

# Annexes

Annex 1	Data sources and methods	182
Annex 2A	Recommended policies and strategies for malaria control, 2014	198
Annex 2B	Antimalarial drug policy, 2014	202
Annex 3	Funding for malaria control, 2012–2014	204
Annex 4	Intervention coverage estimated from routinely collected data, 2012–2014	210
Annex 5	Household surveys, 2012–2014	216
Annex 6A	Reported malaria cases and deaths, 2014	218
Annex 6B	Reported malaria cases by method of confirmation, 2000–2014	222
Annex 6C	Reported malaria cases by species, 2000–2014	234
Annex 6D	Reported malaria deaths, 2000–2014	242

# Annex 1 – Data sources and methods

## Section 1: Introduction

### Table 1.1 Declarations and plans containing targets for malaria control and elimination 2000–2015

The table shows major declarations and plans that contain targets for malaria control and elimination 2000–2015.

### Table 1.2 MDG 6 and associated malaria target and indicators

The table shows the Millennium Development Goal (MDG), target and indicators. Source: *Millennium Development Goals Indicators (1)*.

### Table 1.3 Roll Back Malaria objectives, targets for 2015 and indicators for measuring progress

This table shows the Global Malaria Action Plan (GMAP) targets and indicators. Source: *World malaria report 2012 (2)* and *Household survey indicators for malaria control (3)*.

## Section 2: Trends in infection prevalence, cases and deaths

### Table 2.1 Estimated malaria cases and deaths, by WHO region, 2000–2015

The number of malaria cases was estimated by one of two methods:

- i) For countries outside Africa and for low-transmission countries in Africa: estimates of the number of cases were made by adjusting the number of reported malaria cases for completeness of reporting, the likelihood that cases are parasite positive and the extent of health-service use. The procedure, which is described in the *World malaria report 2008 (4,5)*, combines data reported by national malaria control programmes (NMCPs) (reported cases, reporting completeness, likelihood that cases are parasite positive) with those obtained from nationally representative household surveys on health-service use. Projections to 2015 were made using the results of country-specific segmented regression analyses (6). The trend line from the most recent segment of years was extrapolated to project cases and deaths for 2014 and 2015. The number of *P. vivax* malaria cases in each country was estimated by multiplying the country's reported proportion of cases that are *P. vivax* by the total number of estimated cases for the country.
- ii) For high-transmission countries in Africa: for some African countries, the quality of surveillance data did not permit a convincing estimate to be made from the number of reported cases. Hence, estimates of the number of malaria cases were derived from information on parasite prevalence obtained from household surveys. First, parasite prevalence data from

27 573 georeferenced population clusters between 1995 and 2014 were assembled within a spatiotemporal Bayesian geostatistical model, along with environmental and sociodemographic covariates and data on use of insecticide-treated mosquito nets (ITNs) and access to artemisinin-based combination therapies (ACTs). The geospatial model enabled predictions to be made of *P. falciparum* parasite prevalence in children aged 2–10 years at a resolution of 5 × 5 km<sup>2</sup> across all endemic African countries for each year from 2000 to 2015. Second, an ensemble model was developed to predict malaria incidence as a function of parasite prevalence. The model was then applied to the estimated parasite prevalence, to obtain estimates of the malaria case incidence at 5 × 5 km<sup>2</sup> resolution for each year from 2000 to 2015. Data for each 5 × 5 km<sup>2</sup> area were then aggregated within country and regional boundaries to obtain national estimates and regional estimates of malaria cases (7).

The number of malaria deaths was estimated by one of two methods:

- i) For countries outside Africa and for low-transmission countries in Africa: the number of deaths was estimated by multiplying the estimated number of *P. falciparum* malaria cases by a fixed case fatality rate for each country, as described in the *World malaria report 2008 (4)*. This method was used for all countries outside Africa and for low-transmission countries in Africa, where estimates of case incidence were derived from routine reporting systems. A case fatality rate of between 0.01% and 0.40% was applied to the estimated number of *P. falciparum* cases, and a case fatality rate of between 0.01% and 0.06% was applied to the estimated number of *P. vivax* cases. For countries in the pre-elimination and elimination phases, and those with vital registration systems that reported more than 50% of all deaths (determined by comparing the number of reported deaths with those expected given a country's population size and crude deaths rate), the number of malaria deaths was derived from the number of reported deaths, adjusting for completeness of reporting.
- ii) For countries in Africa with a high proportion of deaths due to malaria: child malaria deaths were estimated using a verbal autopsy multicausal model developed by the Maternal and Child Health Epidemiology Estimation Group which estimates causes of death for children aged 1–59 months (8). Mortality estimates were derived for seven causes of post-neonatal death (pneumonia, diarrhoea, malaria, meningitis, injuries, pertussis and other disorders), causes arising in the neonatal period (prematurity, birth asphyxia and trauma, sepsis,

and other conditions of the neonate) and other causes (e.g. malnutrition). Deaths due to measles, unknown causes and HIV/AIDS were estimated separately. The resulting cause-specific estimates were adjusted, country by country, to fit the estimated 1–59 month mortality envelopes (excluding HIV and measles deaths) for corresponding years. Estimated malaria parasite prevalence, as described above, was used as a covariate within the model. Deaths in those aged over 5 years were inferred from a relationship between levels of malaria mortality in different age groups and the intensity of malaria transmission (9); thus, the estimated malaria mortality rate in children aged under 5 years was used to infer malaria-specific mortality in older age groups.

**Table 2.2 Estimated malaria incidence and death rates, by WHO region, 2000–2015**

Incidence rates were derived by dividing estimated malaria cases by the population at risk of malaria within each country (calculated as population at high risk + population at low risk/2). The total population of each country was taken from the 2015 revision of the *World population prospects* (10) and the proportion at risk of malaria derived from NMCP reports. Malaria death rates were derived by dividing annual malaria deaths by the mid-year population at risk of malaria within each country. Where death rates are quoted for children aged under 5 years, the number of deaths estimated in children aged under 5 years was divided by the estimated number of children aged under 5 years at risk of malaria.

**Table 2.3 Estimated number of malaria deaths in children aged under 5 years, by WHO region, 2015**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria deaths in children aged under 5 years.

**Figure 2.1 Estimated malaria case incidence and death rates globally, 2000–2015**

See the methods notes for Table 2.1 and Table 2.2 for the calculation of incidence and death rates globally.

**Figure 2.2 Percentage decrease in (a) estimated malaria case incidence and (b) malaria death rate, by WHO region, 2000–2015.**

See the methods notes for Table 2.1 and Table 2.2 for the calculation of incidence and death rates by region.

**Figure 2.3 Under-5 mortality rate in sub-Saharan Africa, 2000–2015**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria and total death rates in children aged under 5 years.

**Figure 2.4 Leading causes of death among children aged under 5 years in sub-Saharan Africa, 2000–2015**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria death rates and death rates by other causes in children aged under 5 years.

**Figure 2.5 Estimated *P. falciparum* infection prevalence among children aged 2–10 years ( $PfPR_{2-10}$ ) in 2000 and 2015**

See the methods notes for Table 2.1 for the estimation of malaria parasite prevalence. This figure was produced by the University of Oxford Malaria Atlas Project (7).

**Figure 2.6 Estimated change in malaria case incidence 2000–2015, by WHO region**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria case incidence by WHO region.

**Table 2.4 Summary of trends in reported malaria case incidence 2000–2015, by WHO region**

The main source of information on reported numbers of malaria cases and deaths are the disease surveillance systems operated by ministries of health. Data from such systems have three strengths: (i) case reports are recorded continuously over time and can thus reflect changes in the implementation of interventions or other factors; (ii) routine case and death reports are often available for all geographical units of a country; and (iii) the data reflect the burden that malaria places on the health system. Changes in the numbers of cases and deaths reported by countries do not, however, necessarily reflect changes in the incidence of disease in the general population, for several reasons. First, not all health facilities report each month; hence, variations in case numbers may reflect fluctuations in the number of health facilities reporting rather than a change in underlying disease incidence. Second, routine reporting systems often do not include patients attending private clinics or morbidity treated at home, so disease trends in health facilities may not reflect trends in the entire community. Finally, not all malaria cases reported are confirmed by microscopy or rapid diagnostic testing (RDT); hence, some of the cases reported as malaria may actually be other febrile illnesses (5,11). When reviewing data supplied by ministries of health in malaria endemic countries, the following strategy was used to minimize the influence of these sources of error and bias:

- Focusing on confirmed cases (by microscopy or RDT) to ensure that malaria (not other febrile illnesses) was tracked. For high burden countries in the WHO African Region, where there is little confirmation of cases, the numbers of malaria admissions (inpatient cases) and deaths were reviewed, because the predictive value of malaria diagnosis for an admitted patient is considered to be higher than that of an outpatient diagnosis. In such countries, the analysis may be heavily influenced by trends in cases of severe malaria rather than trends in all cases.
- Monitoring the number of laboratory tests undertaken. It is useful to measure the annual blood examination rate (ABER), to ensure that potential differences in diagnostic effort or completeness of reporting are taken into account. To discern decreases in malaria incidence, the ABER should ideally remain constant or increase over time. In addition, it is useful to monitor the percentage of suspected malaria cases that are

examined with a parasite-based test. Some authorities recommend that the ABER should be >10%, to ensure that all febrile cases are examined; however, the observed rate depends partly on how the population at risk is estimated, and trends may still be valid if the rate is <10%. A value of 10% may not be sufficient to detect all febrile cases. In Solomon Islands, a highly endemic country, the ABER exceeds 60%, with a slide positivity rate (SPR) of 25%, achieved solely through passive case detection.

- Monitoring trends in the SPR or RDT positivity rate. This rate should be less severely distorted by variations in the ABER than trends in the number of confirmed cases.
- Monitoring malaria admissions and deaths. For high-burden African countries, when reviewing the number of malaria admissions or deaths, it is also informative to examine the number of admissions from all causes, which should remain constant or increase over time. If the total number of admissions fluctuates, then it may be preferable to examine the percentage of admissions or deaths due to malaria, because this proportion is less sensitive to variation in reporting rates than the number of malaria admissions or deaths.
- Monitoring the number of cases detected in the surveillance system in relation to the total number of cases estimated to occur in a country. Trends derived from countries with high case detection rates are more likely to reflect trends in the broader community. When examining trends in the number of deaths, it is useful to compare the total number of deaths occurring in health facilities with the total number of deaths estimated to occur in the country.
- Examining the consistency of trends. Unusual variation in the number of cases or deaths that cannot be explained by climate or other factors, or inconsistency between trends in cases and in deaths, can suggest deficiencies in reporting systems.
- Monitoring changes in the proportion of cases due to *P. falciparum* or the proportion of cases occurring in children aged under 5 years. Decreases in the incidence of *P. falciparum* malaria may precede decreases in *P. vivax* malaria, and there may be a gradual shift in the proportion of cases occurring in children aged under 5 years; however, unusual fluctuations in these proportions may point to changes in health-facility reporting or to errors in recording.

These procedures help to rule out data-related factors (e.g. incomplete reporting or changes in diagnostic practice) as explanations for a change in the incidence of disease. The aim is to ensure that trends in health-facility data

reflect changes in the wider community, which is more likely in situations where changes in disease incidence are large; coverage with public health services is high; and interventions promoting change, such as use of ITNs, are delivered throughout the community rather than being restricted to health facilities.

Where data reported by NMCPs were sufficiently complete and consistent to reliably assess trends between 2000 and 2014, a country was classified as being on track to achieve, by 2015, a decrease in case incidence of >75%, 50–75% or <50%, or to experience an increase in case incidence by 2015, using 2000 as the baseline. A 75% reduction in malaria case incidence is equivalent to a 5% reduction per year between 2000 and 2015. Thus, to achieve a reduction of 75% by 2015, countries need to have reduced the incidence of malaria by at least 70% between 2000 and 2014. Countries that reduced malaria incidence rates by 48–70% between 2000 and 2014 are projected to achieve reductions in malaria case incidence of 50–75% in 2015.

**Table 2.5 Summary of trends in estimated malaria case incidence 2000–2015, for countries in which trends could not be evaluated from reported data but can be assessed through modeling**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of incidence rates in high-transmission countries, where the quality of surveillance data did not permit a convincing estimate to be made from the number of reported cases.

**Figure 2.7 Estimated number of cases in 2000 and 2015, by WHO region**

The figure shows changes in the estimated number of cases by country within each WHO region. Each point represents a country. See the methods notes for Table 2.1 for the estimation of the number of malaria cases.

**Figure 2.8 Number of countries with fewer than 1000, 100 and 10 cases, 2000–2015**

See the methods notes for Table 2.1 for the estimation of the number of malaria cases.

**Table 2.6 Classification of countries by programme phase, December 2015**

The criteria used to classify countries according to programme phase were updated in 2012 to facilitate tracking of progress over time (2). These focus on three main components: the malaria epidemiological situation, case-management practices and the state of the surveillance system, as shown in Table A.1. The assessment concentrates on the situation in those districts of the country reporting the highest annual parasite index (API).

**Table A.1** Criteria for classifying countries according to malaria programme phase

	Pre-elimination	Elimination	Prevention of reintroduction
<b>Malaria situation in areas with most intense transmission</b>			(1) Recently endemic country with zero local transmission for at least 3 years; or (2) country on the register or supplementary list that has ongoing local transmission <sup>a</sup>
Test positivity rate	<5% among suspected malaria patients (PCD) throughout the year		
API in the district with the highest number of cases/1000 population/ year (ACD and PCD), <sup>b</sup> averaged over the past 2 years	<5 (i.e. fewer than 5 cases/1000 population)	<1 (i.e. fewer than 1 case/1000 population)	
Total number of reported malaria cases nationwide		A manageable number (e.g. <1000 cases, local and imported) nationwide	
<b>Case management</b>			Imported malaria. Maintain capacity to detect malaria infection and manage clinical disease
All cases detected in the private sector are microscopically confirmed	National policy being rolled out	Yes	Yes
All cases detected in the public sector are microscopically confirmed	National policy being rolled out	Yes	Yes
Nationwide microscopy quality assurance system covers public and private sector	Initiated	Yes	Yes
Radical treatment with primaquine for <i>P. vivax</i>	National policy being updated	National policy fully implemented	Yes
Treatment with ACT plus single-dose primaquine for <i>P. falciparum</i>	National policy being updated	National policy fully implemented	Yes
<b>Surveillance</b>			Vigilance by the general health services
Malaria is a notifiable disease nationwide (<24–48 hours)	Laws and systems being put in place	Yes	Yes
Centralized register on cases, foci and vectors	Initiated	Yes	Yes
Malaria elimination database	Initiated	Yes	Certification process (optional)
Active case detection in groups at high risk or with poor access to services (proactive case detection)	Initiated	Yes	In residual and cleared-up foci, among high-risk population groups
Case and foci investigation and classification (including reactive case detection and entomological investigation)	Initiated	Yes	Yes

ABER: annual blood examination rate; ACD: active case detection; API: annual parasite index; PCD: passive case detection.

<sup>a</sup> Ongoing local transmission = 2 consecutive years of local *P. falciparum* malaria transmission, or 3 consecutive years of local *P. vivax* malaria transmission, in the same locality or otherwise epidemiologically linked.

<sup>b</sup> The API has to be evaluated against the diagnostic activity in the risk area (measured as the ABER). Low values of ABER in a district raise the possibility that more cases would be found with improved diagnostic efforts.

### Figure 2.9 Indigenous malaria cases in the WHO European Region, by country, 1990–2015

The number of indigenous cases shown are those reported to WHO by NMCPs.

### Figure 2.10 Indigenous malaria cases in the WHO European Region by parasite species, 2000–2015

The number of indigenous cases shown are those reported to WHO by NMCPs.

## Section 3: Coverage of key interventions

### Figure 3.1 Proportion of population at risk with access to an ITN and proportion sleeping under an ITN, sub-Saharan Africa, 2000–2015

Estimates of ITN coverage were derived from a model developed by the Malaria Atlas Project (12). A two-stage process was followed. First, a mechanism was defined for estimating net crop – that is, the total number of ITNs in households in a country at a given point in time – taking into account inputs to the system (e.g. deliveries of ITNs to a country) and outputs (e.g. loss of ITNs from households). Second, empirical modelling was used to translate estimated net crops into resulting levels of coverage (e.g. access within households, use in all ages and use among children aged under 5 years).

The model incorporates three sources of information:

- data on the number of long-lasting insecticidal nets (LLINs) delivered by manufacturers to countries, as provided by Milliner Global Associates to WHO;
- data on ITNs distributed within countries, as reported by NMCPs to WHO; and
- nationally representative household surveys from 39 sub-Saharan African countries, from 2001 to 2014.

*Countries and populations at risk*

The main analysis covered 40 of the 47 malaria endemic countries or areas of sub-Saharan Africa. The islands of Mayotte (France) (for which no ITN delivery or distribution data were available) and Cabo Verde (which does not distribute ITNs) were excluded, as were the low-transmission countries of Namibia, Sao Tome and Principe, South Africa and Swaziland for which ITNs make up a small proportion of vector control. Analyses were limited to populations categorized as being at risk by NMCPs.

*Estimating national net crops through time*

As described by Flaxman et al. (13) with a large fraction of these resources directed toward the distribution of ITNs, national ITN systems were represented using a discrete

time stock-and-flow model. Nets delivered to a country by manufacturers were modelled as first entering a “country stock” compartment (i.e. stored in-country but not yet distributed to households). Nets were then available from this stock for distribution to households by the NMCP or other distribution channels. To accommodate uncertainty in net distribution, number of nets distributed in a given year were specified as a range, with all available country stock as one extreme (the maximum nets that could be delivered) and the NMCP-reported value (the assumed minimum distribution level) as the other. New nets reaching households joined older nets remaining from earlier time steps to constitute the total household net crop, with the duration of net retention by households governed by a loss function. Rather than fitting the loss function to a small external dataset, as was done by Flaxman et al., the loss function was fitted directly to the distribution and net crop data within the stock-and-flow model itself. Loss functions were fitted on a country-by-country basis, allowed to vary through time, and defined separately for conventional ITNs (cITNs) and LLINs. The fitted loss functions were compared to existing assumptions about rates of net loss from households. The stock-and-flow model was fitted using Bayesian inference and Markov chain Monte Carlo methods, providing time-series estimates of national household net crop for cITNs and LLINs in each country along with evaluation of under-distribution, all with posterior credible intervals.

#### *Estimating national ITN access and use indicators from net crop*

Rates of ITN access within households depend not only on the total number of ITNs in a country (i.e. net crop), but on how those nets are distributed between households. One aspect that is known to strongly influence the relationship between net crop and household ownership distribution is the size of households in different countries (14), which varies greatly across sub-Saharan Africa.

Many recent national surveys report the number of ITNs observed in each surveyed household. This makes it possible to not only estimate net crop, but also to generate a histogram that summarizes the net ownership pattern (i.e. the proportion of households with zero nets, one net, two nets and so on). In this way, the size of the net crop was linked to distribution patterns among households, while accounting for household size, so that ownership distributions for each household size stratum could be generated. The bivariate histogram of net crop to distribution of nets among households by household size made it possible to calculate the proportion of households with at least one ITN and, because the number of both ITNs and people in every household can be triangulated, to directly calculate the two additional indicators: the proportion of households with at least one ITN for every two people, and the proportion of population with access to an ITN within their household. For the final ITN indicator – the

proportion of the population who slept under an ITN the previous night – the relationship between ITN and access was defined using 62 surveys where both indicators were available ( $ITN\ use_{all\ ages} = 0.8133 * ITN\ access_{all\ ages} + 0.0026$ ,  $R^2 = 0.773$ ). This relationship was applied to the Malaria Atlas Project’s country-year estimates of household access to obtain ITN use among all ages. The same method was used to obtain the country-year estimates of ITN use in children aged under 5 years ( $ITN\ use_{children\ under\ five} = 0.9327 * ITN\ access_{all\ ages} + 0.0282$ ,  $R^2 = 0.754$ ).

#### **Figure 3.2 Proportion of population sleeping under an ITN, sub-Saharan Africa, 2015**

See the methods notes for Figure 3.1 for the estimation of population sleeping under ITNs.

#### **Figure 3.3 Number of ITNs/LLINs delivered and distributed, and the estimated number of LLINs needed annually to achieve universal access in sub-Saharan Africa, 2004–2015**

See the methods notes for Figure 3.1 for the sources of LLINs delivered and distributed. For estimating ITN requirements to achieve universal access, the two-stage modelling framework outlined in the notes for Figure 3.1 represented the pathway from ITN delivery from manufacturers through to resulting levels of net access and use in households. It also accounted for two potential factors that may reduce access levels (i.e. the efficiency of allocation of nets to households during distribution, and the loss of nets from households over time), and allowed these to be quantified through time for each country. Using this architecture, it was possible to simulate delivery of any volume of ITNs to a given country over a given future time period, to predict the levels of access and use that would result, and to examine the impact of different amounts of allocation efficiency and net loss. The model was used to estimate the levels of access likely to be achieved by 2015 under a broad spectrum of LLIN delivery levels across the 4-year period. These simulations were run under two scenarios: (i) ‘business-as-usual’, where current levels were maintained for allocation efficiency and net loss (approximately a 2-year median retention time); and (ii) with both maximized allocation efficiency and a 3-year median retention time.

#### **Figure 3.4 Proportion of the population at risk protected by IRS by WHO region, 2009–2014**

The number of persons protected by indoor residual spraying (IRS) and the population at risk of malaria were reported by NMCPs to WHO. See the methods notes for Table 2.2 for the calculation of the population at risk.

#### **Figure 3.5 Proportion of the population protected by IRS or with access to ITNs in sub-Saharan Africa, 2014**

See the methods notes for Figure 3.1 for derivation of the population at risk with access to an ITN in their household in 2015, and Figure 3.4 for the proportion benefitting from IRS. The proportion benefitting from IRS in 2015 was assumed to be the same as 2014 because this was the latest year for which data on populations protected by IRS were available. Analysis of household survey data indicates that about half

of the people in IRS-sprayed households are also protected by ITNs (15). Therefore, the proportion of the population protected by either ITNs or IRS was estimated by adding half the proportion of the population protected by IRS to the proportion with access to an ITN.

**Figure 3.6 Proportion of pregnant women receiving IPTp, by dose, sub-Saharan Africa, 2007–2014**

Women are eligible to receive intermittent preventive treatment in pregnancy (IPTp) after the first trimester of pregnancy; therefore, the total number of IPTp-eligible women is the total number of second- and third-trimester pregnancies in a given calendar year. This was calculated for years 2001 through 2014 by adding total live births and spontaneous pregnancy loss, specifically miscarriages and stillbirths, after the first trimester. Spontaneous pregnancy loss was previously calculated by Dellicour et al. (16). Country-specific estimates of IPTp coverage were calculated as the ratios of volumes of IPTp doses distributed to the estimated numbers of IPTp-eligible pregnant women in a given year. Antenatal care (ANC) attendance rates were derived in the same way, using the number of first-time ANC visits reported through routine information systems. Local linear interpolation was used to compute missing values. In countries that did not report data for the first year of the policy, or in any year before the policy adoption, the quantities of IPTp distributed were assumed to be zero one year before the policy adoption, allowing for interpolation of coverage estimates relative to reported volumes in later years. For each country, the percentage of pregnant women attending ANC and receiving IPTp doses were calculated only for years in which NMCPs reported that a nationwide IPTp policy was in place. Uncertainty around the point estimates was determined by using Monte Carlo simulations to sample from specified input distributions. Sampling from these distributions yielded 1000 point estimates for country-level IPTp dose-specific coverage and ANC attendance for each year, which were then summarized by country-specific means and 95% confidence intervals. Locally estimated regression (17), using the 1000 country-level estimates, was used to predict the continental coverage for each year.

**Figure 3.7 Proportion of pregnant women receiving at least one dose of IPTp, sub-Saharan Africa, 2013–2014**

See the methods notes for Figure 3.6 for the estimation of percentage of pregnant women receiving at least one dose of IPTp.

**Figure 3.8 Proportion of suspected malaria cases attending public health facilities that received a diagnostic test, by WHO region, 2005–2014**

The proportion of suspected malaria cases receiving a malaria diagnostic test in public facilities was calculated from NMCP reports to WHO. The number of malaria diagnostic tests performed included the number of RDTs and microscopic slide examinations. Few countries reported the number of suspected malaria cases as an independent

value. For countries reporting the total number of malaria cases as presumed malaria cases (i.e. cases classified as malaria without undergoing malaria parasitological testing) and confirmed malaria cases, the number of suspected cases was calculated by adding the number of negative diagnostic tests to the number of presumed and confirmed cases. Using this method for countries that reported only confirmed malaria cases for the total number of malaria cases, the number of suspected cases is equal to the number of cases tested. This is not informative in determining the proportion of suspected cases tested; therefore, countries were excluded from the regional calculation for years in which they reported only confirmed cases for total malaria cases.

**Figure 3.9 Proportion of febrile children presenting for treatment, by health sector, sub-Saharan Africa, 2013–2015**

The estimates for source of care for febrile children were derived using data from 18 nationally representative household surveys (demographic and health surveys [DHS] and malaria indicator surveys [MIS]) conducted from 2013 through 2015. The surveys included the following data, provided by caregivers, on each child aged under 5 years living in the surveyed households: if the child had had a fever in the 2 weeks preceding the survey, whether care was sought for the fever, and if so, where care was sought, whether a diagnostic test was administered, and the treatment received.

**Figure 3.10 Proportion of febrile children receiving a blood test, by health sector, sub-Saharan Africa, 2013–2015**

See the methods notes for Figure 3.9.

**Figure 3.11 Number of RDTs sold by manufacturers and distributed by NMCPs, by WHO region, 2005–2014**

The numbers of RDTs distributed by WHO region are the annual totals reported to be distributed by NMCPs. Manufacturers reporting the number of RDT sales between 2008 and 2014 included 44 manufacturers that participate in RDT product testing by WHO, the Foundation for Innovative New Diagnostics (FIND), the United States Centers for Disease Control and Prevention (CDC) and the Special Programme for Research and Training in Tropical Diseases (TDR). The number of RDTs reported by manufacturers represents total sales to the public and private sector worldwide.

**Figure 3.12 Ratio of ACT treatment courses distributed to diagnostic tests performed (RDTs or microscopy), WHO African Region, 2006–2014**

The number of RDTs and ACTs distributed within countries by national programmes are reported by NMCPs to WHO, as are the number of microscopic examinations of blood slides performed for malaria parasites and number of RDTs performed. This figure shows the ratio of these data over time. The test positivity rate was calculated as the total number of positive tests (slide examinations and RDTs) divided by the total number tests (slides examinations and RDTs) reported by countries in the WHO African Region in 2014.

**Figure 3.13 Estimated proportion of children aged under 5 years with confirmed *P. falciparum* malaria who received ACTs, sub-Saharan Africa, 2003–2014**

The proportion of children with uncomplicated malaria (defined as fever in the 2 weeks preceding the survey, and parasite infection measured by RDT at the time of the survey) receiving an ACT was estimated for all countries in sub-Saharan Africa 2003–2014 using a three-step modelling approach:

1. Fitting a model to predict whether a child with fever has a malaria infection: Recent MIS and DHS include the malaria parasite infection status of a child, assessed from an RDT given at the time of the survey. It was assumed that a positive RDT provides a reasonable measure of a 2-week period prevalence of infection (18–20). A logistic regression model was created to predict malaria parasite infection among febrile children. Covariates in the model included the child's age and sex, household wealth quintile, ITN ownership, facility type where treatment was sought (public/other), urban/rural status, and malaria transmission intensity as measured by proportion of children aged 2–10 years infected with *P. falciparum* ( $PfPR_{2-10}$ ).
2. Predicting the infection status of children in surveys in which RDTs were not used: Coefficients estimated from the logistic regression model in step 1 were used to obtain predictions of infection status among all children with a fever from DHS, MIS and multiple indicator cluster surveys (MICS) in which RDT testing had not been performed. The national survey-weighted proportion of febrile children with a malaria parasite infection (RDT measured or imputed) aged under 5 years who received an ACT was then calculated for all surveys.
3. Estimating the proportion of children with malaria that received an ACT: The ACT distribution data reported by NMCPs were used to calculate a predicted ACT "availability" per person at risk for *P. falciparum* malaria in each country. A linear model was then created to predict the proportion of children with malaria receiving an ACT, using ACT availability per capita in the current and previous year as a covariate, with additional covariates including national ITN coverage (by year), measles vaccination coverage, gross national income, and the proportion of births with a skilled birth attendant (20). The model was run in a Bayesian framework using Markov chain Monte Carlo methods, and included uncorrelated random effects for each country and correlated (autoregressive) random effects for each year. The proportion of children who received ACTs for each country and year (2003–2014) was imputed for non-survey years, based on the relationship between ACT coverage and ACT availability across countries.

Household survey data were considered if they included a module assessing fever treatment behaviour for children aged under 5 years, categorized by type of antimalarial received. For the period 2003–2014, 16 MIS, 61 DHS and 22

MICS were included. Annual estimates of mean *P. falciparum* parasite rates in children aged 2–10 years ( $PfPR_{2-10}$ ), as well as the total population at malaria risk, were ascertained from the Malaria Atlas Project (see methods notes for Table 2.1 and Table 2.2).

**Figure 3.14 Proportion of febrile children who receive an ACT among those who receive any antimalarial, sub-Saharan Africa, 2004–2015**

See the methods notes for Figure 3.9.

**Figure 3.15 Proportion of febrile children receiving antimalarial treatments, by type, sub-Saharan Africa, 2013–2015**

See the methods notes for Figure 3.9.

**Figure 3.16 Proportion of febrile children who receive an ACT among those who receive any antimalarial, by place where care was sought, sub-Saharan Africa, 2013–2015**

See the methods notes for Figure 3.9.

**Figure 3.17 Number of ACT treatment courses distributed by NMCPs, by WHO region, and ACT treatment courses delivered by manufacturers to the public and private sector, 2005–2014**

Data on ACT deliveries were provided by ten manufacturers eligible for procurement by WHO/UNICEF. ACT sales were categorized as either to the public sector or to the private sector. Data on ACTs distributed within countries through the public sector were taken from NMCP reports to WHO.

**Figure 3.18 Predicted time series of  $PfPR_{2-10}$  across endemic Africa with and without interventions, 2000–2015**

The model used to estimate malaria case incidence (described in the methods notes for Table 2.1) is based on various surveys of parasite prevalence undertaken between 2000 and 2015. It also incorporates time-series models of coverage for ITN use, IRS and access to ACTs within each country, and a suite of environmental and sociodemographic covariates. The model was used to predict a spatiotemporal "cube" of age-structured  $PfPR$  at 5 × 5 km resolution across all endemic African countries for each year from 2000 to 2015. During the process of modelling, flexible functional forms were fitted to capture the effect of each intervention on declining  $PfPR$  as a function of coverage reached and the starting (pre-intervention)  $PfPR$  in 2000. Using the observed effect of each intervention, it was possible to generate counterfactual maps estimating contemporary  $PfPR$  under hypothetical scenarios without interventions. This "no intervention" counterfactual was then used to estimate the total effect of interventions on parasite prevalence and case incidence.

**Figure 3.19 Predicted cumulative number of malaria cases averted by interventions, sub-Saharan Africa, 2000–2015**

See the methods notes for Figure 3.18.

## Section 4: Costs of malaria control and cost savings

### Figure 4.1 Investments in malaria control activities by funding source, 2005–2014

Domestic financing data included contributions from governments of malaria endemic countries for the period 2005–2014 that were obtained from NMCPs for the *World malaria reports*. When domestic financing data were not available for 2014, data from previous years were used. Domestic financing data exclude government spending on case management, including the cost of the time that health workers spend testing, treating and tracking malaria patients and the cost of capital (e.g. infrastructure and vehicles). Data also exclude household spending on malaria prevention and treatment. International financing data were obtained from several sources. The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) provided disbursed amounts by year and country for the period 2005–2014. Data on funding from the government of the United States of America (USA) were sourced from the US Foreign Assistance Dashboard (22), with the technical support of the Kaiser Family Foundation. Funding data were available for the US Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC) and the US Department of Defense. Country-level data were available from USAID only, and only for the period 2006–2014. Financing data for other international funders included annual disbursement flows for the period 2005–2013, obtained from the Organisation for Economic Co-operation and Development (OECD) Creditor Reporting System (CRS) aid activity database. For each year and each funder, the list of regional- and country-level project-type interventions and other technical assistance were abstracted. Contributions to programmes and funds managed by international organizations (e.g. Global Fund contributions) were excluded. International annual contributions for 2014 were estimated by projecting linearly 2011–2013 available estimates. To measure funding trends in real terms (i.e. corrected for inflation), all values were converted to constant 2014 US\$ using the gross domestic product (GDP) implicit price deflators published by the World Bank (23).

### Figure 4.2 Investments in malaria control activities by WHO region and funding source, 2005–2014

See the methods notes for Figure 4.1 for investments in malaria control activities by funding source.

### Figure 4.3 Expenditures on ITN/LLIN, ACT, RDT and IRS, and trend in international funding, 2004–2014

Manufacturers' sales volumes data on ITNs/LLINs (as provided by Milliner Global Associates to WHO), RDTs (see methods notes for Figure 3.11) and ACTs (see methods notes for Figure 3.16) and the number of people at risk covered by IRS (see methods notes for Figure 3.4) were used to estimate the amount spent each year in preventive and curative commodities.

i) *Calculating expenditures for ITNs/LLINs:* ITN/LLIN sales volumes data were sourced from the Net Mapping Project, which provided data for 47 sub-Saharan African

countries from 2004 to 2014 and for 51 malaria endemic countries outside sub-Saharan Africa for the period 2011–2014. LLIN price data originated from a review of country-level transactions information available from the Global Fund's Price & Quality Reporting (PQR) tool (23). LLIN price data included the name of the country of delivery, LLIN manufacturer name, net shape, net size, number of nets purchased, unit cost in US\$ at the time of the transaction and transaction date. The review of price data concentrated on prices of rectangular nets of any size. For each country and each year, the average procurement price paid per net was calculated. For LLIN price observations for which there was no information on whether freight cost was included, freight cost was assumed not to be included, following the data entry guidelines of the PQR tool (24). For price observations for which freight cost was excluded, unit price data were inflated by 20%. For countries missing price data, the regional LLIN average price was imputed.

- ii) *Calculating expenditures for IRS:* The unit cost of protecting one person per year with IRS, which varied by year, was estimated by calculating the average cost of covering one person with IRS across 10 countries for the years 2008–2012 (Abt Associates, personal communication, June 2014). IRS commodity cost included the costs of insecticide, shipping and equipment. The costs of spraying operations, local labour and local administration were excluded, to follow the approach used for the other commodities costed in this report.
- iii) *Calculating expenditures for RDTs and ACTs:* RDT and ACT sales volumes were sourced from manufacturers' reports to WHO. RDT price data originated from a review of country-level transactions information available from the Global Fund's PQR tool (24). RDT average unit price was calculated as the average of all CareStart™ Malaria product prices. ACT price data were sourced from the Management Sciences for Health (MSH) international drug price database (25). ACT average treatment price was calculated across all ACT types with price information (including AL, AS-AQ, AS-MQ, AS-SP across different strengths) on the basis of a full dose for treating a 60 kg adult (26). ACT and RDT prices were inflated by 20% to reflect the cost of freight and insurance.

### Figure 4.4 Provider savings in malaria case management costs attributable to expansion of malaria control activities, 2001–2014

The analysis concentrated on sub-Saharan Africa and took a public provider perspective. Data included:

- number of malaria cases averted from the decline in case incidence rates observed between 2000 and 2015 (see the methods notes for Table 2.1 and Table 2.2, and Figure 3.18);
- proportion of malaria cases estimated to seek care in the public sector from nationally representative household surveys;

- proportion of cases that move to severe stage and that are hospitalized (27);
- proportion of suspected cases seeking care at public facilities that receive a blood test using microscopy or RDT (see the methods notes for Figure 3.8); and
- proportion of children with malaria who received an ACT, another antimalarial (chloroquine or sulphadoxine-pyrimethamine) or medicine (see the methods notes for Figure 3.13 extended to non-ACT)

To estimate the savings incurred by health systems due to a reduced number of cases, it was assumed that the cases averted that would have attended public health facilities would have received an antimalarial if diagnosed presumptively or if they were tested either by microscopy or RDT and the test result was positive. The cost of blood test diagnosis was assumed to be equal to the price of an RDT. Medicine procurement prices were sourced from the MSH international drug price database. For ACT, the average price for treating a 60 kg adult was estimated as described under methods notes for Figure 4.3. Non-ACT medicines were costed at the average price of chloroquine and sulphadoxine-pyrimethamine adult treatment prices. Severe cases were assumed to be treated with quinine, or a similarly priced medicine. Medicine costs were inflated for wastage (10%), freight and insurance (20%), and in-country service delivery (15%). Outpatient visit costs from the perspective of the provider were estimated for each country by calculating the average price of a visit to rural and urban health facilities (without bed) as estimated in the WHO-CHOICE tool (28). Similarly, inpatient admission costs were estimated in terms of average unit bed-day stay at primary and tertiary hospitals in each country also using the WHO CHOICE tool. Hospitalization for a severe malaria case was assumed to last for 3 days. An annual inflation rate of 3% was assumed when converting WHO-CHOICE price estimates for 2008 to cover the 2001–2014 period. To measure funding trends in real terms (i.e. corrected for inflation), all values were converted to constant 2014 US\$ using the GDP implicit price deflators published by the World Bank (23). The cost savings attributable to malaria control interventions were derived from the relative contribution of each intervention in averting cases (see methods notes for Figure 3.18.)

## Section 5: Challenges

**Figure 5.1 Estimated proportion, and cumulative proportion, of the global number of (a) malaria cases and (b) malaria deaths in 2015 for countries accounting for the highest share of the malaria disease burden**

See the methods notes for Table 2.1 for the estimation of malaria cases and deaths.

**Figure 5.2 Reduction in malaria incidence, 2000–2015 versus estimated number of cases in a country in 2000**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria cases and incidence rates.

Two countries with increases (negative decreases) were excluded from the figure.

**Figure 5.3 Proportion and number of people not receiving an intervention, sub-Saharan Africa, 2014**

See the methods notes for Figure 3.5, Figure 3.6 and Figure 3.7 for the estimation of the proportion of the target population receiving an intervention. The formula,  $100\% - (\% \text{ receiving the intervention})$ , was applied to the population at risk targeted by each intervention to calculate the population not receiving an intervention. See the methods notes for Figure 3.6 for estimation of the population of pregnant women. The population living in households was calculated by utilizing the population at risk, see the methods for Table 2.2 for the derivation of population sizes, and household size, as derived from nationally representative household survey data. The number of children aged under 5 years with malaria infection was estimated by applying the modelled country-specific age distribution of cases (29) to the total number of cases, calculated by the methods described for Table 2.1.

**Figure 5.4 Population at risk of malaria in sub-Saharan Africa with access to or using vector control, 2014**

See the methods notes for Figure 3.5 for the estimation of indicators related to vector-control coverage.

**Figure 5.5 Proportion of pregnant women attending ANC and proportion receiving IPTp, by dose, in sub-Saharan Africa, 2014**

See the methods notes for Figure 3.7 for the estimation of pregnant women receiving IPTp doses and attending ANC at least once.

**Figure 5.6 Proportion of febrile children aged under 5 years receiving antimalarial medicines, by place of where care was sought, among sub-Saharan countries with household surveys, 2013–2015**

See the methods notes for Figure 3.9.

**Figure 5.7 Number of nurses per 1000 population in malaria endemic countries versus estimated number of malaria deaths\***

See the methods notes for Table 2.1 for the estimation of malaria cases. Data on nurses per capita were obtained from the Global Health Observatory Data Repository (nursing and midwifery personnel data by country) (30).

**Figure 5.8 Proportion of malaria cases seeking care (a) in public sector and (b) private sector versus estimated number of malaria cases, sub-Saharan Africa, 2015**

See the methods notes for Table 2.1 for the estimation of malaria cases. The percentage of malaria cases seeking care in the public sector was calculated using nationally representative household survey data applied to estimates of malaria cases.

**Figure 5.9 Gross national income per capita versus estimated number of malaria cases, by WHO region, 2015**

See the methods notes for Table 2.1 for the estimation of malaria cases. Data on gross national income per capita based on purchasing power parity was obtained from the World Bank (37).

**Figure 5.10 (a) Domestic government spending on malaria control per capita and (b) international government spending on malaria control per capita versus estimated number of malaria deaths, by WHO region, 2015**

See the methods notes for Table 2.1 for the estimation of malaria cases, and the methods notes for Figure 4.1 for the estimation of NMCP spending on malaria control per capita.

**Figure 5.11 Estimated spending on malaria treatment, sub-Saharan Africa, 2001–2014**

See the methods notes for Figure 4.3 for the estimation of spending on malaria treatment.

**Table 5.12 Proportion of estimated malaria cases in each region due to *P. vivax*, 2015**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria cases.

**Figure 5.13 Proportion of global *P. vivax* cases occurring in each WHO region**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria cases.

**Figure 5.14 Proportion of reported malaria cases due to *P. vivax*, countries with different average caseloads between 2000 and 2014**

See the methods notes for Table 2.1 and Table 2.2 for the estimation of malaria cases.

**Figure 5.15 Insecticide resistance and monitoring status, by insecticide class and WHO region, 2010–2014**

Insecticide resistance monitoring results were collected from NMCP reports to WHO, the African Network for Vector Resistance, Malaria Atlas Project, United States President's Malaria Initiative (PMI) and the published literature. In these studies, confirmed resistance was defined as mosquito mortality <90% in bioassay tests with standard insecticide doses. Where multiple insecticide classes or types, mosquito species or time points were tested, the highest resistance status was considered.

**Figure 5.16 Reported pyrethroid resistance status of malaria vectors, measured with insecticide bioassays since 2010**

See the methods notes for Figure 5.16 for assessing pyrethroid resistance status.

**Section 5.6: Antimalarial drug efficacy and resistance**

The WHO global antimalarial drug efficacy database contains data from therapeutic efficacy studies (TES) conducted

by NMCPs, research institutes and nongovernmental organizations. Currently, the database holds over 1130 TES, conducted in 62 malaria endemic countries from 2005 to 2015. About 900 of the studies were conducted on the treatment efficacy of ACTs against *P. falciparum*, and the remainder were conducted on treatment efficacy against *P. vivax*.

WHO encourages malaria endemic countries to conduct antimalarial TES on nationally recommended first- and second-line medicines once every 2 years. The WHO protocol provides standardized methods for conducting TES for both *P. falciparum* and *P. vivax*; such studies allow comparison of data across geographical regions and over time. Studies are conducted at sentinel sites, which are selected based on population distribution and density, accessibility, feasibility of supervision, malaria epidemiology, population mobility and migration. Updates on the global status of antimalarial drug efficacy for both *P. falciparum* and *P. vivax* are available on the WHO website (32).

**Section 6: Moving forward****Table 6.1 Goals, milestones and targets of the *Global technical strategy for malaria 2016–2030* and *Action and investment to defeat malaria 2016–2030***

The table shows the goals, milestones and targets of the *Global technical strategy for malaria 2016–2020* and *Action and investment to defeat malaria 2016–2030* (33).

**Regional profiles**

**Figure A.** Incidence was derived from reports of confirmed malaria cases in 2014 (by microscopy or RDT) from ministries of health to WHO, and from the number of people living at risk for malaria in each geographical unit, as reported by NMCPs. Values were corrected for reporting completeness by dividing the proportion of health-facility reports received in 2014 by the number expected. If subnational data on population or malaria cases were lacking, an administrative unit was labelled “insufficient data” on the map. In some cases, the subnational data provided by the NMCP did not correspond to a subnational administrative area known to WHO, because of either modifications to administrative boundaries, or the use of names not verifiable by WHO. The maps for countries outside of the WHO Region of the Americas and WHO European Region display a combination of cases per 1000 per year, and parasite prevalence in areas with >10 cases per 1000 population per year. The parasite prevalence used in regions with >10 cases per 1000 is the sum of the rates for *P. falciparum* and *P. vivax* calculated at each location (~1 km<sup>2</sup>). The parasite rate for *P. falciparum* was from two sources, one global (34) and one for Africa (7), with the African source taking precedence over the global source. The parasite rate for *P. vivax* was taken from one global source (35). Data on environmental suitability for malaria transmission were used to identify areas that would be free of malaria or have unstable malaria transmission.

**Figure B.** Sources of data for the financial contributions were as described for Figure 4.1.

**Figure C.** Sources of data for international and domestic contributions were as described in the notes for Figure 4.1. Funding per capita at risk was calculated by giving populations at low risk for malaria (i.e. those living in areas with fewer than one case reported per 1000 per year) half the weight of populations at high risk (i.e. those living in areas with one or more cases reported per 1000 per year). This procedure was followed to ensure that countries with populations at low risk for malaria could be included in the analysis, and also to take into account the greater need for malaria programmes and funds in countries with larger proportions of their population at high risk for malaria.

**Figure D.** For the WHO African Region and for Djibouti, Somalia and the Sudan in the WHO Eastern Mediterranean Region, the proportion of the population with access to an ITN was derived from a model that takes into account household survey data, ITNs distributed by NMCPs, and ITNs delivered by manufacturers (see methods notes for Figure 3.1 and Figure 3.2). For other countries, the proportion of the population protected with ITNs was estimated from the number of ITNs delivered by NMCPs in the past 3 years, divided by the population at high risk. It is assumed that each net delivered can cover on average 1.8 people, that conventional nets are re-treated regularly, and that nets have a lifespan of 3 years. The denominator was the population living at high risk for malaria, since it is assumed that, in countries with lower levels of transmission, ITNs will be preferentially targeted to populations at higher risk. IRS coverage was calculated as the total number of people protected with IRS, divided by the population at high risk. There are limited data on the extent to which these interventions overlap, so the two bars simply represent the percentage of populations protected by the respective interventions individually. When no population at high risk was defined for a country, total population at risk was used as a denominator.

For the WHO European Region, the graph presents the number of introduced, imported and indigenous cases by year, reported by NMCPs.

**Figure E.** Few countries have information systems that record treatments given to individual patients. It is therefore necessary to use aggregate information on numbers of treatment courses delivered to public health facilities, and relate this information to the number of malaria cases among patients attending such facilities. For countries in the WHO African Region, the number of treatment courses available was calculated as the total number of ACT courses distributed by a ministry of health, divided by the estimated number of presumed cases recorded as malaria (without a diagnostic test having been performed) plus confirmed *P. falciparum* malaria cases at public health facilities. In other WHO regions, the number of treatment

courses available is shown as a percentage of confirmed malaria cases plus presumed malaria cases reported in the public sector, correcting for reporting completeness. The bars for any antimalarial treatment show the number of all treatment courses supplied in relation to all malaria cases of any *Plasmodium* species, including the ACT to treat *P. falciparum*.

For the WHO European Region, the graph presents the number of indigenous cases reported by NMCPs.

**Figure F.** The percentage of confirmed cases in which *P. falciparum* or a mixed infection was detected was calculated as the total number of *P. falciparum* and mixed infections between 2010 and 2014, divided by the number of confirmed cases over that period. For countries in the elimination phase, only locally acquired *P. falciparum* cases and mixed infections were considered.

For the WHO African Region, the estimated incidence (as described in the methods for Table 2.1 and Table 2.2) is presented for years 2000 and 2015. The bars represent the estimated incidence and the lines represent the 95% credible intervals of the estimation.

For the WHO European Region, the figure presents the total number of *P. falciparum* and *P. vivax* by year, reported by ministries of health.

**Figure G.** Analysis of changes in malaria incidence rates focuses on confirmed cases (by microscopy or RDT) reported by ministries of health, to ensure that malaria (not other febrile illnesses) is tracked. For countries in the WHO African Region (except for Algeria, Cabo Verde, Namibia and South Africa), and Papua New Guinea in the WHO Western Pacific Region, the figure shows percentage reductions in the rate of hospital admissions and deaths and in the rate of reported malaria deaths. Although the diagnosis of admitted patients is not always confirmed with a diagnostic test, the predictive value of diagnosis undertaken for an admitted patient is considered to be higher than for outpatient diagnosis. See the methods notes for Table 2.4 for more details of the analysis undertaken.

## Country profiles

### I. Epidemiological profile

**Maps:** The procedures used to create the map of confirmed cases were the same as those used for Figure A for the regional profiles; that is, for countries outside the WHO Region of the Americas and the WHO European Region, if an area has >10 cases per 1000, the parasite prevalence is used instead. For countries in the WHO Region of the Americas and WHO European Region, only the cases per 1000 data are used. For the map showing the proportion of cases due to *P. falciparum*, the proportion is only shown

where the number of cases is >0.1 per 1000. Otherwise, the cases per 1000 is shown instead of the proportion. The proportion (where shown) was calculated from the *P. falciparum* prevalence divided by the sum of *P. falciparum* and *P. vivax* prevalence.

**Population:** The total population of each country was taken from the 2015 revision of the *World population prospects (10)*. The country population was subdivided into three levels of malaria endemicity, as reported by the NMCPs:

- i) areas of high transmission, where the reported incidence of confirmed malaria due to all species was >1 per 1000 population per year in 2014;
- ii) areas of low transmission, where the reported malaria case incidence from all species was  $\leq 1$  per 1000 population per year in 2014, but >0 (transmission in these areas is generally highly seasonal, with or without epidemic peaks); and
- iii) malaria free areas, where there is no continuing local mosquito-borne malaria transmission, and all reported malaria cases are imported; an area is designated “malaria free” when no cases have occurred for several years.

Areas may be naturally malaria free because of factors that are unfavourable for malaria transmission (e.g. altitude or other environmental factors), or they may become malaria free as a result of effective control efforts. In practice, malaria-free areas can be accurately designated by NMCPs only after the local epidemiological situation and the results of entomological and biomarker investigations have been taken into account.

In cases where an NMCP did not provide the number of people living in high- and low-risk areas, the numbers were inferred from subnational case incidence data provided by the programme. The population at risk is the total population living in areas where malaria is endemic (low and high transmission), excluding the population living in malaria free areas. The population at risk is used as the denominator in calculating the coverage of malaria interventions, and is therefore used in assessing current and future needs for malaria control interventions, taking into account the population already covered. For countries in the pre-elimination and elimination stages, “population at risk” is defined by the countries, based on the resident populations in foci where active malaria transmission occurs.

**Parasites and vectors:** The species of mosquito responsible for malaria transmission in a country, and the species of *Plasmodium* involved, are listed according to information provided by WHO regional offices. The proportion of malaria cases due to *P. falciparum* was estimated from the number of *P. falciparum* and mixed infections detected by microscopy, divided by the total number of malaria cases confirmed by microscopy in 2014.

## II. Intervention policies and strategies

**Intervention policy:** The policies and strategies adopted by each country were reported by NMCPs to WHO. They vary according to the epidemiological setting, socioeconomic factors and the capacity of the NMCP or the country’s health system. Adoption of policies does not necessarily imply immediate implementation, nor does it indicate full, continuous implementation nationwide.

**Antimalarial treatment policy:** Antimalarial treatment policies were reported by NMCPs to WHO.

**Therapeutic efficacy tests:** Data on therapeutic efficacy were extracted from the WHO global antimalarial drug efficacy database. The data originated from three main sources: published data, unpublished data and regular monitoring data from surveillance studies conducted according to the WHO standard protocol. The percentage of treatment failures is the total number of failures (early treatment failures + late clinical failures + late parasitological failures), divided by the total number of patients who completed the study follow-up. The number of studies included in the analysis and the years during which the studies were conducted are shown for each antimalarial medicine. The minimum, median and maximum describe the range of treatment failures observed in the studies for each antimalarial medicine.

## III. Financing

**Sources of financing:** The data shown are those reported by NMCPs. The government contribution is usually the declared government expenditure for the year. In cases where government expenditure was not reported by the programme, the government budget was used. External contributions are those allocated to the programme by external agencies; however, such contributions may or may not be disbursed. Additional information about contributions from specific donor agencies, as reported by these agencies, is given in Annex 3. All countries were asked to convert their local currencies to US\$ for reporting on sources of financing.

**Expenditure by intervention in 2014:** The pie chart shows the proportion of malaria funding from all sources that was spent on ITNs, insecticides and spraying materials, IRS, diagnosis, antimalarial medicines, monitoring and evaluation, human resources, technical assistance and management. There are differences in the completeness of data between countries, and the activities for which expenditures are reported do not necessarily include all items of expenditure. For example, government expenditures usually only include expenditures specific to malaria control, and do not take into account costs related to health-facility staff, infrastructure and so on.

## IV. Coverage

**ITN and IRS coverage:** Indicators are shown according to data availability:

- a) With access to an ITN (survey) – the proportion of all individuals that could be covered by available ITNs in each household, assuming each ITN can be shared by two people. The indicator is calculated from nationally representative household surveys such as DHS, MICS and MIS.
- b) All ages who slept under an ITN (survey) – the proportion of all individuals who spent the previous night in surveyed households who slept under an ITN, as measured in a nationally representative household survey such as DHS, MICS or MIS.
- c) With access to an ITN (model) – for high-transmission countries in the WHO African Region, a model was used to estimate the proportion of the population with access to an ITN within their household for years in which household survey results were not available. The methods used to estimate the indicator were the same as those described for Figure 3.1 and Figure 3.2.
- d) At high risk protected by ITNs – for countries in WHO regions other than the African Region, nationally representative household surveys are not undertaken sufficiently frequently to allow an assessment of levels and trends in ITN coverage. Therefore, the number of ITNs distributed by NMCPs is used. The proportion of the population potentially protected with ITNs is calculated as  $1.8 \times (\text{number of LLINs distributed in the past 3 years} + \text{number of conventional ITNs distributed or re-treated in the past year})$  divided by the population at high risk for malaria. LLINs are considered to have an average useful lifespan of 3 years and conventional ITNs 1 year; also, each net is assumed to protect two people. The ratio of 1.8 is used in the formula to allow for only one person sleeping under some ITNs in households with an odd number of inhabitants. The population at high risk is used as the denominator because it is assumed that populations at high risk will be preferentially targeted to receive an ITN. For countries in the elimination phase, those residing in foci are considered to be the population at risk.
- e) At high risk protected by IRS – calculated as the number of people living in a household where IRS has been applied during the preceding 12 months, divided by the population at risk (the sum of populations living in low- and high-transmission areas). For areas outside Africa, the population at high risk is used as the denominator. The percentage of people protected by IRS is a measure of the extent to which IRS is implemented and the extent to which the population at risk benefits from IRS nationwide. The data show neither the quality of spraying nor the geographical distribution of IRS coverage in a country.

## Cases tested and cases treated in the public sector

**Suspected cases tested** – the number of suspected cases examined by microscopy or by RDT, divided by the total number of suspected malaria cases. For countries that do not report the number of suspected cases independently, the number of suspected malaria cases is derived from the number of presumed and confirmed cases, the number tested and the number of positive tests. This indicator reflects the extent to which a programme can provide diagnostic services to patients attending public health facilities. It does not consider patients attending privately run health facilities, and therefore does not reflect the experience of all patients seeking treatment. In many situations, health facilities in the private sector are less likely to provide a diagnostic test than those in the public sector. The indicator may also be biased if those health facilities that provide a diagnostic test (e.g. hospitals) are more likely than other facilities to submit monthly reports.

**Under 5 with fever with finger/heel stick (survey)** – the proportion of children aged under 5 years with fever in the past weeks who had a finger or heel stick, as measured in a nationally representative household survey such as DHS, MICS or MIS.

**Antimalarial medicines distributed versus cases** – few countries have information systems that are able to record the treatments given to individual patients. Instead, data on the numbers of antimalarial medicines distributed by the country's ministry of health are used to calculate proxy indicators of access to treatment. Three indicators are shown:

- a) Antimalarials distributed versus all malaria cases – the number of first-line treatment courses distributed, divided by the estimated number of malaria cases attending public sector health facilities.
- b) ACTs distributed versus *P. falciparum* malaria cases – the number of ACT treatment courses distributed, divided by the estimated number of *P. falciparum* malaria cases attending public sector health facilities.
- c) Primaquine distributed versus *P. vivax* malaria cases – the number of primaquine treatment courses distributed, divided by the estimated number of *P. vivax* malaria cases attending public sector health facilities. For high-transmission countries in the WHO African Region, the estimated number of malaria cases attending public sector health facilities is used as a denominator. For other countries, the denominator is the number of confirmed cases plus the number of presumed cases, adjusted for reporting completeness. These indicators can provide information on whether the NMCP delivers sufficient antimalarial medicines to treat all malaria patients who seek treatment in the public sector. It is not a direct measure of the proportion of patients with malaria that have received treatment.

**ACTs as a percentage of all antimalarials received (survey)**

– children aged under 5 years with fever in the past 2 weeks who received ACTs as a proportion of children aged under 5 years with fever who received any antimalarial.

**Cases tracked**

**Reporting completeness** – calculated as the total number of health-facility reports received by a ministry of health during a year, divided by the total number of facility reports that were expected in that year. The expected number of facility reports is the number of health facilities multiplied by the frequency of reporting; that is, if 100 facilities are expected to report each month, 1200 reports would be expected during a year.

**Percentage fever cases <5 seeking treatment at public health facility (survey)**

– the proportion of children aged under 5 years with fever in the past 2 weeks who sought treatment at a public health facility, derived from a nationally representative household survey such as DHS, MICS or MIS (for programmes in the control phase only).

**Cases investigated** – the proportion of reported confirmed malaria cases that are investigated for additional information on the characteristics of the case; most importantly, whether the case was imported or locally acquired (for programmes in the pre-elimination and elimination phase only).

**Foci investigated** – the proportion of foci of malaria transmission that are investigated for additional information on the characteristics of transmission of malaria, including evidence of local malaria transmission and entomological information such as vector breeding sites within the transmission focus (for programmes in the pre-elimination and elimination phase only).

**V. Impact**

**Test positivity slide positivity rate (SPR)** – the number of microscopically positive cases divided by the total number of slides examined.

**RDT positivity rate** – the number of positive RDT tests divided by the total number of RDT tests carried out. The RDT positivity rate and SPR are derived from the number of parasitologically positive cases per 100 cases examined by RDT or microscopy. They measure the prevalence of malaria parasites among people who seek care and are examined in health facilities. Trends in these indicators may be less distorted by variations in the ABER than by trends in the number of confirmed cases.

**Parasite prevalence (survey)** – the proportion of people tested for malaria parasites in a survey (usually children aged under 5 years) who have malaria parasites (programmes in control phase only).

**Confirmed malaria cases per 1000 and ABER** (microscopy and RDT) – the number of parasitological tests (by microscopy or RDT) undertaken per 100 population at risk per year. The numbers of parasitological tests were derived from reports by NMCPs to WHO. The ABER provides information on the extent of diagnostic testing in a population. It can be useful to take ABER into account when interpreting trends in confirmed cases. To discern changes in malaria incidence, the ABER should ideally remain constant (see the methods notes for Table 2.4). There is no set threshold or target for ABER; rather, it is the trend in ABER in relation to reported case incidence that is most informative.

**Cases (all species)** – the total number of confirmed malaria cases (by microscopy or RDT) divided by the population at risk. The numbers of confirmed cases were derived from reports by NMCPs to WHO. The indicator is useful in assessing changes in the incidence of malaria over time, provided that there has been consistency in patient attendance at facilities, diagnostic testing and case reporting over time.

**Cases (*P. vivax*)** – the total number of confirmed *P. vivax* malaria cases (by microscopy or RDT) divided by the population at risk. The numbers of confirmed *P. vivax* cases were derived from reports by NMCPs to WHO (the numbers exclude mixed infections). For countries in the pre-elimination or elimination phases, the total number of indigenous cases (acquired within the country) and imported cases were also plotted.

**Malaria admissions and deaths (for countries in the control phase)** – numbers for malaria admissions and deaths for countries in the control phase were derived from reports by NMCPs to WHO.

**Admissions (all species)** – the number of patients admitted for malaria with malaria as the primary discharge diagnosis, divided by the population at risk.

**Admissions (*P. vivax*)** – the number of patients admitted for malaria with *P. vivax* malaria as the primary discharge diagnosis, divided by the population at risk.

**Deaths (all species)** – the number of patients dying in health facilities with malaria as the primary cause of death, divided by the population at risk.

**Deaths (*P. vivax*)** – the number of patients dying in health facilities with *P. vivax* malaria as the primary cause of death, divided by the population at risk.

# References

1. United Nations. Millennium Development Goals indicators. United Nations; 2008 (<http://mdgs.un.org/unsd/mdg/Host.aspx?Content=indicators/officialist.htm>, accessed 10 November 2015).
2. World Health Organization. World malaria report. Geneva: World Health Organization; 2012 ([http://www.who.int/malaria/publications/world\\_malaria\\_report\\_2012/en/](http://www.who.int/malaria/publications/world_malaria_report_2012/en/), accessed 15 October 2013).
3. MEASURE DHS, President's Malaria Initiative, Roll Back Malaria Partnership, United Nations, World Health Organization. Household survey indicators for malaria control. 2013 ([http://www.rollbackmalaria.org/files/files/resources/tool\\_HouseholdSurveyIndicatorsForMalariaControl.pdf](http://www.rollbackmalaria.org/files/files/resources/tool_HouseholdSurveyIndicatorsForMalariaControl.pdf), accessed 1 November 2015).
4. World Health Organization. World malaria report. Geneva: World Health Organization; 2008 (<http://www.who.int/malaria/publications/atoz/9789241563697/en/>, accessed 15 October 2013).
5. Cibulskis RE, Aregawi M, Williams R, Otten M, Dye C. Worldwide incidence of malaria in 2009: estimates, time trends, and a critique of methods. *PLoS Med*. 2011 Dec;8(12):e1001142.
6. Kim HJ, Fay MP, Feuer EJ, Midthune DN. Permutation tests for joinpoint regression with applications to cancer rates. *Stat Med*. 2000; 19: 335–51.
7. Bhatt S, et al. The effect of malaria control on *Plasmodium falciparum* in Africa between 2000 and 2015. *Nature* 2015; 526: 207–211.
8. Liu L, Oza S, Hogan D, Perin J, Rudan I, Lawn JE, et al. Global, regional, and national causes of child mortality in 2000–13, with projections to inform post-2015 priorities: an updated systematic analysis. *Lancet*. 2014;385(9966):430–40.
9. Ross A, Maire N, Molineaux L, Smith T. An epidemiologic model of severe morbidity and mortality caused by *Plasmodium falciparum*. *Am J Trop Med Hyg*. 2006;75(2):63–73.
10. United Nations. Revision of world population prospects. United Nations. (<http://esa.un.org/unpd/wpp/>, accessed 1 August 2015).
11. Cibulskis RE, Bell D, Christophel EM, Hii J, Delacollette C, Bakayaita N, et al. Estimating trends in the burden of malaria at country level. *Am J Trop Med Hyg*. 2007;77(6 Suppl):133–7.
12. Bhatt S, Weiss DJ, Mappin B, Dalrymple U, Cameron E et al. Coverage and system efficiencies of insecticide-treated nets in Africa from 2000 to 2017s. *eLife*; in press.
13. Flaxman AD, Fullman N, Otten MW, Menon M, Cibulskis RE, Ng M, et al. Rapid scaling up of insecticide-treated bed net coverage in Africa and its relationship with development assistance for health: A systematic synthesis of supply, distribution, and household survey data. *PLoS Med*. 2010;7(8):e1000328.
14. Yukich J, Bennett A, Keating J, Yukich RK, Lynch M, Eisele TP, et al. Planning long lasting insecticide treated net campaigns: should households' existing nets be taken into account? *Parasit Vectors*. 2013;6:174.
15. World Health Organization. World malaria report. Geneva: World Health Organization; 2013 ([http://www.who.int/malaria/publications/world\\_malaria\\_report\\_2013/en/](http://www.who.int/malaria/publications/world_malaria_report_2013/en/), accessed 30 November 2014).
16. Dellicour S, Tatem AJ, Guerra CA, Snow RW, ter Kuile FO. Quantifying the number of pregnancies at risk of malaria in 2007: A demographic study. *PLoS Med*. 2010;7(1):e1000221.
17. Jacoby WG. Loess: a nonparametric, graphical tool for depicting relationships between variables. *Elect Stud*. 2000;19(4):577–613.
18. Keating J, Miller JM, Bennett A, Moonga HB, Eisele TP. *Plasmodium falciparum* parasite infection prevalence from a household survey in Zambia using microscopy and a rapid diagnostic test: implications for monitoring and evaluation. *Acta Trop*. 2009;112(3):277–82.
19. Willcox ML, Sanogo F, Graz B, Forster M, Dakouo F, Sidibe O, et al. Rapid diagnostic tests for the home-based management of malaria, in a high-transmission area. *Ann Trop Med Parasitol*. 2009;103(1):3–16.
20. Aydin-Schmidt B, Mubi M, Morris U, Petzold M, Ngasala BE, Premji Z, et al. Usefulness of *Plasmodium falciparum*-specific rapid diagnostic tests for assessment of parasite clearance and detection of recurrent infections after artemisinin-based combination therapy. *Malar J*. 2013;12(1):349.
21. The World Bank. Data. (<http://data.worldbank.org/>, accessed 11 January 2015).
22. Foreign Assistance. Foreign assistance database. (<http://beta.foreignassistance.gov/>, accessed 24 September 2015).
23. The World Bank. Inflation, GDP deflator (annual %). (<http://data.worldbank.org/indicator/NY.GDP.DEFL.KD.ZG>, accessed 11 January 2015).

24. The Global Fund. Price and quality reporting. (<http://www.theglobalfund.org/en/pqr/>, accessed 10 April 2015).
25. Management Science for Health. International drug price indicator guide. (<http://erc.msh.org/mainpage.cfm?file=1.0.htm&module=DMP&language=english>, accessed 1 November 2015).
26. World Health Organization. Guidelines for the treatment of malaria (third edition). Geneva: World Health Organization; 2015 (<http://www.who.int/malaria/publications/atoz/9789241549127/en/>, accessed 1 November 2015).
27. Griffin JT, Hollingsworth TD, Reyburn H, Drakeley CJ, Riley EM, Ghani AC. Gradual acquisition of immunity to severe malaria with increasing exposure. *Proc Biol Sci.* 2015;282(1801):20142657.
28. World Health Organization. Cost effectiveness and strategic planning (WHO-CHOICE). Geneva: World Health Organization; 2015 (<http://www.who.int/choice/costs/en/>, accessed 1 November 2015).
29. Griffin JT, Ferguson NM, Ghani AC. Estimates of the changing age-burden of *Plasmodium falciparum* malaria disease in sub-Saharan Africa. *Nat Commun.* 2014;5:3136.
30. World Health Organization. Nursing and midwifery personnel: data by country. Geneva: World Health Organization; 2015 (<http://apps.who.int/gho/data/node.main.HWF1?lang=en>, accessed 26 November 2015).
31. The World Bank. GNI per capita, PPP (current international \$). (<http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD>, accessed 1 November 2015).
32. World Health Organization. Antimalarial drug efficacy maps. Geneva: World Health Organization; 2015 ([http://www.who.int/malaria/areas/drug\\_resistance/maps/en/](http://www.who.int/malaria/areas/drug_resistance/maps/en/), accessed 1 November 2015).
33. World Health Organization. Global technical strategy for malaria 2016–2030. Geneva: World Health Organization; 2015 ([http://www.who.int/malaria/areas/global\\_technical\\_strategy/en/](http://www.who.int/malaria/areas/global_technical_strategy/en/), accessed 1 November 2015).
34. Gething PW, Patil AP, Smith DL, Guerra CA, Elyazar IR, Johnston GL, et al. A new world malaria map: *Plasmodium falciparum* endemicity in 2010. *Malar J.* 2011;10:378.
35. Gething PW, Elyazar IR, Moyes CL, Smith DL, Battle KE, Guerra CA, et al. A long neglected world malaria map: *Plasmodium vivax* endemicity in 2010. *PLoS Negl Trop Dis.* 2012;6(9):e1814.

# Annex 2A – Recommended policies and strategies for malaria control, 2014

WHO region	Country/area	Programme phase	Insecticide-treated mosquito nets			Indoor residual spraying		Treatment							Malaria in pregnancy			
			ITNs/LLINs are distributed for free	ITNs/LLINs are distributed to all age groups	ITNs/LLINs distributed through mass campaigns to all age groups	IRS is recommended by malaria control programme	DDT is used for IRS	ACT policy adopted	Patients of all ages should get diagnostic test	Malaria diagnosis is free of charge in the public sector	RDTs used at community level	Pre-referral treatment with quinine or artemether IM or artesunate suppositories	Single course of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	Primaquine is used for treatment of <i>P. vivax</i> cases	G6PD test is recommended before treatment with primaquine	Directly observed treatment with primaquine is undertaken	IPTp used to prevent malaria during pregnancy	Seasonal malaria chemo-prevention (SMC or IPTc) is used
African	Algeria	Elimination	N	N	-	Y	N	NA	-	Y	-	Y	Y	Y	Y	Y	-	-
	Angola	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Benin	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Botswana	Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
	Burkina Faso	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Burundi	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Cabo Verde	Pre-elimination	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Cameroon	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Central African Republic	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Chad	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Comoros	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Congo	Control	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Côte d'Ivoire	Control	Y	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Democratic Republic of the Congo	Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Equatorial Guinea	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Eritrea	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Ethiopia	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Gabon	Control	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	Gambia	Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Ghana	Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Guinea	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Guinea-Bissau	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Kenya	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Liberia	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Madagascar	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Malawi	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Mali	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Mauritania	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Mayotte, France	Elimination	Y	Y	-	-	N	-	-	-	-	-	-	-	-	-	-	-
	Mozambique	Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Namibia	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Niger	Control	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Nigeria	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Rwanda	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Sao Tome and Principe	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Senegal	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Sierra Leone	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
South Africa	Control	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	
South Sudan?	Control	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Swaziland	Pre-elimination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Togo	Control	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	







# Annex 2B – Antimalarial drug policy, 2014

WHO region	Country/area	P. falciparum				P. vivax
		Uncomplicated unconfirmed	Uncomplicated confirmed	Severe	Prevention during pregnancy	
African	Algeria	-	-	-	-	CQ
	Angola	AL	AL	AS; QN	SP (IPT)	-
	Benin	AL	AL	AS; QN	SP (IPT)	-
	Botswana	AL	AL	QN	CQ+PG	-
	Burkina Faso	AL; AS+AQ	AL; AS+AQ	AS; QN	SP (IPT)	-
	Burundi	AS+AQ	AS+AQ	AS; QN	-	-
	Cabo Verde	AL	AL	QN	CQ	-
	Cameroon	AS+AQ	AS+AQ	AS	-	-
	Central African Republic	AL	AL	AS	-	-
	Chad	AL; AS+AQ	AL; AS+AQ	AS	-	-
	Comoros	AL	AL	QN	SP (IPT)	-
	Congo	AS+AQ	AS+AQ	QN	SP (IPT)	-
	Côte d'Ivoire	AS+AQ	AS+AQ	QN	SP (IPT)	-
	Democratic Republic of the Congo	AS+AQ	AS+AQ	AS	-	-
	Equatorial Guinea	AS+AQ	AS+AQ	AS	-	-
	Eritrea	AS+AQ	AS+AQ	QN	-	AS+AQ+PQ
	Ethiopia	AL	AL	AS; AM; QN	-	CQ
	Gabon	AS+AQ	AS+AQ	AS; AM; QN	SP (IPT)	-
	Gambia	AL	AL	QN	SP (IPT)	-
	Ghana	AS+AQ	AL; AS+AQ	AS; AM; QN	SP (IPT)	-
	Guinea	AS+AQ	AS+AQ	AS	SP (IPT)	-
	Guinea-Bissau	AL	AL	AS; QN	SP (IPT)	-
	Kenya	AL	AL	AS; AM; QN	SP (IPT)	-
	Liberia	AS+AQ	AS+AQ	AS; AM; QN	SP (IPT)	-
	Madagascar	AS+AQ	AS+AQ	QN	SP (IPT)	-
	Malawi	AL	AL	AS; QN	SP (IPT)	-
	Mali	AS+AQ	AL; AS+AQ	QN	SP (IPT)	-
	Mauritania	AS+AQ	AL; AS+AQ	QN	-	-
	Mayotte, France	AS+AQ	AL	QN; AS; QN+AS; AS+D; QN+D	-	CQ+PQ
	Mozambique	-	AL	AS	-	-
	Namibia	AL	AL	QN	SP (IPT)	AL
	Niger	AL	AL	AS; QN	SP (IPT)	-
	Nigeria	AL	AL	AS; AM; QN	SP (IPT)	-
Rwanda	AL; AS+AQ	AL; AS+AQ	AS; QN	SP (IPT)	-	
Sao Tome and Principe	AL	AL	QN	SP (IPT)	-	
Senegal	AS+AQ	AS+AQ	AS; QN	SP (IPT)	-	
Sierra Leone	AS+AQ	AL; AS+AQ	AS; AM; QN	SP (IPT)	-	
South Africa	-	AL; QN+CL; QN+D	QN	CQ+PG	AL+PQ; CQ+PQ	
South Sudan <sup>1</sup>	AS+AQ	AS+AQ	AM; AS; QN	SP (IPT)	AS+AQ+PQ	
Swaziland	-	AL	AS	CQ+PG	-	
Togo	AL; AS+AQ	AL; AS+AQ	AS; AM; QN	SP (IPT)	-	
Uganda	AL	AL	AS	-	-	
United Republic of Tanzania	AL; AS+AQ	AL; AS+AQ	AS	-	-	
Malinland	AL	AL	AS	-	-	
Zanzibar	AS+AQ	AS+AQ	AS; AM; QN	SP (IPT)	-	
Zambia	AL	AL	QN	SP (IPT)	-	
Zimbabwe	AL	AL	QN	SP (IPT)	-	
<b>Eastern Mediterranean</b>						
	Alghanistan	CQ	AS+SP+PQ	AM; AS; QN	-	CQ+PQ(8w)
	Djibouti	AL	AL+PQ	QN	-	CQ+PQ (14 d)
	Iran (Islamic Republic of)	-	AS+SP; AS+SP+PQ	AS; QN+D	-	CQ+PQ(14d & 8w)
	Pakistan	CQ	AS+SP+PQ	AS; QN	-	CQ+PQ(14d)
	Saudi Arabia	-	AS+SP+PQ	AS; AM; QN	-	CQ+PQ(14d)
	Somalia	AS+SP	AS+SP	AS; QN	-	-
	Sudan	AS+SP	AS+SP	AM; QN	-	AL+PQ(14d)
	Yemen	AS+SP	AS+SP	AM; QN	-	CQ+PQ(14d)

WHO region	Country/area	P. falciparum			Prevention during pregnancy	P. vivax Treatment	
		Uncomplicated unconfirmed	Uncomplicated confirmed	Severe			
European	Azerbaijan	AS+SP	AS+SP	AS; QN	-	CQ+PQ(14d)	
	Kyrgyzstan	-	-	-	-	CQ+PQ(14d)	
	Tajikistan	-	AL	QN	-	CQ+PQ(14d)	
	Turkey	-	-	-	-	CQ+PQ(14d)	
	Uzbekistan	-	-	-	-	CQ+PQ(14d)	
	Region of the Americas	Argentina	-	AL+PQ	-	-	CQ+PQ
		Belize	-	CQ+PQ (1d)	AL; QN	-	CQ+PQ(14d)
		Bolivia (Plurinational State of)	-	AS+MQ+PQ	QN	-	CQ+PQ(7d)
		Brazil	-	AL+PQ(1d); AS+MQ+PQ(1d)	AM+CL; AS+CL; QN+CL	-	CQ+PQ(7d)
		Colombia	-	AL	AS+AL	-	CQ+PQ(14d)
		Costa Rica	-	CQ+PQ(1d)	QN	-	CQ+PQ(7d); CQ+PQ(14d)
		Dominican Republic	-	CQ+PQ(1d)	CQ; QN	-	CQ+PQ(14d)
		Ecuador	-	AL+PQ	QN	-	CQ+PQ(14d)
El Salvador		-	CQ+PQ(1d)	QN	-	CQ+PQ(14d)	
French Guiana, France		-	AL	AS; AL	-	CQ+PQ	
Guatemala		-	CQ+PQ(3d)	QN	-	CQ+PQ(14d)	
Guyana		-	AL+PQ(1d)	AM	-	CQ+PQ(14d)	
Haiti		-	CQ+PQ(1d)	QN	-	CQ+PQ(14d)	
Honduras	-	CQ+PQ(1d)	QN	-	CQ+PQ(14d)		
Mexico	-	CQ+PQ	AL	-	CQ+PQ		
Nicaragua	-	CQ+PQ(1d)	QN	-	CQ+PQ(7d)		
Panama	-	AL+PQ(1d)	QN	-	CQ+PQ(7d); CQ+PQ(14d)		
Paraguay	-	AL+PQ	AS	-	CQ+PQ		
Peru	-	AS+MQ	AS+MQ	-	CQ+PQ		
Suriname	-	AL+PQ	AS	-	CQ+PQ		
Venezuela (Bolivarian Republic of)	-	AS+MQ+PQ	AM; QN	-	CQ+PQ(14d)		
South-East Asia	Bangladesh	-	AL	AM; QN	-	CQ+PQ(14d)	
	Bhutan	-	AL	AM; QN	-	CQ+PQ(14d)	
	Democratic People's Republic of Korea	-	-	-	-	CQ+PQ(14d)	
	India	CQ	AS+SP+PQ	AM; AS; QN	-	CQ+PQ(14d)	
	Indonesia	-	AS+AQ; DHA-PP+PQ	AM; AS; QN	-	CQ+PQ(14d)	
	Myanmar	-	AL; AM; AS+MQ; DHA-PPQ; PQ	AM; AS; QN	-	AS+AQ; DHA-PP+PQ(14d)	
	Nepal	CQ	AL+PQ	AS; QN	-	CQ+PQ(14d)	
	Sri Lanka	-	AL+PQ	AS	-	CQ+PQ(14d)	
	Thailand	-	AS+MQ	QN+D	-	CQ+PQ(14d)	
	Timor-Leste	-	AL	QN+D	-	CQ+PQ(14d)	
	Cambodia	-	AS+MQ; DHA-PPQ+PQ	AM; AS; QN	-	DHA-PPQ	
	China	-	ART+NQ; ART-PPQ; AS+AQ; DHA-PPQ	AM; AS; QN	-	CQ+PQ(8d)	
	Lao People's Democratic Republic	-	AL	AM; AS; PYR	-	CQ+PQ(14d)	
Malaysia	-	AS+MQ	AS+AL	-	CQ+PQ(14d)		
Papua New Guinea	-	AL	QN+T	-	CQ+PQ(14d)		
Philippines	AL	AL+PQ	AM; AS	-	AL+PQ		
Republic of Korea	CQ	-	QN+T; QN+D; QN+CL	-	CQ+PQ(14d)		
Solomon Islands	AL	AL	AL; AS	-	AL+PQ(14d)		
Vanuatu	-	AL	AS	-	AL+PQ(14d)		
Viet Nam	-	DHA-PPQ	DHA-PPQ	AS; QN	CQ(weekly)		

AL=Artemether-lumefantrine AS=Artesunate AT=Atovaquone CL=Clindamycin CQ=Chloroquine D=Doxycycline DHA=Dihydroartemisinin MQ=Mefloquine NQ=Naphthoquinone PQ=Primaquine PYR=Pyronaridine PPO=Piperaquine SP=Sulphadoxine-pyrimethamine T=Tetracycline QN=Quinine

1 In May 2013 South Sudan was reassigned to the WHO African Region (WHA resolution 66.21, [http://apps.who.int/gb/ebwha/pdf\\_files/WHA66/A66\\_R21-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R21-en.pdf))

# Annex 3 – Funding for malaria control, 2012–2014

WHO Region	Country/area	Year	Contributions reported by donors						Contributions reported by countries					
			Global Fund <sup>1</sup>	PMI/ USAID <sup>2</sup>	The World Bank <sup>3</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/ USAID	Other bilaterals	WHO	UNICEF	Other contributors <sup>5</sup>
African	Algeria	2012	-	-	-	-	98 151 555	0	-	-	33 000	-	0	
		2013	-	-	-	-	0 <sup>5</sup>	0	-	-	-	-	0	
		2014	-	-	-	-	1 705 134	0	-	-	12 000	-	0	
		2012	7 070 600	30 750 000	-	-	57 415 819 <sup>5</sup>	2 135 717	-	30 750 000	-	-	1 000 000	
	Angola	2013	25 215 799	28 548 000	-	-	64 047 348 <sup>5</sup>	19 286 339	-	27 200 000	-	3 555 239	-	
		2014	-249 158*	29 000 000	-	-	27 851 717	-	-	27 000 000	-	-	-	
	Benin	2012	5 848 553	18 500 000	33 200	-	1 072 280	9 011 888	-	16 100 000	660 000	123 571	-	
		2013	27 645 452	16 653 000	-	-	980 000	-	-	-	-	-	-	
		2014	13 105 187	16 500 000	-	-	1 082 000	40 580 540	-	-	-	-	-	
		2012	-	-	-	-	1 921 908	-	-	-	-	-	250 000	
	Botswana	2013	-	-	0	-	1 947 775	0	0	0	0	0	0	
		2014	-	-	0	-	2 142 552	0	0	0	0	0	0	
	Burkina Faso	2012	40 321 989	9 000 000	1 981 243	-	11 380 472	4 834 000	0	2 698 000	29 500	14 000	0	
		2013	9 399 940	9 421 000	4 254 781	281 893	58 920 267	40 645 351	0	8 552 723	37 800	521 760	942 955	
		2014	5 963 608	9 500 000	-	-	3 126 963	2 433 376	697 173	8 571 017	19 048	136 540	379 610	
		2012	1 018 766	8 000 000	-	-	1 279 206	4 382 754	-	8 000 000	94 294	150 502	2 602 730	
	Burundi	2013	22 752 851	9 229 000	-	-	1 134 923	19 481 377	-	9 260 000	65 000	453 631	1 277 376	
		2014	4 774 243	9 500 000	-	-	2 001 113	6 027 330	-	9 229 345	79 050	475 936	1 324 385	
		2012	373 386	-	-	-	481 264 <sup>5</sup>	-	-	-	-	-	-	
		2013	892 644	-	-	-	397 920	555 169	-	-	130 448	-	-	
	Cabo Verde	2012	-	-	-	-	253 251	64 285	-	-	19 638	-	-	
		2013	1 632 342	-	-	-	3 178 626 <sup>5</sup>	11 655 745	0	0	449 000	1 196 800	0	
		2014	10 878 702	-	-	-	5 246 863 <sup>5</sup>	15 293 706	-	-	904 218	118 341	5 415 537	
		2012	8 613 320	-	-	-	43 709 021 <sup>5</sup>	147 856 497	-	1 123 490	460 000	14 718	669 000	
Central African Republic	2012	3 836 072	-	-	-	371 463 <sup>5</sup>	-	0	0	74 535	219 747	0		
	2013	12 276 042	-	-	-	160 000	5 342 710	0	0	-	2 000 000	-		
	2014	1 991 913	-	-	-	530 000 <sup>5</sup>	2 852 385	-	-	20 500	5 596 000	-		
	2012	-	-	-	-	7 493 400 <sup>5</sup>	-	-	-	-	-	-		
Chad	2013	34 674 177	-	-	-	9 122 400 <sup>5</sup>	30 125 205	-	-	54 574	2 667 358	673 440		
	2014	12 587 947	-	-	-	225 621 <sup>5</sup>	-	0	0	20 000	-	0		
Comoros	2012	137 122	-	0	-	137 147	499 000	0	0	40 000	5 576	0		
	2013	3 541 013	-	-	-	94 797	1 074 877	0	0	104 000	51 630	56 500		
	2014	1 107 319	-	-	-	6 956 815 <sup>5</sup>	4 740 367	-	-	-	-	-		
	2012	1 142 527	-	-	-	0	0	0	0	45 000	10 000	0		
Congo	2013	735 866	-	-	-	7 240 000 <sup>5</sup>	0	0	0	45 000	10 000	0		
	2014	-	-	-	-	2 582 747 <sup>5</sup>	-	-	-	45 000	-	3 827		
	2012	18 895 269	-	-	-	206 925 966 <sup>5</sup>	-	13 119 140	19 678 710	14 466 750	-	-		
	2013	45 346 542	-	-	-	54 723 090	74 853 096	13 119 140	9 839 355	36 338	24 975 817	244 000		
Côte d'Ivoire	2014	27 496 568	-	-	-	53 942 249	33 611 939	-	9 839 355	6 245 966	29 250 235	-		
	2012	105 080 153	38 000 000	8 457 772	4 751 190	303 835	64 140 129	73 719 913	34 930 000	520 000	5 584 965	12 575 325		
	2013	58 206 877	41 869 000	11 238 171	13 731 500	7 812 690	86 281 277	2 952 042	37 001 000	0	1 790 452	35 020 370		
	2014	78 117 103	50 000 000	-	-	8 104 841	102 540 781	0	34 000 000	24 838 023	2 100 000	7 196 262		
Equatorial Guinea	2012	-307 864*	-	-	-	2 659 791 <sup>5</sup>	-	-	-	-	-	5 319 581		
	2013	-	-	-	-	2 582 747 <sup>5</sup>	0	-	-	-	-	4 490 030		
	2014	-138 121*	-	-	-	-	-	-	-	-	-	-		
	2012	8 229 050	-	-	-	-	11 157 713	0	0	0	0	0		
Eritrea	2013	14 460 101	-	-	-	-	15 871 769	-	-	-	-	-		
	2014	6 797 703	-	-	-	0	4 906 745	0	0	58 832	0	0		
	2012	23 762 673	43 000 000	-	-	-	42 424 919	-	-	111 677	-	15 000 000		
	2013	113 143 096	43 773 000	-	-	19 705 028	85 723 876	-	29 370 000	-	-	-		
Ethiopia	2014	9 890 472	45 000 000	-	-	-	93 201 479	-	-	-	-	-		
	2012	-275 821*	-	-	-	-	-	-	-	-	-	-		
	2013	-118*	-	-	-	226 596	0	0	0	11 276	0	-		
	2014	-154 828*	-	-	-	123 200	-	-	-	34 855	-	-		

WHO Region	Country/area	Year	Contributions reported by donors				Contributions reported by countries						UNICEF	Other contributions <sup>6</sup>	
			Global Fund <sup>1</sup>	PMI/USAID <sup>2</sup>	The World Bank <sup>3</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/USAID	Other bilaterals	WHO			
African	Gambia	2012	5 393 233	-	-	-	597 812	4 107 095	-	-	119 149	134 306	-	119 149	-
		2013	9 288 845	-	-	2 982 020	726 578	4 919 685	0	0	0	16 000	26 229	100 000	26 229
		2014	4 134 951	-	-	-	799 091	5 934 320	-	-	-	132 833	150 000	120 814	150 000
		2012	24 589 072	32 000 000	3 484 590	2 006 310	7 700 154	34 668 998	0	27 010 000	581	200 000	79 490	7 911 545	79 490
	Ghana	2013	67 802 357	28 547 000	1 903 200	145 948	8 736 726	67 804 357	0	27 000 000	38 817	47 050	0	0	0
		2014	14 840 935	28 000 000	-	-	8 855 177	64 952 156	-	4 730 000	825 000	32 514	7 519	6 429	7 519
		2012	20 112 537	10 000 000	-	-	3 015 335	1 705 505	-	10 000 000	-	41 060	15 736	6 773 166	15 736
		2013	4 603 535	12 371 000	-	-	956 833	15 603 972	-	10 000 000	-	105 114	36 639	16 581	36 639
	Guinea-Bissau	2014	9 144 353	12 500 000	-	-	-	18 177	0	12 052 476	0	124 135	436 945	0	436 945
		2012	268 512	-	-	-	-	18 177	0	0	0	124 135	436 945	0	436 945
		2013	7 320 497	-	-	-	0	701 363	0	0	0	73 734	218 811	-	218 811
		2014	2 340 811	-	-	-	100 000 <sup>5</sup>	2 952 761	0	0	0	16 869	7 231	13 111 111	7 231
	Kenya	2012	10 881 645	36 450 000	-	17 515 900	2 635 294	9 353 875	8 790 688	35 604 651	232 558	-	337 209	13 111 111	337 209
		2013	33 311 280	34 256 000	-	22 345 400	1 372 093	29 089 771	1 127 907	32 400 000	23 457 627	-	0	23 457 627	0
		2014	49 541 177	35 000 000	-	-	1 178 804	48 916 476	-	32 400 000	25 635 413	832 402	-	-	-
		2012	12 187 274	12 000 000	-	-	0 <sup>5</sup>	14 243 081	0	12 000 000	500 000	73 333	0	500 000	0
	Liberia	2013	5 862 949	12 370 000	-	-	284 306 <sup>5</sup>	14 026 642	0	12 000 000	-	44 890	340 647	-	340 647
		2014	10 405 293	12 000 000	-	-	11 341 797	10 399 555	0	12 000 000	0	-	0	0	0
		2012	25 540 902	27 000 000	-	-	95 000	31 371 350	0	28 742 000	51 000	111 315	875 717	0	875 717
		2013	22 647 300	26 026 000	-	-	15 286	29 994 536	0	27 000 000	369 500	299 000	737 588	0	737 588
Madagascar	2014	499 317	26 000 000	-	-	23 658	2 524 013	600 000	2 592 000	3 369 341	254 170	0	720 000	254 170	
	2012	2 473 270	24 600 000	-	-	720 000	9 720 000	-	21 600 000	3 240 000	120 000	-	-	-	
	2013	9 084 196	24 075 000	-	-	-	880 267	-	23 000 000	-	150 000	-	-	-	
	2014	7 129 260	22 000 000	-	-	-	8 023 075	-	19 118 000	-	150 000	-	-	-	
Malawi	2012	-	27 000 000	-	-	1 259 872	0	-	5 298 930	-	52 584	-	-	-	
	2013	13 845 815	25 007 000	-	-	1 871 915	18 180 392	0	25 500 000	0	92 000	3 092 000	0	3 092 000	
	2014	10 803 020	25 000 000	-	-	1 756 941	26 392 018	0	25 500 000	-	-	1 437 552	-	1 437 552	
	2012	-534 600*	-	-	-	170 000	0	0	0	0	-	-	0	0	
Mauritania	2013	3 674 513	-	-	264 564	1 130 593	-	-	-	-	11 767	42 583	-	42 583	
	2014	-	-	-	-	2 328 000	-	-	-	-	46 000	42 000	-	42 000	
	2012	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mayotte, France	2014	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2012	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mozambique	2012	29 682 980	30 000 000	1 880 060	-	65 800 000	-	10 500 000	-	-	250 000	-	-	-	
	2013	12 626 612	29 023 000	2 031 197	7 739 210	65 800 000	2 497 243	11 000 000	29 000 000	-	100 000	2 668 555	-	2 668 555	
	2014	34 642 279	29 000 000	-	-	4 186 129	37 646 902	3 500 000	29 023 096	-	-	268 993	-	268 993	
	2012	1 243 974	-	-	-	4 500 000	926 804	0	0	0	0	0	0	0	
Namibia	2013	3 608 532	-	-	-	14 811 934	882 630	0	0	0	100 000	-	0	0	
	2014	556 809	-	-	-	2 996 923	2 910 095	0	0	0	100 000	-	0	0	
	2012	490 866	-	-	-	2 115 926 <sup>5</sup>	225 901	60 000	38 000	-	16 000	816 535	0	816 535	
	2013	9 305 823	-	-	-	2 688 014	19 000 000	0	0	-	27 000	4 000 000	-	4 000 000	
Niger	2014	24 009 643	-	-	-	2 859 000	2 494 013	0	0	0	70 248	1 249 000	44 000	1 249 000	
	2012	123 123 364	60 100 000	25 335 000	12 752 900	1 740 000	83 083 666	5 492 349	48 502 012	-	285 968	1 000 000	18 908 794	1 000 000	
	2013	45 365 287	73 272 000	27 963 280	30 852 400	5 541 401	100 362 906	7 040 569	60 462 012	36 736 654	934 980	3 000 000	3 000 000		
	2014	144 939 061	75 000 000	-	-	-	137 920 815	52 220 588	73 771 000	20 157 565	861 615	1 000 000	-	1 000 000	
Rwanda	2012	26 012 739	18 100 000	-	-	-	-	-	-	-	-	-	-	-	
	2013	22 881 569	18 003 000	-	-	-	-	-	-	-	-	-	-	-	
	2014	15 427 182	17 500 000	-	-	0	0	0	0	0	0	0	0	0	
	2012	-	0	62 361	-	128 502	926 494	459 294	0	2 000	47 962	3 000	1 022 740	3 000	
Sao Tome and Principe	2013	3 699 517	0	9 455	-	107 238	1 002 778	0	0	1 050 830	32 512	0	2 000	2 000	
	2014	3 306 066	0	-	-	1 108 444	1 715 622	0	0	1 020 102	125 209	0	1 600	0	
	2012	22 520 214	24 500 000	-	-	-	21 567 732	-	-	-	30 117	443 356	-	443 356	
	2013	3 662 132	24 124 000	-	-	213 986 <sup>5</sup>	4 675 836	-	24 500 000	-	12 490	200 000	-	200 000	
Senegal	2014	21 674 466	24 000 000	-	-	24 800	11 304 875	-	25 302 960	-	12 491	9 780	-	9 780	
	2012	2 991 631	-	-	-	1 231 395 <sup>5</sup>	11 763 088	-	-	-	430 000	2 812	-	2 812	
	2013	6 214 513	-	-	6 097 560	26 898	13 216 219	1 952 807	-	-	64 000	7 874 921	112 855	7 874 921	
	2014	13 788 079	-	-	-	3 074	13 525 631	-	0	6 156 320	50 000	17 912	2 200 067	17 912	

WHO Region	Country/Area	Year	Contributions reported by donors						Contributions reported by countries														
			Global Fund <sup>1</sup>			The World Bank <sup>2</sup>			The World Bank			PMI/USAID			Other bilaterals			WHO	UNICEF	Other contributions <sup>6</sup>			
			Global Fund <sup>1</sup>	PMI/USAID <sup>2</sup>	The World Bank <sup>2</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/USAID	Other bilaterals	Global Fund	The World Bank	PMI/USAID	Other bilaterals								
African	South Africa	2012	-	-	-	-	24 291 216	-	-	-	-	-	-	-	-	-	-	-	-	254 869			
		2013	-	-	0	-	13 511 860	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	South Sudan <sup>7</sup>	2012	-	-	-	-	17 096 911	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		2013	26 978 048	6 300 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	8 716 372	6 947 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	14 253 512	6 000 000	-	-	8 955 920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Swaziland	2012	1 116 084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2013	1 336 085	-	-	-	685 739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	1 654 211	-	-	-	556 245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	276 521	-	-	-	678 718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Togo	2012	20 510 821	-	-	-	225 535	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	7 413 283	-	-	-	5 139 088	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Uganda	2012	83 091 440	33 000 000	-	-	27 083 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2013	19 511 505	33 782 000	-	-	680 702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	14 223 217	34 000 000	-	-	8 035 963 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	14 721 341	49 000 000	-	-	8 164 570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	United Republic of Tanzania <sup>8</sup>	2012	56 328 793	46 056 000	-	-	7 354 400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2013	28 943 792	46 000 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	15 167 601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	52 221 547	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Mainland	2012	28 943 792	-	-	-	553 167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2013	4 107 246	-	-	-	937 500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	9 069 648	25 700 000	-	-	6 022 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	29 335 147	24 028 000	10 454 000	4 833 820	18 031 872	0	165 480	0	360 000	0	0	0	0	0	0	0	0	0	0	0	
Zanzibar	2012	21 665 148	14 000 000	-	-	15 152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2013	9 985 457	15 035 000	-	-	1 250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2014	10 695 816	15 000 000	-	-	4 072 975	0	37 117 700	0	500	0	0	0	0	0	0	0	0	0	0	0		
	2014	2 112 710	-	-	-	6 022 000	0	450 000	0	500	0	0	0	0	0	0	0	0	0	0	0		
Region of the Americas	Argentina	2012	-	-	-	-	520 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2013	-	-	0	-	1 082 700 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		2014	-	-	-	-	1 082 700 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-	-	-	-	250 000 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Belize	2012	-	-	0	-	261 500 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2013	-	-	-	-	270 000 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-	-	-	-	1 110 097 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	3 423 745	-	-	-	110 097 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bolivia (Plurinational State of)	2012	2 112 710	-	-	-	61 378 194 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2013	1 318 174	-	-	-	73 291 509 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-253 838 <sup>*</sup>	-	-	-	72 248 286 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-228 780 <sup>*</sup>	-	-	-	47 495	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Brazil	2012	3 369 591	-	-	-	22 898 987 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2013	6 737 839	-	-	-	23 100 498 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	2 894 197	-	-	-	11 493 708 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-	-	-	-	5 350 000 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Costa Rica	2012	-	-	0	-	4 830 000 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2013	-	-	-	-	129 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	-	-	-	-	2 068 141 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	1 475 716	-	-	-	1 966 812 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dominican Republic	2012	1 149 536	-	-	-	1 883 503 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2013	514 691	-	-	-	2 003 620 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	1 690 157	-	-	-	1 852 740 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		2014	1 110 598	-	-	-	983 835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ecuador	2012	1 002 244	-	-	-	3 688 650 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2013	-	-	0	-	2 854 844 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

WHO Region	Country/area	Year	Contributions reported by donors				Contributions reported by countries						Other contributions <sup>6</sup>	
			Global Fund <sup>1</sup>	PMI/USAID <sup>2</sup>	The World Bank <sup>3</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/USAID	Other bilaterals	WHO		UNICEF
Region of the Americas	French Guiana, France	2012	-	-	-	-	-	0	0	0	0	0	0	0
		2013	-	-	-	-	-	0	0	0	0	0	0	0
	2014	-	-	-	-	-	0	0	0	0	0	0	0	0
	Guatemala	2012	2 821 516	-	-	-	5 637 645 <sup>5</sup>	2 780 074	0	10 561	0	5 260	0	0
		2013	-2 089 393 <sup>*</sup>	-	-	-	1 385 919 <sup>5</sup>	3 498 024	0	105 373	0	0	0	0
		2014	4 368 420	-	-	-	5 42 663 <sup>5</sup>	3 278 171	0	92 461	0	0	0	0
		2012	425 717	-	-	-	1 075 952 <sup>5</sup>	799 527	0	150 000	0	20 000	0	0
	Guyana	2013	379 266	-	-	-	904 858 <sup>5</sup>	809 474	0	297 569	0	15 899	0	0
		2014	-	-	-	-	800 439 <sup>5</sup>	451 597	0	115 708	0	130 882	0	0
		2012	4 516 089	-	-	-	2 433 241 <sup>5</sup>	19 317 275	0	64 222	0	205 000	0	745 000
		2013	3 902 655	-	-	-	4 011 797	4 011 797	0	-	0	169 000	0	820 000
	Haiti	2014	4 531 760	-	-	-	5 257 474	5 257 474	0	102 864	0	24 413	0	-
		2012	1 288 990	-	-	-	592 631 <sup>5</sup>	970 940	0	58 936	0	16 437	0	0
		2013	954 631	-	-	-	971 742 <sup>5</sup>	1 106 404	0	99 330	0	0	0	6 000
		2014	967 393	-	-	-	543 312 <sup>5</sup>	792 634	0	113 187	0	0	0	6 046
	Mexico	2012	-	-	-	-	24 285 354 <sup>5</sup>	0	-	0	0	0	0	0
		2013	-	-	0	-	25 256 768 <sup>5</sup>	0	-	0	0	0	0	0
		2014	-	-	-	-	23 827 054 <sup>5</sup>	0	-	0	0	0	0	0
		2012	803 339	-	-	-	439 258 <sup>5</sup>	1 747 908	0	43 163	0	6 001	0	5 333
	Nicaragua	2013	2 431 682	-	-	-	980 326 <sup>5</sup>	2 075 252	0	37 630	0	0	0	0
2014		1 010 094	-	-	-	631 907 <sup>5</sup>	1 214 811	0	52 976	0	0	0	0	
2012		-	-	-	-	7 919 505 <sup>5</sup>	0	0	27 065	0	17 186	0	0	
2013		-	-	0	-	7 220 410 <sup>5</sup>	0	0	32 136	0	0	0	0	
Panama	2014	-	-	-	-	11 117 148 <sup>5</sup>	200 000	0	77 562	0	0	0	0	
	2012	-	-	-	-	2 115 436 <sup>5</sup>	0	0	0	0	5 635	0	0	
	2013	-	-	0	-	5 145 662 <sup>5</sup>	0	0	0	0	0	0	0	
	2014	-	-	-	-	5 574 580 <sup>5</sup>	0	0	77 438	0	5 740	0	0	
Paraguay	2012	-	-	-	-	125 155 514 <sup>5</sup>	0	0	56 073	0	0	0	0	
	2013	-	-	0	-	429 285 <sup>5</sup>	0	0	102 871	0	0	0	0	
	2014	-	-	-	-	-	0	0	0	0	0	0	0	
	2012	355 313	-	-	-	1 428 000 <sup>5</sup>	355 000	0	0	0	0	0	0	
Suriname	2013	549 463	-	-	-	152 805 <sup>5</sup>	550 000	0	156 965	0	100 000	0	400 000	
	2014	158 751	-	-	-	1 650 498 <sup>5</sup>	479 600	0	400 541	0	100 000	0	0	
	2012	-	-	-	-	790 292 <sup>5</sup>	0	0	0	0	0	0	0	
	2013	-	-	0	-	800 000 <sup>5</sup>	0	0	0	0	0	0	0	
Venezuela (Bolivarian Republic of)	2014	-	-	-	-	1 000 000 <sup>5</sup>	0	0	0	0	0	0	0	
	2012	12 526 779	-	1 729 231	-	-	10 613 985	-	-	-	116 291	-	-	
	2013	17 626 010	-	3 154 876	-	-	16 651 753	-	-	-	109 068	-	-	
	2014	8 403 364	-	-	-	-	9 083 870	-	-	-	113 341	-	-	
Djibouti	2012	44 923	-	-	-	1 050 000 <sup>5</sup>	48 527	8 413	-	-	55 782	142 000	-	
	2013	-	-	52 000	-	-	-	-	-	-	121 616	200 563	9 200	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	
	2012	8 256 054	-	-	-	9 222 400	5 238 195	-	-	-	73 000	-	-	
Iran (Islamic Republic of)	2013	3 180 088	-	-	-	5 000 000	0	-	-	-	60 500	-	-	
	2014	2 665 232	-	-	-	6 300 000	2 979 260	-	-	-	34 000	-	-	
	2012	19 030 225	-	-	-	2 500 000 <sup>5</sup>	15 231 843	-	-	-	-	-	-	
	2013	5 849 945	-	-	-	8 057 177	8 057 177	-	-	-	-	-	-	
Pakistan	2014	9 003 535	-	-	-	-	10 718 906	-	-	-	154 000	-	-	
	2012	-	-	-	-	29 440 000	-	-	-	-	-	-	-	
	2013	-	-	0	-	29 440 000	-	-	-	-	-	-	-	
	2014	-	-	-	-	30 000 000	0	-	-	-	-	-	0	
Saudi Arabia	2012	22 059 494	-	-	-	63 250	11 904 217	0	0	200 000	103 400	-	0	
	2013	2 266 628	-	-	-	64 515	15 062 018	0	0	-	138 400	-	-	
	2014	9 672 384	-	-	-	67 740	9 604 810	0	0	0	85 000	0	0	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	
Eastern Mediterranean	Afghanistan	2012	12 526 779	-	1 729 231	-	-	10 613 985	-	-	-	116 291	-	-
		2013	17 626 010	-	3 154 876	-	-	16 651 753	-	-	-	109 068	-	-
		2014	8 403 364	-	-	-	-	9 083 870	-	-	-	113 341	-	-
		2012	44 923	-	-	-	1 050 000 <sup>5</sup>	48 527	8 413	-	-	55 782	142 000	-
Djibouti	2013	-	-	52 000	-	-	-	-	-	-	121 616	200 563	9 200	
	2014	-	-	-	-	-	-	-	-	-	-	-	-	
	2012	8 256 054	-	-	-	9 222 400	5 238 195	-	-	-	73 000	-	-	
	2013	3 180 088	-	-	-	5 000 000	0	-	-	-	60 500	-	-	
Iran (Islamic Republic of)	2014	2 665 232	-	-	-	6 300 000	2 979 260	-	-	-	34 000	-	-	
	2012	19 030 225	-	-	-	2 500 000 <sup>5</sup>	15 231 843	-	-	-	-	-	-	
	2013	5 849 945	-	-	-	8 057 177	8 057 177	-	-	-	-	-	-	
	2014	9 003 535	-	-	-	-	10 718 906	-	-	-	154 000	-	-	
Pakistan	2012	-	-	-	-	29 440 000	-	-	-	-	-	-	-	
	2013	-	-	0	-	29 440 000	-	-	-	-	-	-	-	
	2014	-	-	-	-	30 000 000	0	-	-	-	-	-	0	
	2012	22 059 494	-	-	-	63 250	11 904 217	0	0	200 000	103 400	-	0	
Somalia	2013	2 266 628	-	-	-	64 515	15 062 018	0	0	-	138 400	-	-	
	2014	9 672 384	-	-	-	67 740	9 604 810	0	0	0	85 000	0	0	

WHO Region	Country/Area	Year	Contributions reported by donors				Contributions reported by countries							
			Global Fund <sup>1</sup>	PMI/USAID <sup>2</sup>	The World Bank <sup>3</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/USAID	Other bilaterals	WHO	UNICEF	Other contributions <sup>5</sup>
Eastern Mediterranean	Sudan	2012	51 832 249	0	-	-	26 709 969	38 398 132	-	-	641 921	494 000	1 680 907	
		2013	35 680 104	0	-	-	26 724 830	34 938 594	-	-	475 893	140 000	-	
		2014	16 053 353	0	-	-	27 316 109	35 883 294	-	-	446 160	-	-	
		2012	9 824 756	-	-	-	136 850	8 908 540	-	-	-	-	5 807 093	
	Yemen	2013	5 973 123	-	-	-	2 293 553 <sup>5</sup>	6 256 730	-	-	200 000	-	1 986 444	
		2014	2 017 535	-	-	-	8 480	2 110 776	-	258 495	465 713	-	1 674 350	
	European	Azerbaijan	2012	587 129	-	-	-	5 000 968	462 920	-	0	35 000	-	0
			2013	554 196	-	-	-	4 827 461	4 32 570	-	-	35 000	-	0
			2014	-35 242*	-	-	-	2 446 419	0	-	-	35 000	-	0
			2012	496 411	-	-	-	70 000	850 061	-	0	0	-	0
Kyrgyzstan		2013	580 063	-	-	-	65 000	434 351	-	-	25 000	-	0	
		2014	376 878	-	-	-	72 300	511 055	-	-	25 000	-	0	
Tajikistan		2012	2 240 695	-	-	-	416 753 <sup>5</sup>	2 068 376	-	-	20 000	-	0	
		2013	1 308 106	-	-	-	633 740	1 714 393	-	-	35 000	-	-	
2014		1 032 277	-	-	-	-	773 000	1 057 879	-	-	75 000	-	0	
		2012	-	-	-	-	22 927 000	0	-	0	0	-	0	
Turkey	2013	0	-	-	-	-	0	-	-	0	-	0		
	2014	-	-	-	-	-	0	-	-	0	-	0		
Uzbekistan	2012	442 231	-	-	-	1 208 161	448 627	-	-	0	-	0		
	2013	544 742	-	-	-	1 480 992	288 060	-	-	0	-	0		
South-East Asia	Bangladesh	2014	-	-	-	-	1 872 954	265 139	-	-	20 000	-	0	
		2012	2 346 342	-	-	-	4 761 717	7 505 444	-	439 490	-	-	-	
		2013	16 404 817	-	-	-	4 134 615	8 033 087	-	-	98 000	-	-	
		2014	4 395 406	-	-	-	5 586 290	8 912 484	-	-	399 189	-	-	
	Bhutan	2012	440 259	-	-	-	213 595	292 324	-	-	27 898	-	146 759	
		2013	405 271	-	-	-	-	-	-	-	-	-	-	
	2014	239 869	-	-	-	-	-	-	-	-	-	-	-	
		3 228 671	-	-	-	-	1 882 000	6 568 434	-	0	5 000	0	0	
	Democratic People's Republic of Korea	2013	2 706 329	-	-	-	1 895 000	2 706 329	0	0	25 000	0	0	
		2014	6 704 605	-	-	-	1 957 000	1 571 206	0	0	98 000	0	0	
India	2012	11 457 066	-	15 798 300	-	47 240 020	7 863 868	-	16 696 978	-	-	-		
	2013	7 174 057	-	5 377 070	-	51 336 600	4 811 540	-	4 299 233	-	-	-		
Indonesia	2014	4 481 942	-	-	-	43 802 468	16 129 032	-	0	-	-	-		
	2012	18 763 721	-	-	-	14 360 336 <sup>5</sup>	11 072 851	0	0	51 141	471 362	0		
2013	31 045 276	-	-	297 389	-	15 288 402 <sup>5</sup>	34 580 791	0	0	400 000	3 525 000	0		
	11 488 128	-	-	-	-	16 108 194 <sup>5</sup>	15 913 410	0	0	400 000	3 490 400	0		
Myanmar	2012	19 766 042	0	-	2 344 460	1 000 000	10 513 382	-	5 500 000	142 500	948 890	870 441		
	2013	15 032 712	6 566 000	-	11 283 400	1 028 807	14 863 117	-	5 400 000	142 500	1 000 000	-		
Nepal	2014	18 254 744	8 000 000	-	-	-	42 620 577	-	6 565 881	25 000	-	5 561 917		
	2012	6 182 591	-	-	-	726 465	2 960 440	-	-	46 500	-	-		
2013	4 922 108	-	-	-	-	1 910 485	3 110 685	-	-	46 500	-	-		
	1 813 110	-	-	-	-	-	-	-	-	46 500	-	-		
Sri Lanka	2012	2 618 112	-	-	-	572 945	1 442 758	-	-	7 400	-	-		
	2013	3 877 889	-	-	-	601 528	1 382 732	-	-	10 000	-	-		
Thailand	2014	2 318 045	-	-	-	708 377	1 433 109	-	-	-	-	-		
	2012	7 152 654	-	-	-	7 098 780	16 246 556	-	-	104 979	-	79 772		
Timor-Leste	2013	11 325 529	-	-	-	5 893 255	9 937 671	-	278 311	139 166	-	70 833		
	2014	16 524 453	0	-	-	7 546 409	20 175 612	0	345 667	0	0	0		
2012	5 040 394	0	-	-	-	2 687 572	5 375 143	0	0	25 000	0	0		
	2 604 409	0	-	-	-	2 981 432	4 372 545	-	80 000	65 012	-	120 000		
Cambodia	2014	1 527 841	0	-	-	-	3 482 955	-	-	-	-	-		
	2013	1 441 288	0	-	-	3 427 795	22 685 407	0	456 796	201 718	0	0		
China	2012	12 111 758	3 997 000	-	-	3 484 029	13 240 888	0	3 996 624	431 792	0	-		
	2014	17 983 122	4 500 000	-	-	714 343	2 917 174	0	4 500 000	334 029	0	-		
2013	12 839 868	-	-	-	-	-	33 637 258	-	-	-	-	-		
	1 856 459	-	-	-	-	16 812 725	0	0	0	0	0	0		
2014	-1 738 247*	-	-	-	-	20 843 118	0	-	-	0	-	0		

WHO Region	Country/area	Year	Contributions reported by donors				Contributions reported by countries								
			Global Fund <sup>1</sup>	PMI/ USAID <sup>2</sup>	The World Bank <sup>3</sup>	UK <sup>4</sup>	Government	Global Fund	The World Bank	PMI/ USAID	Other bilaterals	WHO	UNICEF	Other contributions <sup>5</sup>	
Western Pacific	Lao People's Democratic Republic	2012	6 394 183	-	406 198	-	1 361 672	3 745 346	0	271 773	620 000	20 000	0	2 500	
		2013	3 256 001	-	695 423	-	1 122 915	4 038 937	0	120 132	0	20 000	0	0	
		2014	2 322 590	-	-	-	247 375	2 475 938	0	0	0	113 000	0	43 620	
		2012	-	-	-	-	44 424 578	-	-	-	-	-	-	-	-
	Malaysia	2013	-	-	0	-	39 845 997	-	-	-	-	0	-	0	0
		2014	-	-	-	-	57 535 038	0	-	-	-	-	-	0	0
	Papua New Guinea	2012	22 934 883	-	-	-	584 290 <sup>5</sup>	-	-	-	-	-	-	-	-
		2013	22 970 152	-	-	-	388 000	25 311 547	0	0	0	-	0	-	-
		2014	10 970 461	-	-	-	377 000	695 052	0	0	0	0	0	0	0
		2012	4 271 657	-	-	-	3 939 519 <sup>5</sup>	7 224 199	0	0	0	0	0	0	0
	Philippines	2013	4 806 916	-	-	-	5 235 686	8 612 874	0	0	0	315 326	0	22 220	0
		2014	6 932 455	-	-	-	5 861 758	7 395 343	0	0	0	0	0	0	0
2012		-	-	-	-	681 674	0	-	-	0	0	0	0	0	
2013		-	-	0	-	519 102	0	-	-	0	0	0	0	0	
Republic of Korea	2014	-	-	-	-	556 200	0	-	-	-	0	-	0	0	
	2012	-	-	-	-	269 486	1 696 290	0	0	0	706 000	0	5 432 362	0	
	2013	-	-	-	-	270 180	1 305 840	0	0	1 987 523	852 472	0	674 896	0	
	2014	-	-	-	-	260 505	1 362 022	0	0	1 820 735	654 985	0	0	0	
Vanuatu	2012	-	-	-	-	812 377 <sup>5</sup>	2 446 418	0	0	0	287 615	0	1 178 215	0	
	2013	-	-	0	-	812 377 <sup>5</sup>	1 162 890	0	0	1 692 091	287 615	0	0	0	
	2014	-	-	-	-	812 377 <sup>5</sup>	1 310 500	0	0	1 064 592	287 615	0	0	0	
	2012	4 059 889	-	1 003 840	-	4 615 385	3 961 323	0	0	0	493 802	0	0	0	
Viet Nam	2013	4 249 171	-	-2 733*	-	4 523 810	5 254 143	0	0	0	410 000	0	0	0	
	2014	3 777 902	-	-	-	2 666 667	15 263 816	0	0	0	640 700	0	0	0	

PMI, United States President's Malaria Initiative; UK, Funding from the United Kingdom government; UNICEF, United Nations Children's Fund; USAID, United States Agency for International Development

1 Source: The Global Fund

2 Source: www.foreignassistance.gov

3 Source: OECD Database

4 Source: OECD Database

5 Budget not expenditure

6 Other contributions as reported by countries: NGOs, foundations, etc.

7 South Sudan became an independent State on 9 July 2011 and a Member State of WHO on 27 September 2011. South Sudan and Sudan have distinct epidemiological profiles comprising high transmission and low transmission areas respectively. For this reason data up to

June 2011 from the high transmission areas of Sudan (10 southern states which correspond to South Sudan) and low transmission areas (15 northern states which correspond to contemporary Sudan) are reported separately.

8 Where national totals for the United Republic of Tanzania are unavailable, refer to the sum of Mainland and Zanzibar

\* Negative disbursements reflect recovery of funds on behalf of the financing organization.

# Annex 4 – Intervention coverage estimated from routinely collected data, 2012–2014

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>	
African	Algeria	2012	0	0	0	-	-	13 000	0	887	0	65	0	
		2013	0	0	0	-	-	17 407	1	603	0	87	0	
		2014	0	0	0	-	-	-	-	-	266	92	87	39
		2012	477 044	477 044	0	31	26	676 090	3	3 747 190	3 747 190	100	100	100
	Angola	2013	1 182 519	1 182 519	0	26	31	419 353	2	2 814 900	2 814 900	100	100	100
		2014	2 978 937	2 978 937	0	34	41	58 370	0	-	-	-	-	-
	Benin	2012	708 643	708 643	0	100	44	694 729	7	7	-	-	-	-
		2013	584 285	584 285	0	100	20	694 729	7	-	-	-	-	-
		2014	6 203 924	6 203 924	0	100	46	789 883	7	1 101 154	1 101 154	100	100	100
		2012	52 500	52 500	0	19	35	163 647	12	4 606	4 606	100	100	100
	Botswana	2013	0	0	0	8	36	176 887	12	3 953	3 953	100	100	100
		2014	0	0	0	6	205 831	205 831	14	-	-	-	-	-
		2012	264 432	264 432	0	86	59	115 638	1	5 720 967	5 720 967	96	96	
		2013	9 959 820	9 959 820	0	100	65	0	0	0	5 797 938	5 797 938	100	100
	Burkina Faso	2014	307 243	307 243	0	100	84	0	0	0	7 494 498	7 494 498	100	100
		2012	703 699	703 699	0	84	64	59 300	1	2 183 228	2 183 228	100	100	100
		2013	731 981	731 981	0	74	58	0	0	0	3 836 437	3 836 437	100	100
		2014	5 752 583	5 752 583	0	100	71	0	0	0	4 772 805	4 263 178	100	100
	Cabo Verde	2012	0	0	0	-	18	282 265	100	100	6 960	3 960	100	100
		2013	0	0	0	-	20	298 475	100	100	4 824	3 144	100	100
		2014	0	0	0	-	-	25 780	19	0	46	41	95	85
		2012	217 600	217 600	0	71	62	0	0	0	762 338	760 375	37	36
	Cameroon	2013	0	0	0	68	49	0	0	0	1 048 811	497 022	48	23
		2014	0	0	0	2	36	0	0	0	1 270 172	1 270 172	59	59
		2012	30 000	30 000	0	38	33	0	0	0	-	-	-	-
		2013	150 000	150 000	0	7	35	0	0	0	420 000	420 000	58	58
	Central African Republic	2014	555 334	555 334	0	28	62	0	0	0	522 270	522 270	95	95
		2012	230 043	230 043	0	55	54	-	-	-	814 449	814 449	100	100
2013		6 321 676	6 321 676	0	88	69	0	0	0	1 038 000	1 038 000	100	100	
2012		666	666	0	66	47	-	-	-	-	-	-	-	
Comoros	2013	377 252	377 252	0	93	55	31 150	4	60 868	60 868	100	100		
	2014	13 576	13 576	0	92	80	22 475	3	4 750	4 750	9	9		
	2012	1 203 982	1 203 982	0	72	48	0	0	0	202 402	202 402	25	25	
	2013	14 005	14 005	0	71	40	0	0	0	0	0	0	0	
Congo	2014	180 595	180 595	0	56	28	0	0	0	0	0	0	0	
	2012	1 821 267	1 821 267	0	71	36	-	-	-	6 888 647	2 358 567	100	100	
	2013	12 627 282	12 627 282	0	83	15	-	-	-	2 358 567	2 358 567	76	76	
	2014	18 644 449	18 644 449	0	100	54	-	-	-	-	-	-	-	
Democratic Republic of the Congo	2012	7 947 747	7 947 747	0	84	48	187 386	0	11 693 982	11 693 982	100	100		
	2013	13 918 109	13 918 109	0	96	49	185 252	0	14 941 450	7 112 841	100	100		
	2014	4 431	4 431	0	97	48	194 566	0	19 008 927	19 008 927	100	100		
	2012	8 397	8 397	0	2	24	148 092	19	40 199	40 199	45	45		
Equatorial Guinea	2013	10 010	10 010	0	4	18	129 000	16	40 911	40 911	38	38		
	2014	83 943	83 943	0	5	31	165 944	20	14 577	14 577	7	-		
	2012	86 597	86 597	0	43	46	298 734	6	219 793	219 793	100	100		
	2013	0	0	0	42	38	275 857	6	182 911	182 911	100	100		
Eritrea	2012	6 260 000	6 260 000	0	6	38	320 881	6	216 195	216 195	100	100		
	2013	11 709 780	11 709 780	0	70	49	15 468 785	25	9 000 000	9 000 000	100	100		
	2014	13 388 552	13 388 552	0	62	51	23 150 388	36	12 800 000	9 164 641	100	100		
	2012	21 666	21 666	0	86	58	16 709 249	25	7 321 471	5 321 471	100	100		
Ethiopia	2013	10 000	10 000	0	2	21	0	0	0	-	-	-	-	
	2014	21 666	21 666	0	2	21	0	0	0	-	-	-	-	
	2012	10 000	10 000	0	3	15	-	-	-	984 423	984 423	100	100	
	2013	0	0	0	3	15	-	-	-	-	-	-	-	

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>	
African	Gambia	2012	275 042	275 042	0	100	81	484 086	27	484 901	484 901	83	83	
		2013	138 149	138 149	0	100	82	800 290	43	468 767	468 767	100	100	
		2014	1 046 510	1 046 510	0	100	82	350 442	18	319 182	319 182	100	100	
		2012	7 874 094	7 874 094	0	92	62	2 117 240	8	4 170 828	4 170 828	90	90	
	Ghana	2013	1 926 300	1 926 300	0	96	79	2 936 037	11	8 330 784	8 330 784	100	100	
		2014	5 190 887	5 190 887	0	100	77	2 154 924	8	14 267 045	14 267 045	100	100	
		2012	90 188	90 188	0	3	27	-	-	-	802 110	802 110	28	24
		2013	5 268 245	5 268 245	0	81	43	-	-	-	1 402 400	1 402 400	11	43
	Guinea	2014	73 145	73 145	0	80	73	-	-	-	1 312 802	644 829	77	38
		2012	73 819	73 819	0	33	69	-	-	-	-	-	-	-
		2013	116 268	116 268	0	37	76	-	-	-	-	-	-	-
		2014	1 109 568	1 109 568	0	100	82	-	-	-	171 540	171 540	59	100
	Kenya	2012	4 226 261	4 226 261	0	61	78	2 435 836	6	12 000 000	12 000 000	100	100	
		2013	1 641 982	1 641 982	0	61	77	0	0	8 300 000	7 000 000	100	100	
		2014	5 450 064	5 450 064	0	45	73	0	0	10 839 611	10 614 717	100	100	
		2012	0	0	0	74	44	960 000	23	6 507 544	5 064 014	100	100	
	Liberia	2013	0	0	0	35	38	367 930	9	1 332 055	443 900	100	63	
		2014	0	0	0	-	56	0	0	100 535	96 787	14	13	
		2012	3 939 740	3 939 740	0	76	52	1 597 374	7	2 026 100	2 026 100	100	100	
		2013	6 947 498	6 947 498	0	89	62	1 579 521	7	266 000	266 000	33	33	
	Madagascar	2014	60 091	60 091	0	84	81	-	-	-	467 854	467 854	95	95
		2012	6 742 108	6 742 108	0	100	49	1 873 056	12	6 956 821	6 956 821	100	100	
		2013	636 318	636 318	0	94	77	-	-	-	7 601 460	7 601 460	100	100
		2014	1 423 507	1 423 507	0	95	67	-	-	-	8 735 160	8 735 160	100	100
	Malawi	2012	1 935 348	1 935 348	0	80	63	758 021	5	3 842 790	3 842 790	97	97	
		2013	636 465	636 465	0	73	51	826 386	5	3 080 130	3 080 130	72	72	
		2014	3 790 403	3 790 403	0	67	60	836 568	5	2 211 118	2 211 118	51	51	
		2012	13 000	13 000	0	49	9	-	-	-	-	-	-	-
	Mauritania	2013	105 000	105 000	0	12	8	-	-	-	56 015	56 015	92	92
		2014	178 922	178 922	0	13	9	-	-	-	176 192	176 192	100	100
		2012	40 988	40 988	0	100	9	4 339	9	-	-	-	100	100
		2013	39 400	39 400	0	100	-	-	381	1	-	-	100	100
	Mayotte, France	2014	5 252	5 252	0	100	-	-	450	1	-	-	100	100
		2012	2 669 244	2 669 244	0	52	49	1 789 110	7	5 106 570	5 106 570	67	67	
		2013	3 315 727	3 315 727	0	63	55	9 647 202	36	13 477 650	13 477 650	100	100	
		2014	6 112 245	6 112 245	0	80	69	5 597 770	21	15 976 059	15 976 059	100	100	
	Mozambique	2012	93 900	93 900	0	27	70	559 305	31	22 313	22 313	100	100	
		2013	104 249	104 249	0	28	65	598 901	32	90 377	87 520	100	100	
		2014	163 526	163 526	0	34	-	467 930	25	-	-	-	-	
		2012	541 550	541 550	0	20	35	192 761	1	3 500 243	3 500 243	100	100	
	Niger	2013	409 400	409 400	0	15	27	0	0	0	6 556 070	6 556 070	100	100
		2014	2 048 430	2 048 430	0	30	40	0	0	0	5 731 036	5 731 036	100	100
2012		14 448 634	14 448 634	0	55	36	2 415 540	1	12 877 360	12 877 360	36	36		
2013		8 559 372	8 559 372	0	43	38	132 211	0	32 568 349	32 568 349	92	92		
Nigeria	2014	23 328 225	23 328 225	0	47	48	316 255	0	22 145 889	22 145 889	100	100		
	2012	1 675 233	1 675 233	0	100	52	1 080 889	10	619 786	611 482	100	100		
	2013	5 249 761	5 249 761	0	100	57	1 562 411	14	1 204 913	1 204 913	100	100		
	2014	1 373 582	1 373 582	0	100	62	1 243 704	11	1 917 021	1 917 021	100	100		
Sao Tome and Principe	2012	105 312	105 312	0	100	52	146 773	82	10 703	10 703	85	85		
	2013	14 596	14 596	0	100	53	153 514	84	8 752	8 752	82	82		
	2014	11 385	11 385	0	100	-	124 692	67	1 456	1 456	72	72		
	2012	267 482	267 482	0	44	48	1 095 093	8	713 344	713 344	100	100		
Senegal	2013	3 902 145	3 902 145	0	84	53	976 840	5	976 840	976 840	100	100		
	2014	3 785 595	3 785 595	0	98	76	708 999	5	703 712	703 712	96	96		
	2012	139 391	139 391	0	100	24	986 898	16	2 004 308	2 004 308	100	100		
	2013	441 859	441 859	0	18	32	0	0	2 201 370	2 201 370	100	100		
Sierra Leone	2014	3 846 204	3 846 204	0	100	60	0	0	1 391 273	1 391 273	85	85		

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>	
African	South Africa	2012	0	0	0	-	37	5 000 000	95	3 897	3 897	57	57	
		2013	0	0	0	-	43	2 318 129	43	8 272	5 444	61	40	
		2014	0	0	0	-	-	5 650 177	100	14 036	14 036	88	88	
		2012	1 036 109	1 036 109	0	59	61	170 440	2	4 333 150	4 333 150	100	100	
	South Sudan <sup>3</sup>	2013	3 144 818	3 144 818	0	72	71	332 968	3	3 125 448	3 125 448	100	100	
		2014	0	0	0	63	75	-	-	-	-	-	-	
	Swaziland	2012	40 612	40 612	0	83	69	0	0	0	200	197	27	27
		2013	0	0	0	45	73	0	0	0	356	307	24	21
		2014	5 399	5 399	0	23	-	3 971	1	568	558	79	75	
		2012	329 999	329 999	0	83	72	0	0	812 911	914 218	91	100	
	Togo	2012	468 575	468 575	0	87	59	0	0	964 927	802 904	100	97	
		2013	4 042 425	4 042 425	0	100	70	0	0	1 134 604	1 208 529	62	66	
		2012	1 000 747	1 000 747	0	46	38	2 543 983	7	23 864 320	23 864 320	100	100	
		2013	13 219 306	13 219 306	0	73	47	2 581 839	7	24 375 450	24 375 450	100	100	
	Uganda	2014	10 615 631	10 615 631	0	100	75	3 219 122	9	10 175 160	10 175 160	100	100	
		2012	2 208 293	2 208 293	0	-	65	-	-	-	-	-	-	
		2013	2 547 391	2 547 391	0	-	44	-	-	-	-	-	-	
		2014	510 000	510 000	0	-	27	-	-	-	-	-	-	
	United Republic of Tanzania	2012	1 535 867	1 535 867	0	94	65	6 518 120	14	10 128 060	10 128 060	100	100	
		2013	2 489 536	2 489 536	0	68	44	3 537 097	7	20 377 410	20 377 410	100	100	
2014		510 000	510 000	0	16	27	2 000 000	4	19 937 820	19 937 820	100	100		
2012		672 426	672 426	0	96	-	255 930	19	47 100	47 100	100	87		
Zanzibar	2013	57 855	57 855	0	96	-	224 900	16	5 075	5 075	100	9		
	2014	0	0	0	90	-	-	-	-	-	-	100		
Zambia	2012	2 688 575	2 688 575	0	89	77	4 250 000	29	4 289 743	4 289 743	100	100		
	2013	3 362 588	3 362 588	0	100	81	1 063 460	7	15 926 301	15 926 301	100	100		
	2014	6 368 026	6 368 026	0	100	87	5 538 574	35	13 000 845	13 000 845	100	100		
	2012	457 000	457 000	0	26	39	3 106 659	27	1 236 958	1 236 958	100	100		
Zimbabwe	2013	2 010 000	2 010 000	0	38	60	3 106 659	26	815 260	815 260	100	100		
	2012	1 743 542	1 743 542	0	63	88	3 460 871	29	960 455	960 455	100	100		
	2014	37 551	37 551	0	35	0	0	0	0	0	0	-		
	2013	359 622	359 622	0	29	0	0	0	0	11 135	11 135	-		
Eastern Mediterranean	Afghanistan	2014	4 325 552	4 325 552	0	36	0	0	0	21 625	21 625	-	-	
		2012	26 400	26 400	0	23	29	0	0	0	0	-	-	
		2013	25 700	25 700	0	22	26	0	0	0	8 920	8 920	-	
		2014	0	0	0	21	23	0	0	0	0	0	-	
	Iran (Islamic Republic of)	2012	243 728	243 728	0	98	-	204 224	26	5 670	3 100	100	100	
		2013	169 084	169 084	0	100	-	281 203	36	6 230	3 400	100	100	
		2014	70 360	70 360	0	100	-	289 249	36	8 830	8 830	100	100	
		2012	439 181	439 181	0	0	-	4 584 426	3	2 280 000	596 600	-	-	
	Pakistan	2013	2 238 300	2 238 300	0	3	-	1 161 825	1	2 150 000	590 840	-	-	
		2014	1 519 947	1 519 947	0	4	-	1 103 480	1	907 200	162 880	-	-	
		2012	767 000	767 000	0	72	-	2 210 000	94	1 283	1 283	100	100	
		2013	750 000	750 000	0	100	-	1 736 400	72	974	974	100	100	
	Saudi Arabia	2014	1 450 000	1 450 000	0	100	-	752 851	30	1 155	1 155	100	100	
		2012	455 000	455 000	0	14	15	240 558	2	18 868	9 268	-	-	
		2013	525 000	525 000	0	21	23	90 060	1	292 000	292 000	-	-	
		2014	413 000	413 000	0	24	26	61 362	1	155 450	155 450	-	-	
	Sudan	2012	782 901	782 901	0	14	34	2 945 746	8	2 478 038	2 462 470	-	-	
		2013	5 803 319	5 803 319	0	35	40	3 902 712	10	2 630 400	2 077 204	-	-	
		2014	4 432 714	4 432 714	0	50	54	3 942 110	10	3 823 175	3 823 175	-	-	
		2012	1 209 215	1 209 215	0	16	10	1 886 500	10	179 000	166 500	-	-	
Yemen	2013	1 405 837	1 405 837	0	24	-	2 204 429	11	303 847	303 847	-	-		
	2014	375 899	375 899	0	26	-	2 188 436	11	215 486	215 486	-	-		
	2012	10 000	10 000	0	25	-	211 500	98	4	1	100	100		
	2013	0	0	0	15	-	209 004	96	4	4	100	100		
European	Azerbaijan	2013	0	0	0	8	-	187 261	85	2	2	100	100	
		2014	0	0	0	8	-	-	-	-	-	-	-	

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>	
European	Kyrgyzstan	2012	35 000	35 000	0	100	-	146 466	100	3	0	100	100	
		2013	35 000	35 000	0	100	-	100 633	100	4	0	100	100	
	Tajikistan	2012	100 000	100 000	0	17	-	503 156	19	31	2	100	100	
		2013	100 000	100 000	0	16	-	437 436	21	1	1	100	100	
	Turkey	2012	0	0	0	-	-	387 010	14	0	0	100	100	
		2013	0	0	0	-	-	50	0	600	235	100	100	
		2014	0	0	0	-	-	2 120	12	400	350	100	100	
		2014	0	0	0	-	-	2 120	12	350	300	100	100	
	Uzbekistan	2012	20 000	20 000	0	100	-	375 605	100	1	1	100	100	
		2013	0	0	0	100	-	328 020	100	3	3	100	100	
		2014	0	0	0	100	-	372 967	100	1	1	100	100	
		2014	-	0	0	-	-	26 712	13	50	-	100	100	
	Region of the Americas	Argentina	2013	-	0	0	-	-	24 636	12	50	-	100	100
			2014	-	0	0	-	-	300	0	-	-	100	100
Belize		2012	3 000	3 000	0	2	-	20 052	9	37	1	100	100	
		2013	2 324	2 324	0	4	-	21 413	4	26	0	100	100	
		2014	2 452	2 452	0	6	-	21 413	9	19	0	100	100	
		2014	24 526	24 526	0	4	-	28 000	1	7 400	350	65	65	
Bolivia (Plurinational State of)		2012	20 965	20 965	0	3	-	30 280	1	7 342	959	100	100	
		2013	23 580	23 580	0	3	-	369 103	1	905 010	141 410	100	100	
		2014	361 241	361 241	0	2	-	324 477	1	452 990	122 290	100	100	
		2014	147 736	147 736	0	2	-	287 150	1	334 740	59 690	100	100	
Brazil		2012	229 947	229 947	0	3	-	359 100	3	171 342	50 398	100	100	
		2012	313 398	313 398	0	11	-	154 000	1	68 879	48 285	100	100	
		2013	146 196	146 196	0	12	-	519 333	5	86 228	32 489	100	100	
		2014	169 500	169 500	0	11	-	22 000	1	50	0	100	0	
Costa Rica	2012	3 000	3 000	0	1	-	13 560	1	20	0	100	0		
	2013	7 000	7 000	0	2	-	0	0	6	3	100	100		
	2014	0	0	0	0	-	61 557	1	947	5	100	1		
	2014	62 095	62 095	0	8	-	49 510	1	579	4	100	1		
Dominican Republic	2013	54 139	54 139	0	7	-	6 066	0	496	7	100	1		
	2014	6 733	6 733	0	4	-	83 357	1	4 720	548	100	100		
	2012	13 502	13 502	0	2	-	94 321	1	378	161	100	100		
	2013	20 337	20 337	0	1	-	-	-	-	-	-	-		
Ecuador	2012	0	0	0	1	-	16 905	1	124 753	0	100	0		
	2013	10 000	10 000	0	1	-	15 076	1	10 865	0	100	100		
	2014	0	0	0	1	-	6 424	1	8	0	81	100		
	2014	13 969	13 969	0	10	-	16 625	7	-	-	-	-		
French Guiana, France	2012	2 880	2 880	0	12	-	16 932	7	-	-	-	-		
	2013	2 990	2 990	0	14	-	65 390	1	7 966	0	100	0		
	2014	618 803	618 803	0	10	-	37 450	0	-	-	-	-		
	2013	282 788	282 788	0	13	-	20 700	3	31 601	20 291	100	87		
Guatemala	2012	49 905	49 905	0	14	-	41 000	6	31 479	13 655	100	51		
	2013	16 800	16 800	0	11	-	25 592	4	12 354	12 354	65	100		
	2012	27 921	27 921	0	50	-	0	0	141 094	0	100	0		
	2014	152 996	152 996	0	52	-	0	0	107 029	0	100	0		
Guyana	2012	2 987 653	2 987 653	0	52	-	0	0	37 827	0	100	0		
	2013	0	0	0	51	-	104 495	2	45 926	1	100	0		
	2014	0	0	0	2	-	121 121	2	37 248	2	100	0		
	2013	30 630	30 630	0	4	-	116 490	2	54 466	8	100	1		
Honduras	2012	66 920	66 920	0	4	-	42 985	1	2	2	0	100		
	2013	25 118	25 118	0	16	-	49 401	2	2 974	4	100	100		
	2014	52 766	52 766	0	2	-	47 775	3	4 592	6	100	100		
	2012	4 500	4 500	0	2	-	-	-	-	-	-	-		
Mexico	2013	4 500	4 500	0	2	-	-	-	-	-	-	-		
	2014	7 500	7 500	0	3	-	-	-	-	-	-	-		

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>		
Region of the Americas	Nicaragua	2012	18 350	18 350	0	3	-	87 446	3	218 419	1	100	0		
		2013	17 100	17 100	0	3	-	126 403	4	49 256	0	100	0		
	Panama	2014	83 279	83 279	0	7	-	54 834	2	68 878	0	100	0		
		2012	0	0	0	-	-	21 071	12	920	0	100	0		
	Paraguay	2013	0	0	0	-	-	17 055	10	705	0	100	0		
		2014	0	0	0	-	-	11 422	6	874	0	86	0		
	Peru	2012	0	0	0	-	-	40 126	17	15	0	100	-		
		2013	0	0	0	-	-	19 425	8	11	2	100	18		
	Suriname	2014	0	0	0	-	-	12 809	5	8	7	100	100		
		2012	9 900	9 900	0	0	0	108 629	1	-	-	-	-		
	Venezuela (Bolivarian Republic of)	2013	4 600	4 600	0	0	0	43 617	0	42 670	6 504	64	61		
		2014	0	0	0	0	0	69 155	1	-	-	-	-		
	South-East Asia	Bangladesh	2012	4 892	4 892	0	32	-	0	0	0	800	300	100	74
			2013	515	515	0	10	-	0	0	0	0	0	-	
Bhutan		2012	80 609	80 609	0	59	-	3 637 795	65	77	-	-	-		
		2013	332 000	332 000	0	0	-	4 369 755	77	77	-	-	-		
Democratic People's Republic of Korea		2012	85 976	20 052	65 924	23	-	4 189 850	73	120 979	27 659	32 005	100	95	
		2013	717 000	612 000	105 000	25	-	0	0	0	94 810	71 040	100	100	
India		2012	786 764	728 773	57 991	15	-	0	0	0	42 390	42 390	100	100	
		2013	93 726	93 726	0	39	-	141 322	26	82	35	58 770	100	100	
Indonesia		2012	80 609	80 609	0	36	-	32 824	6	518	518	118	100	100	
		2013	332 000	332 000	0	11	-	144 669	26	118	118	100	100		
Myanmar		2012	0	0	0	6	-	1 835 016	15	23 537	0	0	100	100	
		2013	0	0	0	5	-	2 651 612	22	15 673	0	0	100	100	
Nepal		2012	0	0	0	1	-	2 617 120	21	11 212	0	0	100	100	
		2013	0	0	0	1	-	49 942 758	4	30 523 925	3 147 400	3 147 400	100	100	
Sri Lanka	2012	0	0	0	1	-	45 854 424	4	147 000	147 000	17	32			
	2013	0	0	0	1	-	45 150 612	4	211 500	211 500	19	29			
Thailand	2012	844 737	844 737	0	17	-	257 915	0	341 697	341 697	13	24			
	2013	913 135	913 135	0	13	-	253 815	0	300 008	300 008	13	24			
Timor-Leste	2012	6 416 947	6 416 947	0	22	-	103 285	0	212 346	212 346	11	19			
	2013	2 964 812	1 042 244	1 922 568	22	-	56 414	0	546 060	546 060	74	100			
Cambodia	2012	2 812 517	1 508 557	1 303 960	25	-	48 626	0	371 663	371 663	79	100			
	2013	917 666	904 613	13 053	20	-	281 103	0	281 103	281 103	100	100			
China	2012	499 166	499 166	0	26	-	443 229	3	669 152	53 252	100	100			
	2013	1 395 865	1 395 865	0	38	-	345 000	3	38 113	325	93	7			
Western Pacific	China	2012	1 064 518	1 064 518	0	39	-	372 000	3	24 500	195	17	1		
		2013	637 250	637 250	0	31	-	75 354	2	70	48	61	100		
Cambodia	China	2012	0	0	0	24	-	50 666	1	95	43	80	100		
		2013	0	0	0	24	-	50	0	49	23	100	100		
Thailand	China	2012	264 806	139 000	125 806	4	-	451 730	1	3 348	3 348	10	26		
		2013	783 896	670 000	113 896	6	-	106 374	0	15 069	15 069	36	83		
Timor-Leste	China	2012	631 596	528 850	102 746	8	-	362 469	1	19 314	19 314	51	100		
		2013	25 148	25 148	0	39	-	159 743	16	5 211	2 923	85	100		
Cambodia	China	2012	253 037	253 037	0	54	-	0	0	23 667	3 131	100	100		
		2013	99 572	99 572	0	65	-	110 707	11	3 432	330	100	100		
Cambodia	China	2012	2 177 808	2 177 808	0	63	-	0	0	422 024	422 024	100	100		
		2013	5 418	5 418	0	58	-	117 547	0	117 547	117 547	100	100		
China	China	2012	372 789	70 411	302 378	42	-	0	0	118 483	114 159	100	100		
		2013	257 935	0	257 935	0	-	1 096 877	0	-	-	-	-		
China	China	2012	58 874	0	58 874	0	-	447 639	0	4 127	3 919	100	100		
		2013	19 899	19 899	0	0	-	504 936	0	43 150	9 350	100	100		

WHO region	Country/area	Year	No. of ITN + LLIN sold or delivered	No. of LLIN sold or delivered	No. of ITN sold or delivered	% ITN coverage	Modelled % of population with access to an ITN	No. of people protected by IRS	% IRS coverage	Any first-line treatment courses delivered (including ACT)	ACT treatment courses delivered	% Any antimalarial coverage <sup>1</sup>	% ACT coverage <sup>2</sup>	
Western Pacific	Lao People's Democratic Republic	2012	54 056	54 056	0	34	-	1 856	0	104 400	104 400	100	100	
		2013	439 677	439 677	0	22	-	13 113	0	58 470	58 470	100	100	
	Malaysia	2012	276 655	276 655	0	22	-	4 691	0	50 092	50 092	100	100	
		2013	220 703	220 703	0	100	-	489 988	42	4 725	2 088	100	100	
	Papua New Guinea	2012	317 943	317 943	0	100	-	682 288	58	3 850	2 873	100	100	
		2013	622 673	622 673	0	100	-	615 384	51	3 923	3 182	100	100	
	Philippines	2012	1 062 508	1 062 508	0	78	-	0	0	0	886 560	886 560	89	100
		2013	1 625 831	1 625 831	0	94	-	0	0	0	915 330	915 330	100	100
	Republic of Korea	2012	1 613 140	1 613 140	0	100	-	0	0	0	802 080	802 080	100	100
		2013	783 463	783 463	0	16	-	1 541 860	3	13 469	13 469	100	100	
	Solomon Islands	2012	715 125	715 125	0	14	-	1 108 220	2	24 771	24 771	100	100	
		2013	996 180	996 180	0	8	-	1 175 136	2	30 095	30 095	100	100	
	Vanuatu	2012	0	0	0	1	-	0	0	0	555	-	65	-
		2013	0	0	0	1	-	0	0	0	443	-	65	100
	Viet Nam	2012	5 250	5 250	0	0	-	0	0	0	638	-	65	100
		2013	31 781	31 781	0	100	-	13 752	24	190 255	190 255	100	100	
	Western Pacific	Solomon Islands	2012	371 124	371 124	0	100	-	98 971	18	146 439	146 439	100	100
			2013	47 258	47 258	0	100	-	128 673	23	147 430	147 430	100	100
Western Pacific	Vanuatu	2012	35 863	35 863	0	100	-	9 705	4	52 010	52 010	100	100	
		2013	94 232	94 232	0	100	-	3 033	1	24 000	24 000	100	100	
Western Pacific	Viet Nam	2012	42 916	42 916	0	100	-	0	0	24 000	24 000	100	100	
		2013	968 413	968 413	0	14	-	1 364 815	2	266 351	192 400	100	-	
Western Pacific	Viet Nam	2012	0	0	0	9	-	1 310 820	2	218 389	141 570	100	100	
		2013	526 366	526 366	0	5	-	616 670	1	194 397	106 100	100	100	

ACT, artemisinin-based combination therapy; IRS, indoor residual spraying; ITN, insecticide-treated mosquito net; LLIN, long-lasting insecticidal net

1 Based on presumed and confirmed cases adjusting for reporting completeness and any first-line treatment courses distributed as proxy indicator for treated cases

2 Based on presumed and confirmed cases adjusting for reporting completeness and % of *P. falciparum* using ACTs distributed as proxy indicator for treated cases

3 In May 2013 South Sudan was reassigned to the WHO African Region (WHA resolution 66.21, <http://apps.who.int/iris/handle/10665/121111>)

# Annex 5 – Household surveys, 2012–2014

WHO region	Country/area	Source	% of HH that have at least one ITN	% of HH with enough ITNs for individuals who slept in the house the previous night	% of population with access to an ITN in their household	% of existing ITNs in HH used the previous night	% of the population who slept under an ITN the previous night	% of children <5 years who slept under an ITN the previous night	% of pregnant women who slept under an ITN the previous night	% of HH sprayed by IRS within last 12 months	% of HH with = 1 ITN sprayed by IRS within last 12 months	% of children aged 6–59 months with a hemoglobin measuremen <8g/dL	% of children aged 6–59 months with a positive microscop smear	% children <5 years with fever in last 2 weeks for whom advice or treatment was sought	% children <5 years with fever in last 2 weeks who received an ACT among those who received any antimalarial	% children <5 years with fever in the last 2 weeks who had a finger or heel stick	% of women who received at least 3 doses of IPT during ANC visits during their last pregnancy
African	Benin	DHS 2012	-	43	64	89	62	-	74	7	47	7	29	59	32	17	11
	Burundi	DHS 2013	-	23	46	83	47	-	55	-	-	-	-	-	-	48	-
	Comoros	DHS 2012	-	23	41	93	37	-	44	6	28	-	-	55	14	29	12
	Congo	DHS 2012	33	9	23	90	25	31	26	4	-	4	-	67	40	29	18
	Côte d'Ivoire	DHS 2012	67	30	49	62	32	37	40	2	31	12	17	67	18	11	8
	Democratic Republic of the Congo	DHS 2013	-	24	47	85	49	-	59	-	-	8	-	-	19	19	-
	DHS 2014	-	24	47	85	49	-	59	-	-	8	23	-	59	18	19	6
	Gabon	DHS 2012	36	14	27	87	26	39	-	6	20	5	-	71	37	15	2
	Gambia	DHS 2013	-	19	45	77	36	-	46	32	43	12	1	66	31	37	6
	Ghana	DHS 2014	-	44	59	50	35	-	43	12	51	9	-	80	78	34	40
	Guinea	DHS 2012	-	9	25	68	19	-	28	2	11	17	44	54	5	9	12
	Liberia	DHS 2013	-	20	37	71	31	-	36	13	30	-	-	80	43	42	18
	Madagascar	DHS 2013	-	28	48	85	54	-	61	30	-	4	-	-	41	13	-
	Malawi	MIS 2012	55	18	37	91	40	56	-	51	25	9	28	59	91	36	13
	Mali	DHS 2013	-	38	65	90	58	-	73	6	42	21	53	49	17	12	13
	Namibia	DHS 2013	-	12	18	23	4	-	4	17	26	3	-	66	46	22	3
	Niger	DHS 2012	-	-	-	-	-	-	-	-	-	9	-	64	79	14	9
	Nigeria	DHS 2013	-	22	36	35	13	-	16	2	23	-	-	78	18	11	7
	Rwanda	DHS 2013	-	41	66	75	60	-	74	12	12	-	-	-	93	30	-
Senegal	DHS 2013	-	27	57	66	39	-	43	13	-	-	-	-	18	-	-	
DHS 2014	-	34	34	58	63	39	-	38	10	41	10	1	59	10	11	3	
Sierra Leone	DHS 2013	-	14	38	93	41	-	52	5	-	17	-	-	77	40	-	
Togo	DHS 2014	-	32	49	61	33	-	40	-	-	9	38	61	48	24	24	
United Republic of Tanzania	DHS 2012	91	52	74	77	65	70	-	74	15	61	6	4	79	61	25	
Zambia	DHS 2014	-	24	47	65	34	-	41	31	48	-	-	77	90	49	50	
DHS 2012	-	19	5	11	64	7	12	-	8	2	7	4	-	49	-	12	
Honduras	DHS 2012	-	-	-	-	-	-	-	-	-	-	1	-	64	-	-	
Sudan	DHS 2012	51	-	31	-	-	16	-	-	-	-	-	-	-	-	-	
Indonesia	DHS 2012	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	
Cambodia	DHS 2014	-	-	-	-	-	-	-	-	-	-	-	-	-	63	14	
China	DHS 2012	-	30	49	62	32	-	40	2	-	-	12	-	-	-	-	

ACT = artemisinin-based combination therapy

ANC = antenatal care

DHS = demographic and health survey

MICS = multiple indicator cluster survey

MIS = malaria indicator survey

HH = households

IPT = intermittent preventive treatment

IPTp = intermittent preventive treatment in pregnancy

IRS = indoor residual spraying

ITN = insecticide-treated mosquito net





WHO region	Country/area	Population				Reported malaria cases										Inpatient malaria cases and deaths				Estimates, 2013			
		UN population	At risk (low + high)	At risk (high)	Number of people living in active foci	Suspected malaria cases	Presumed and confirmed malaria cases	Malaria case definition	Mic. slides/ RDTs performed	Mic. slides/ RDTs positive	Mic. slides/ RDTs (incl. mixed cases)	Mic. slides/ RDTs <i>P. vivax</i> (introduced cases)	Presumed and confirmed cases at community level	RDT positive cases at community level	Inpatient malaria cases	Malaria attributed deaths	Cases		Deaths				
																	Lower	Upper	Lower	Upper			
African	United Republic of Tanzania	51 822 621	51 822 621	51 254 941	N/A	25 190 092	7 403 562	P-C	18 467 337	680 807	107 883	-	-	-	212 854	5373	(2)	(2)	4 200 000	7 300 000	3300	16 500	23 000
	Mainland	50 356 338	50 356 338	50 356 338	N/A	24 880 179	7 399 316	P-C	18 159 070	678 207	106 609	-	-	-	212 562	5368	(2)	(2)	-	-	-	0	-
	Zanzibar	1 466 283	1 466 283	898 603	N/A	309 913	4246	P-C	308 267	2600	1274	-	0	-	292	5	(2)	(2)	-	-	-	0	-
	Zambia	15 721 343	15 721 343	15 721 343	N/A	7 859 740	5 972 933	P-C	5 964 354	4 077 547	-	-	-	-	153 009	3257	(2)	(2)	2 500 000	4 100 000	1800	6700	9200
	Zimbabwe	15 245 855	12 004 995	4 362 761	N/A	1 420 846	535 931	P-C	1 420 846	535 931	535 931	-	36 961	12 345	7689	406	(1)	(1)	640 000	1 600 000	71	2650	5700
	Argentina	42 980 026	N/A	N/A	N/A	5691	4	C	5691	4	4	4	-	-	0	0	(1)	(1)	-	-	-	0	-
	Belize	351 706	N/A	N/A	8589	24 122	19	C	24 122	19	-	19	-	-	0	0	(1)	(1)	-	-	-	0	-
	Bolivia (Plurinational State of)	10 561 887	4 791 623	263 876	N/A	124 900	7401	C	124 900	7401	341	7060	-	0	-	-	1	(1)	7800	10 600	20 000	<10	-
	Brazil	206 077 898	41 833 813	4 739 792	N/A	1 670 019	143 415	C	1 670 019	143 415	24 654	118 724	-	0	-	1756	36	(1)	200 000	230 000	260 000	<50	-
	Colombia	47 791 393	10 625 813	2 154 165	N/A	403 532	40 768	C	403 532	40 768	20 634	20 129	-	0	-	286	17	(1)	57 000	79 000	100 000	<100	-
Costa Rica	4 757 606	N/A	N/A	0	4420	6	C	4420	6	3	5	-	-	0	0	(1)	(1)	-	-	-	0	-	
Dominican Republic	10 405 943	5 013 521	96 205	N/A	416 729	496	C	416 729	496	491	5	-	0	-	169	4	(1)	650	800	980	<10	-	
Ecuador	15 902 916	N/A	N/A	N/A	370 825	241	C	370 825	241	49	199	-	-	-	-	-	(1)	380	400	450	0	0	
El Salvador	6 107 706	N/A	N/A	92 717	106 915	8	C	106 915	8	-	8	-	-	3	0	(1)	(1)	-	-	-	0	-	
French Guiana, France	261 466	261 466	223 553	N/A	14 651	448	C	14 651	448	348	98	-	-	55	0	(1)	(1)	940	1500	3400	<10	-	
Guatemala	16 015 494	12 288 545	3 987 658	N/A	314 294	4931	C	314 294	4931	92	4839	-	-	-	-	1	(1)	6600	10 400	23 000	<10	-	
Guyana	763 893	710 420	267 363	N/A	142 843	12 354	C	142 843	12 354	5140	7173	-	-	56	11	(1)	(1)	45 000	63 000	90 000	10	100	
Haiti	10 572 029	10 572 029	5 603 175	N/A	258 817	17 662	C	258 817	17 662	17 662	17 662	-	-	375	9	(1)	(1)	62 000	109 000	170 000	10	280	
Honduras	7 961 680	5 045 601	371 191	N/A	151 420	3380	C	151 420	3380	601	2881	-	-	-	2	(1)	(1)	8200	11 000	15 000	<10	-	
Mexico	125 385 833	N/A	N/A	3 445 972	900 578	664	C	900 578	664	668	8	-	-	0	0	(1)	(1)	1900	2400	3000	<10	-	
Nicaragua	6 013 913	3 018 984	78 181	N/A	620 977	1163	C	620 977	1163	163	1000	-	0	163	0	(1)	(1)	740	830	890	0	0	
Panama	3 867 535	1 812 284	170 172	N/A	80 701	874	C	80 701	874	8	866	-	-	24	0	(1)	(1)	-	-	-	0	-	
Paraguay	6 552 518	N/A	N/A	497 042	24 832	8	C	24 832	8	7	1	-	-	1	0	(1)	(1)	-	-	-	0	-	
Peru	30 973 148	12 165 089	1 550 406	N/A	866 047	64 676	C	866 047	64 676	10 282	54 394	-	-	-	-	4	(1)	75 000	95 000	120 000	<10	-	
Suriname	538 248	84 505	84 505	N/A	26 964	400	C	26 938	374	216	158	-	-	6	0	(1)	(1)	780	1100	2000	<10	-	
Venezuela (Bolivarian Republic of)	30 693 827	5 770 439	798 040	N/A	522 617	90 708	C	522 617	90 708	27 843	62 850	-	0	-	-	5	(1)	86 000	132 000	310 000	20	150	
Afghanistan	31 627 506	23 902 611	8 511 708	N/A	743 183	290 079	P-C	514 466	61 362	3000	56 362	-	22 558	4971	32	(1)	(1)	180 000	250 000	350 000	46	120	
Djibouti	876 174	438 087	0	N/A	-	9439	P-C	39 276	9439	-	-	-	-	1171	28	(2)	(2)	1000	5400	17 000	<50	-	
Iran (Islamic Republic of)	78 143 644	N/A	N/A	606 499	-	1243	C	468 513	1243	134	1109	-	-	77	0	(1)	(1)	530	570	640	<10	-	
Pakistan	185 044 286	181 918 666	53 509 117	N/A	8 514 341	3 666 257	P-C	5 123 233	275 149	42 817	232 332	-	0	30 164	56	(1)	(1)	1 000 000	1 500 000	2 100 000	250	1100	
Saudi Arabia	30 886 545	N/A	N/A	41 404	-	2305	C	1 249 752	2305	1155	1144	-	-	51	0	(1)	(1)	-	<50	-	0	-	
Somalia	10 517 569	10 517 569	5 353 161	N/A	79 653	26 174	P-C	64 480	11 001	-	-	0	-	1285	14	(2)	(2)	310 000	690 000	1 300 000	42	2000	
Sudan	39 350 274	39 350 274	34 195 388	N/A	1 207 771	1 068 506	P-C	788 281	1 068 506	-	-	-	-	135 132	823	(2)	(2)	940 000	1 300 000	1 800 000	120	3300	
Yemen	26 183 676	20 394 487	6 561 894	N/A	725 169	97 069	P-C	695 593	67 513	67 274	239	-	-	495	19	(1)	(1)	290 000	460 000	710 000	35	1100	
Azerbaijan	9 629 779	N/A	N/A	0	399 925	2	C	399 925	2	2	2	-	-	2	0	(1)	(1)	-	0	0	-	0	
Georgia	4 034 774	N/A	N/A	0	440	6	C	440	6	6	6	-	-	6	0	(1)	(1)	-	0	0	-	0	
Kyrgyzstan	5 843 617	N/A	N/A	0	35 600	0	C	35 600	0	0	0	-	-	0	0	(1)	(1)	-	0	0	-	0	
Tajikistan	8 295 840	N/A	N/A	612 596	200 241	7	C	200 241	7	-	7	-	-	0	0	(1)	(1)	-	<10	-	-	0	
Turkey <sup>a</sup>	77 523 788	N/A	N/A	0	189 854	249	C	189 854	249	204	41	-	-	-	1	(1)	(1)	-	<50	-	-	0	
Uzbekistan	29 469 913	N/A	N/A	0	812 347	1	C	812 347	1	1	1	-	-	-	0	(1)	(1)	-	0	0	-	0	

WHO region	Country/area	Population				Reported malaria cases										Inpatient malaria cases and deaths		Estimates, 2013						
		UN population	At risk (low + high)	At risk (high)	Number of people living in active foci	Suspected malaria cases	Presumed and confirmed malaria cases	Malaria case definition	Mic. slides/ RDTs performed	Mic. slides/ RDTs positive	Mic. slides/ RDTs (incl. mixed cases)	Mic. slides/ RDTs <i>P. vivax</i>	Imported cases / (introduced cases)	Presumed and confirmed cases at community level	RDT positive cases at community level	Inpatient malaria cases	Malaria attributed deaths	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
South-East Asia	Bangladesh	159 077 513	16 480 430	4 231 462	N/A	125 201	10 216	P-C	125 201	10 216	9727	489	-	47 264	36 885	2062	45	(b)	500 000	700 000	1 000 000	69	1600	3200
	Bhutan	765 008	N/A	N/A	121 441	28 716	48	P-C	28 716	48	17	31	29	-	-	-	0	(a)	-	<50	-	-	0	-
	Democratic Republic of Korea	25 026 772	N/A	N/A	11 684 511	38 878	11 212	P-C	38 201	10 535	-	10 535	0	0	0	0	0	(a)	15 000	16 000	18 000	0	0	0
	India	1 295 291 541 0	178 715 300	181 340 816	N/A	138 628 331	1102 205	C	138 628 331	1102 205	722 546	379 659	-	-	-	-	561	(b)	10 000 000	17 000 000	26 000 000	2300	26 000	55 000
	Indonesia	254 454 778	66 484 155	29 945 525	N/A	1575 907	252 027	C	1550 296	252 027	142 807	107 260	-	0	0	252 027	64	(b)	3 200 000	4 100 000	5 300 000	540	6600	12 000
Western Pacific	Myanmar	53 437 159	31 804 541	8 448 712	N/A	890 913	152 195	P-C	890 913	152 195	110 324	41 866	-	53 463	53 405	10 444	92	(b)	680 000	1 200 000	1 900 000	120	2300	5000
	Nepal	28 174 724	13 509 780	1 022 742	N/A	296 979	122 874	P-C	175 574	1469	315	1154	-	-	-	0	(b)	10 000	14 000	22 000	-	<10	-	
	Sri Lanka	20 618 991	N/A	N/A	0	1 069 817	49	C	1 069 817	49	20	28	49	-	-	47	0	(a)	-	0	-	-	0	-
	Thailand	67 725 979	33 862 990	5 418 078	N/A	1 756 528	37 921	C	1 756 528	37 921	14 331	20 513	-	-	-	3297	38	(b)	37 000	127 000	390 000	-	<50	-
	Timor-Leste	1 157 360	1 038 282	389 732	N/A	117 107	342	P-C	117 107	342	339	64	64	-	-	5	1	(b)	37 000	90 000	120 000	10	130	270
Western Pacific	Cambodia	15 328 136	10 839 973	7 376 802	N/A	142 242	26 278	P-C	141 116	25 152	14 796	10 356	-	29 993	29 993	3725	18	(b)	62 000	77 000	95 000	10	120	220
	China	1 377 240 450	575 984 744	196 134	N/A	4 403 633	2921	P-C	4 403 633	2921	1855	850	2864	-	-	170	24	(b)	4300	4800	5200	-	<50	-
	Lao People's Democratic Republic	6 689 300	6 194 945	2 089 861	N/A	294 542	48 071	P-C	294 542	48 071	25 445	22 625	-	11 552	11 571	417	4	(b)	72 000	93 000	120 000	10	180	340
	Malaysia	29 901 997	N/A	N/A	1 300 150	1 443 958	3923	C	1 443 958	3923	409	732	766/(8)	-	-	3331	9	(a)	3000	3300	3600	-	<50	-
	Papua New Guinea	7 463 577	7 463 577	7 015 762	N/A	922 417	644 688	S	558 911	281 182	200 215	78 846	-	63 024	32 850	8749	203	(b)	800 000	1 300 000	2 000 000	110	300	6900
Regional summary	Philippines	99 138 690	60 457 356	6 534 558	N/A	314 820	4903	C	314 820	4903	3995	834	-	1184	1184	525	10	(b)	12 000	16 000	21 000	-	<50	-
	Republic of Korea	50 074 401	N/A	N/A	6 895 283	638	638	C	-	638	55	579	78	-	-	344	0	(a)	390	420	470	0	0	0
	Solomon Islands	572 171	566 449	566 449	N/A	233 803	51 649	P-C	200 558	18 404	10 559	7845	-	0	0	994	23	(b)	35 000	42 000	49 000	-	<50	-
	Vanuatu	258 883	258 883	225 034	N/A	35 570	982	C	35 570	982	279	703	-	332	332	9	0	(b)	5800	7900	10 000	-	<10	-
	Viet Nam	92 423 338	68 114 964	6 282 484	N/A	2 786 135	27 868	P-C	2 774 019	15 752	8532	7220	-	18 675	-	7086	6	(b)	20 000	23 000	27 000	-	<50	-
Regional summary	African Region	960 115 328	834 146 157	696 082 864	541 669	205 962 939	126 256 273	Malaria case definition	149 193 017	74 090 708	32 160 834	875 537	616	4 619 218	1 914 920	5 727 373	97 381	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	Region of the Americas	584 536 665	112 363 133	20 388 281	4 044 320	7 051 834	389 600	Malaria case definition	7 051 834	389 600	108 540	281 068	27	0	0	2894	90	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	Eastern Mediterranean	402 629 674	276 521 695	108 131 267	647 903	11 309 393	5 300 357	Malaria case definition	8 943 594	1 496 518	114 380	293 186	3121	73 944	22 558	173 346	972	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	European Region	134 797 711	N/A	N/A	612 896	1 638 407	265	Malaria case definition	1 638 407	265	213	48	258	0	0	9	1	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	South-East Asia	1 905 729 827	1 341 895 483	230 797 067	11 805 952	144 528 377	1 689 089	Malaria case definition	144 380 684	1 567 007	1 000 290	561 674	78	100 791	93 651	266 118	801	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	Western Pacific	16 790 090 946	729 880 892	30 287 084	8 195 433	10 577 758	811 921	Malaria case definition	10 167 127	401 928	266 140	130 590	3708	124 760	75 930	25 350	297	Method used to calculate <sup>3</sup>	Lower	Point	Upper	Lower	Point	Upper
	<b>Total</b>	<b>5 666 900 151</b>	<b>3 294 807 360</b>	<b>1 085 686 563</b>	<b>25 847 873</b>	<b>38 068 768</b>	<b>134 447 565</b>	<b>Malaria case definition</b>	<b>32 137 463</b>	<b>77 946 026</b>	<b>33 650 397</b>	<b>2 142 103</b>	<b>7808</b>	<b>4 918 713</b>	<b>2 107 059</b>	<b>6 195 090</b>	<b>99 542</b>	<b>Method used to calculate<sup>3</sup></b>	<b>148 000 000</b>	<b>216 000 000</b>	<b>302 000 000</b>	<b>240 000</b>	<b>450 000</b>	<b>660 000</b>

RDT, rapid diagnostic test  
 C=Confirmed P=Presumed S=Suspected  
 1 South Sudan became an independent State on 9 July 2011 and a Member State of WHO on 27 September 2011. South Sudan and Sudan have distinct epidemiological profiles comprising high-transmission and low-transmission areas respectively. For this reason data up to June 2011 from the high-transmission areas of Sudan (10 southern states which correspond to South Sudan) and low-transmission areas (15 northern states which correspond to contemporary Sudan) are reported separately.  
 2 All cases were introduced  
 3 Method used to estimate  
 Deaths: (a) Estimated from reported confirmed cases, (b) Estimated from parasite prevalence surveys  
 Deaths: (a) Estimated from reported deaths, (b) Estimated by applying case fatality rate to estimated cases, (c) Modelled from verbal autopsy data





## Annex 6B – Reported malaria cases by method of confirmation, 2000–2014

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
African	Comoros	Presumed and confirmed	801 784	879 032	1 104 310	867 398	43 918	29 554	54 830	53 511	46 426	57 084	103 670	76 661	65 139	62 565	2 465
		Microscopy examined	-	-	-	-	-	-	-	-	-	13 387	87 595	63 217	125 030	154 824	93 444
		Confirmed with microscopy	-	-	-	-	12 874	6086	20 559	-	-	-	5982	35 199	22 278	45 507	46 130
	Congo	RDT examined	-	-	-	-	-	-	-	-	-	-	52 49	20 226	27 714	21 546	9839
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	1339	2578	4333	7026	216
		Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Côte d'Ivoire	Presumed and confirmed	15 751	11 981	7677	1633	293	67	157 757	149 552	157 125	150 583	446 656	277 263	120 319	183 026	248 159
		Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Democratic Republic of the Congo	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Presumed and confirmed		964 623	2 199 247	2 640 168	4 386 638	4 133 514	6 334 608	5 008 959	3 720 570	4 933 845	4 933 845	7 839 435	9 252 959	9 442 144	9 128 398	11 363 817	9 968 983
Microscopy examined		3758	3244	3704	4820	5320	5531	4779	1181 323	2 613 038	2 613 038	2 956 592	3 678 849	4 226 533	4 329 318	4 126 129	3 533 165
Confirmed with microscopy		897	1531	1735	2438	2684	2971	2050	740 615	1 618 091	1 618 091	1 873 816	2 374 930	2 700 818	2 656 864	2 611 478	2 126 554
RDT examined		-	-	-	-	-	-	-	2275	428	12 436	54 728	2 912 088	3 327 071	6 096 993	11 114 215	
Confirmed with RDT		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Imported cases		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Presumed and confirmed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microscopy examined		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Confirmed with microscopy		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eritrea	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethiopia	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gabon	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gambia	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ghana	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
African	Guinea	Presumed and confirmed Microscopy examined	816 539	851 877	850 147	731 911	876 837	850 309	834 835	888 643	657 003	812 471	1 092 554	1 189 016	1 220 574	775 341	1 595 828
		Confirmed with microscopy RDT examined	4800	6238	16 561	107 925	103 069	50 452	41 228	28 646	33 405	20 932	20 936	5450	191 421	63 353	82 818
		Confirmed with RDT Imported cases	-	-	-	-	-	-	16 554	21 150	15 872	14 909	-	139 066	149 004	-	577 389
		Presumed and confirmed Microscopy examined	246 316	202 379	194 976	162 344	187 910	185 493	148 720	140 205	148 542	156 633	140 143	174 986	129 684	132 176	98 952
	Guinea-Bissau	Confirmed with microscopy RDT examined	-	-	-	-	-	33 721	34 862	34 384	31 083	25 379	48 799	57 698	61 048	58 909	106 882
		Confirmed with RDT Imported cases	-	-	-	-	-	14 659	15 120	14 284	11 299	11 757	30 239	21 320	23 547	17 733	35 546
	Kenya	Presumed and confirmed Microscopy examined	4 216 531	3 262 931	3 319 399	5 338 008	7 545 541	9 181 224	8 926 058	9 610 691	839 903	8 123 689	6 071 583	11 120 812	9 335 951	9 750 953	9 655 905
		Confirmed with microscopy RDT examined	-	-	43 643	96 893	59 995	-	-	-	839 903	-	2 384 402	3 009 051	4 836 617	6 606 885	7 444 865
		Confirmed with RDT Imported cases	-	-	20 049	39 383	28 328	-	-	-	-	-	898 531	1 002 805	1 426 719	2 060 608	2 415 950
		Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	164 424	655 285	850 884
Liberia	Presumed and confirmed Microscopy examined	-	-	-	-	-	44 875	1 171 175	694 428	726 905	1 035 940	2 675 816	2 480 748	1 800 372	1 483 676	1 066 107	
	Confirmed with microscopy RDT examined	-	-	-	-	-	878	165 095	123 939	238 752	327 392	335 973	728 443	772 362	818 352	1 318 801	
	Confirmed with RDT Imported cases	-	-	-	-	-	5025	115 677	80 373	157 920	212 657	212 927	577 641	507 967	496 269	302 708	
	Presumed and confirmed Microscopy examined	-	-	-	-	-	57 325	880 952	508 987	635 855	676 569	998 043	1 593 676	1 276 521	1 144 405	912 382	
Madagascar	Confirmed with RDT Imported cases	-	-	-	-	-	39 850	645 738	411 899	449 032	626 924	200 246	1 338 121	899 481	747 951	561 496	
	Presumed and confirmed Microscopy examined	1 392 483	1 386 291	1 598 919	2 198 297	1 458 408	1 229 385	1 087 563	736 194	352 870	299 094	293 910	255 814	395 149	387 045	433 101	
	Confirmed with microscopy RDT examined	31 575	33 354	27 752	37 333	39 174	37 943	29 318	30 921	30 566	23 963	24 393	34 813	38 453	41 316	35 840	
	Confirmed with RDT Imported cases	6946	8538	5272	6909	7638	6753	5689	4823	4096	2720	2173	3447	3667	4550	3620	
Malawi	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	175 595	299 000	610 035	604 114	739 572	906 080	1 029 994	873 526	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	43 674	89 138	212 390	200 277	221 051	355 753	382 495	361 619	
	Presumed and confirmed Microscopy examined	3 646 212	3 823 796	2 784 001	3 358 960	2 871 098	3 688 389	4 498 949	4 786 045	5 185 082	6 183 816	6 851 108	5 338 701	4 922 596	3 906 838	5 065 703	
	Confirmed with microscopy RDT examined	-	-	-	-	-	-	-	-	-	-	-	119 996	406 907	132 475	198 534	
Mali	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	50 526	283 138	44 501	77 635	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	580 708	2 763 986	3 029 020	5 344 724	
	Presumed and confirmed Microscopy examined	546 634	612 896	723 077	809 428	1 969 214	962 706	1 022 592	1 291 853	1 045 424	1 633 423	2 171 542	1 961 070	2 171 739	2 327 385	2 590 643	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mauritania	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mayotte, France	Presumed and confirmed Microscopy examined	-	-	-	792	743	500	392	421	346	352	396	92	72	82	15	
	Confirmed with RDT Imported cases	-	-	-	792	743	500	392	421	346	352	396	1214	1463	-	-	
Mozambique	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	74	129	148	250	236	51	47	71	14	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	6 155 082	4 831 491	4 310 086	3 381 371	3 344 413	3 203 338	3 924 832	5 485 327		
Mozambique	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## Annex 6B – Reported malaria cases by method of confirmation, 2000–2014 (continued)

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
African	Namibia	Presumed and confirmed Microscopy examined	-	538 512	445 803	468 259	610 799	339 204	265 595	172 024	132 130	87 402	25 889	14 406	3163	4911	15 914	
		Confirmed with microscopy RDT examined	-	41 636	23 984	20 295	36 043	23 339	27 690	4242	-	24 361	16 059	14 522	13 262	7875	1507	1894
		Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	1092	505	556	335	194	136	222
	Niger	Presumed and confirmed Microscopy examined	-	1 340 142	888 345	681 783	760 718	817 707	886 531	1 308 896	2 229 812	2 229 812	2 358 156	3 643 803	3 157 482	4 592 519	4 288 425	3 222 613
		Confirmed with microscopy RDT examined	-	-	-	56 460	81 814	107 092	87 103	1 308 896	2 229 812	2 358 156	165 514	130 658	1781 505	1799 299	1799 299	2 872 710
		Confirmed with RDT Imported cases	-	-	-	-	76 030	21 230	12 567	1 308 896	530 910	312 802	7 426 774	1130 514	1781 505	1199 929	1176 711	2 872 710
		Microscopy examined	2 476 608	2 253 519	2 605 381	2 608 479	3 310 229	3 532 108	3 982 372	2 969 950	2 969 950	2 834 174	4 295 686	3 873 463	4 306 945	6 938 519	12 830 911	16 512 127
	Nigeria	Confirmed with microscopy RDT examined	-	-	-	-	-	-	-	-	-	-	523 513	672 185	1953 399	1633 960	1 681 469	
		Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	45 924	242 526	2 898 052	7 194 960	9 188 933	
		Microscopy examined	-	-	-	-	-	-	-	-	-	-	27 674	-	-	-	6 593 300	
Rwanda	Presumed and confirmed Microscopy examined	-	1 003 793	1 073 546	1 217 405	1 303 494	1 654 246	1 429 072	946 569	772 197	772 197	1 247 583	638 669	208 858	483 470	962 618	1 610 812	
	Confirmed with microscopy RDT examined	-	748 806	951 797	1 071 519	1 201 811	1 438 603	1 523 892	1 754 196	1 640 106	1 640 106	2 637 468	2 708 973	1 602 271	2 904 793	2 862 877	4 010 202	
	Confirmed with RDT Imported cases	-	423 493	506 028	563 150	589 315	683 769	573 686	382 686	316 242	316 242	698 745	638 669	208 858	422 224	879 316	1 528 825	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	190 593	201 708	168 004	
Sao Tome and Principe	Presumed and confirmed Microscopy examined	32 149	44 034	50 953	47 830	53 991	22 370	7293	2421	6258	6258	6182	3346	8442	12 550	9243	1754	
	Confirmed with microscopy RDT examined	66 076	83 045	93 882	81 372	97 836	68 819	58 672	49 298	38 583	38 583	59 228	48 366	83 355	103 773	73 866	33 355	
	Confirmed with RDT Imported cases	31 975	42 086	50 586	42 656	46 486	18 139	5146	2421	1647	1647	3798	2233	6373	10 706	6352	569	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	60 649	9989	33 924	23 124	34 768	58 090	
Senegal	Presumed and confirmed Microscopy examined	1123 377	931 682	960 478	1 414 383	1 195 402	1 346 158	1 555 310	1 170 234	737 414	737 414	584 873	707 772	604 290	634 106	772 222	628 642	
	Confirmed with microscopy RDT examined	56 169	55 494	54 257	85 246	67 750	105 093	138 254	195 487	48 324	48 324	43 026	27 793	18 325	19 946	24 205	19 343	
	Confirmed with RDT Imported cases	44 959	12 920	14 425	26 865	22 234	33 160	48 070	78 278	24 830	24 830	19 614	17 750	14 142	15 612	20 801	12 636	
	Microscopy examined	-	-	-	-	-	-	-	90 161	487 188	487 188	485 548	651 377	555 614	524 971	668 562	697 175	
Sierra Leone	Presumed and confirmed Microscopy examined	460 881	447 826	507 130	524 987	355 638	233 833	160 666	653 987	932 819	932 819	747 339	934 028	856 332	1 945 859	1 715 851	1 898 852	
	Confirmed with microscopy RDT examined	-	4985	10 605	12 298	4985	10 605	12 298	3945	-	-	770 463	718 473	46 280	194 787	185 403	66 277	
	Confirmed with RDT Imported cases	-	2206	3702	3945	2206	3702	3945	273 149	218 473	218 473	25 511	104 533	76 077	104 533	76 077	39 414	
	Microscopy examined	-	-	-	-	-	3452	4675	-	235 800	235 800	1 609 455	886 994	1 975 972	2 377 254	2 377 254	2 056 722	
South Africa	Presumed and confirmed Microscopy examined	64 624	26 506	15 649	13 459	13 399	7755	14 456	6327	7796	7796	617	8060	9866	6846	8651	13 988	
	Confirmed with RDT Imported cases	-	26 506	15 649	13 459	13 399	7755	12 098	6327	7796	6072	3787	5986	1632	1632	2572	4101	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	276 669	204 047	30 053	239 705	240 622	240 622	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	4273	3880	-	3997	6073	7604	
South Sudan <sup>1</sup>	Presumed and confirmed Microscopy examined	-	237 712	462 056	646 673	515 958	337 582	116 473	101 008	136 492	136 492	325 634	900 283	795 784	1 125 039	1 855 501	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Presumed and confirmed Microscopy examined	29 374	12 854	10 129	7203	5140	6066	7807	6338	5881	6624	6624	1722	797	626	962	711	
	Confirmed with RDT Imported cases	-	24 123	13 997	12 564	6754	4587	3985	84	58	58	106	87	130	345	488	711	
	Confirmed with RDT Imported cases	-	1395	670	342	574	279	155	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swaziland	Confirmed with RDT Imported cases	-	-	-														



## Annex 6B – Reported malaria cases by method of confirmation, 2000–2014 (continued)

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Region of the Americas	Bolivia (Plurinational State of)	Presumed and confirmed	31 469	15 765	14 276	20 343	14 910	21 442	19 725	14 610	9748	9743	13 769	7143	7415	7342	7401	
		Microscopy examined	143 990	122 933	137 509	158 299	163 307	202 021	208 616	208 616	180 316	159 826	132 633	133 463	143 272	121 944	133 260	124 900
		Confirmed with microscopy	31 469	15 765	14 276	20 343	14 910	20 142	18 995	18 995	15 000	9748	9234	12 252	6108	6293	6272	7401
		RDT examined	-	-	-	-	5000	6000	6000	6000	1500	5000	981	7394	7390	10 960	10 789	-
	Brazil	Confirmed with RDT	-	-	-	-	-	1300	730	-	-	509	1517	1035	1122	1070	-	
		Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Presumed and confirmed	613 241	388 303	348 259	408 886	465 004	606 067	549 469	309 316	458 652	315 746	309 316	334 668	267 146	242 758	178 546	143 415
		Microscopy examined	2 562 576	2 274 610	2 118 491	2 009 414	2 194 780	2 660 539	2 959 489	2 620 787	2 986 381	2 726 433	2 620 787	2 711 432	2 476 335	2 325 775	1 873 518	1 658 976
	Colombia	Confirmed with microscopy	613 241	388 303	348 259	408 886	465 004	606 067	549 469	458 652	315 746	309 316	334 667	266 713	237 978	174 048	142 031	
		RDT examined	-	-	-	-	-	-	-	-	-	90 275	-	1486	23 566	19 500	11 043	
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	433	4780	3719	1384	
		Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Costa Rica	Presumed and confirmed	144 432	231 233	204 916	180 956	142 241	121 629	120 096	120 096	128 462	80 559	79 347	117 650	64 436	60 179	51 722	40 768	
	Microscopy examined	478 820	747 079	686 635	640 453	562 681	493 562	451 240	428 004	564 755	470 381	428 004	521 342	396 861	346 599	284 332	325 713	
	Confirmed with microscopy	144 432	231 233	204 916	180 956	142 241	121 629	120 096	125 262	79 230	79 252	117 637	60 121	50 938	44 293	36 166		
	RDT examined	-	-	-	-	-	-	-	25 000	22 754	8362	21171	21171	70 168	42 723	77 819		
Dominican Republic	Confirmed with RDT	-	-	-	-	-	-	-	3200	1329	95	13	4188	9241	7403	4602		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Presumed and confirmed	1879	1363	1021	718	1289	3541	2903	1223	1223	966	262	114	17	8	6		
	Microscopy examined	61 261	43 053	17 738	9622	9204	12 767	24 498	22 641	17 304	17 304	4829	15 999	10 690	7485	16 774	4420	
Ecuador	Confirmed with microscopy	1879	1363	1021	718	1289	3541	2903	1223	966	262	114	17	8	6	6		
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Presumed and confirmed	1233	1038	1296	1529	2355	3837	3525	2711	1840	1840	1643	3414	1616	952	579	496	
Ecuador	Microscopy examined	427 297	411 431	391 216	349 717	322 948	397 108	446 839	435 649	381 010	353 336	469 052	421 405	415 808	431 683	362 304		
	Confirmed with microscopy	1233	1038	1296	1529	2355	3837	3525	2711	1840	1643	2482	1616	952	579	496		
	RDT examined	-	-	-	-	-	-	-	-	-	-	26 585	56 150	90 775	71 000	54 425		
	Imported cases	-	-	-	-	-	-	-	-	-	-	932	-	-	-	-		
El Salvador	Presumed and confirmed	104 528	108 903	86 757	52 065	28 730	17 050	9863	8464	8464	4891	4120	1888	1233	558	378	241	
	Microscopy examined	544 646	538 757	403 225	433 244	357 633	358 361	318 132	352 426	364 800	384 800	446 740	481 030	460 785	459 157	397 628	370 825	
	Confirmed with microscopy	104 528	108 903	86 757	52 065	28 730	17 050	9863	8464	4891	4120	1888	1233	558	378	241		
	RDT examined	-	-	-	-	-	-	-	-	-	2758	4992	7800	-	-	-		
El Salvador	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Presumed and confirmed	753	362	117	85	112	67	49	40	33	20	24	14	16	19	7		
	Microscopy examined	279 072	111 830	115 378	102 053	94 819	102 479	113 754	95 857	97 872	97 872	83 031	115 256	100 883	124 885	103 748	106 915	
French Guiana, France	Confirmed with microscopy	753	362	117	85	112	67	49	40	33	20	24	14	16	19	7		
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guatemala	Presumed and confirmed	3708	3823	3661	3839	3038	3414	4074	4828	3320	3462	3462	1632	1209	900	875	448	
	Microscopy examined	48 162	44 718	44 718	32 402	32 402	32 402	32 402	32 402	11 994	20 065	20 065	14 373	14 429	13 638	22 327	14 651	
	Confirmed with microscopy	3708	3823	3661	3839	3038	3414	4074	4828	3320	3462	3462	1632	1209	900	875	448	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guatemala	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Presumed and confirmed	53 311	35 824	35 540	31 127	28 955	39 571	31 093	15 382	7198	7080	7080	7384	6817	5346	6214	4931	
	Microscopy examined	246 642	198 114	197 113	156 227	148 729	178 726	168 958	129 410	173 678	154 652	154 652	235 075	195 080	186 645	153 731	264 269	
Guyana	Confirmed with microscopy	53 311	35 824	35 540	31 127	28 955	39 571	31 093	15 382	7198	7080	7080	7384	6817	5346	6214	4931	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guyana	Presumed and confirmed	24 018	27 122	21 895	27 627	28 866	38 984	21 064	11 656	11 815	13 673	13 673	22 935	29 506	31 656	31 479	12 354	
	Microscopy examined	209 197	211 221	175 966	185 877	151 938	210 429	202 688	178 005	137 247	169 309	169 309	212 863	201 693	196 622	205 903	142 843	
	Confirmed with microscopy	24 018	27 122	21 895	27 627	28 866	38 984	21 064	11 656	11 815	13 673	13 673	22 935	29 471	31 601	31 479	12 354	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0		
Guyana	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Presumed and confirmed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guyana	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Region of the Americas	Haiti	Presumed and confirmed Microscopy examined	16 897	9837	-	-	10 802	21 778	32 739	29 825	36 774	49 535	84 153	32 969	25 423	26 543	17 696	
		Microscopy examined with microscopy	21 190	51 067	-	-	30 440	3 541 506	87 951	142 518	168 950	270 438	270 427	184 934	167 726	172 624	134 822	
		RDT examined	16 897	9837	-	-	10 802	21 778	32 739	29 825	-	36 774	49 535	84 153	32 969	25 423	20 586	10 920
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	46	5586	123 961
	Honduras	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6742
		Presumed and confirmed	35 125	24 149	17 223	14 063	17 134	15 943	11 947	10 512	8368	9313	9685	7618	6439	5428	3380	-
		Microscopy examined	175 577	174 430	178 616	137 891	145 082	153 474	125 162	130 255	119 484	108 529	152 961	152 451	155 165	144 436	151 420	-
		Confirmed with microscopy	35 125	24 149	17 223	14 063	17 134	15 943	11 947	10 512	8368	9313	9685	7465	6439	5384	3380	-
	Jamaica	RDT examined	-	-	-	-	-	2500	2500	-	-	4000	4000	4000	4000	237	1427	-
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	0	0	45	10	64	102	-
Imported cases		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Presumed and confirmed		7	6	7	9	141	88	194	199	22	22	22	12	9	5	-	-	
Mexico	Microscopy examined	874	596	725	394	3879	2470	6821	-	30 732	34 149	10 763	5042	-	-	-	-	
	Confirmed with microscopy	7	6	7	9	141	88	194	199	22	22	22	12	9	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nicaragua	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	252	
	Presumed and confirmed	7390	4996	4624	3819	3406	2967	2514	2361	2357	2703	1226	1130	842	499	664	-	
	Microscopy examined	2 003 569	1 857 233	1 852 553	1 565 155	1 454 575	1 559 076	1 345 915	1 430 717	1 246 780	1 240 087	1 192 081	1 035 424	1 025 659	1 017 508	900 578	-	
	Confirmed with microscopy	7390	4996	4624	3819	3406	2967	2514	2361	2357	2703	1226	1130	842	499	664	-	
Panama	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	23 878	10 482	7695	6717	6897	6642	3114	1356	762	610	692	925	1235	1194	1163	-	
Paraguay	Microscopy examined	509 443	482 919	491 689	448 913	492 319	516 313	464 581	521 464	533 173	544 717	535 914	521 904	536 278	517 141	605 357	-	
	Confirmed with microscopy	23 878	10 482	7695	6717	6897	6642	3114	1356	762	610	692	925	1235	1194	1163	-	
	RDT examined	-	-	-	-	-	-	11 563	16 173	10 000	9000	18 500	14 201	16 444	19 029	15 620	-	
	Confirmed with RDT	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	-	
Peru	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	1036	928	2244	4500	5095	3667	1663	1281	744	778	418	354	844	705	874	-	
	Microscopy examined	149 702	156 589	165 796	166 807	171 779	208 582	212 254	204 193	204 193	200 574	158 481	141 038	116 588	107 711	93 624	80 701	
	Confirmed with microscopy	1036	928	2244	4500	5095	3667	1663	1281	744	778	418	354	844	705	874	-	
Suriname	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	6853	2710	2778	1392	694	376	823	1341	348	348	91	27	10	15	11	8	
Venezuela (Bolivarian Republic of)	Microscopy examined	97 026	71 708	99 338	126 582	97 246	85 942	111 361	92 339	94 316	64 660	62 178	48 611	31 499	24 806	24 832	-	
	Confirmed with microscopy	6853	2710	2778	1392	694	376	823	1341	341	1997	-	-	-	-	-	-	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Venezuela (Bolivarian Republic of)	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	68 321	78 544	99 237	88 408	93 581	87 699	64 925	50 797	44 522	42 645	31 546	25 039	31 570	43 468	64 676	-	
	Microscopy examined	1 483 816	1 417 423	1 582 385	1 485 012	1 438 925	1 438 925	1 438 925	1 438 925	1 438 925	796 337	892 990	744 627	702 894	758 723	863 790	864 413	
	Confirmed with microscopy	68 321	78 544	99 237	88 408	93 581	87 699	64 925	50 797	44 522	42 645	31 546	25 005	31 436	43 139	64 676	-	
Venezuela (Bolivarian Republic of)	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Presumed and confirmed	29 736	20 006	29 491	31 719	46 655	45 049	37 062	41 749	32 037	32 037	35 828	45 155	45 824	52 803	78 643	90 708	
Venezuela (Bolivarian Republic of)	Microscopy examined	261 866	198 000	278 205	344 236	420 165	420 165	479 708	392 197	414 137	414 137	370 258	400 495	382 303	410 663	476 764	522 617	
	Confirmed with microscopy	29 736	20 006	29 491	31 719	46 655	45 049	37 062	41 749	32 037	32 037	35 828	45 155	45 824	52 803	78 643	90 708	
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Eastern Mediterranean	Sudan	Presumed and confirmed	4 332 827	3 985 702	3 054 400	3 084 320	2 083 711	2 515 693	2 117 514	3 040 181	3 073 996	2 361 188	1 465 496	1 214 004	964 698	989 946	1 207 771	
		Microscopy examined	-	-	-	-	-	-	-	2 243 981	2 050 354	2 791 156	-	-	-	-	-	
		Confirmed with microscopy	368 557	203 491	280 550	933 267	537 899	628 417	721 233	686 908	-	569 296	711 462	625 365	506 806	526 931	592 383	579 038
	Syrian Arab Republic <sup>3</sup>	RDT examined	-	-	-	-	-	-	-	-	-	-	1 653 300	2 222 380	2 000 700	1 800 000	788 281	
		Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	95 192	-	-	-	489 468	
		Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Yemen	Presumed and confirmed	42	79	27	24	13	28	34	37	51	39	23	48	42	22	21	
		Microscopy examined	-	-	-	-	-	-	-	68 000	-	25 751	19 151	25 109	19 136	18 814	6803	
		Confirmed with microscopy	42	79	27	24	13	28	34	37	51	39	23	48	42	22	21	
	European	Armenia <sup>2</sup>	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Imported cases	36	16	12	22	12	28	34	37	51	39	23	48	42	22	21
		Azerbaijan	Presumed and confirmed	141	79	52	29	47	7	0	1	1	0	1	-	-	-	-
			Microscopy examined	356	174	165	126	220	209	230	658	30 761	31 467	31 026	-	-	-	-
			Confirmed with microscopy	141	79	52	29	47	7	0	1	1	0	-	-	-	-	-
Georgia		RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Confirmed with RDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Imported cases	1526	1058	506	482	386	242	143	110	73	80	52	8	4	4	2	
Kyrgyzstan		Presumed and confirmed	527 688	536 260	507 252	536 822	545 145	515 144	498 697	465 033	408 780	451 436	456 652	449 168	497 040	432 810	399 925	
		Microscopy examined	1526	1058	506	482	386	242	143	110	73	80	52	8	4	4	2	
		Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Russian Federation		Presumed and confirmed	245	439	474	316	257	155	60	25	1	2	2	4	1	4	2	
		Microscopy examined	-	3574	6145	5457	3365	5169	4400	3400	4398	4120	2368	2032	1046	192	440	
		Confirmed with microscopy	245	438	474	316	257	155	60	25	1	2	2	4	1	4	2	
Tajikistan	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Imported cases	795	898	642	533	382	205	143	122	96	107	102	85	3	4	0		
Turkey	Presumed and confirmed	12	28	2743	468	93	226	143	96	18	4	6	5	3	4	0		
	Microscopy examined	70 500	72 020	69 807	144 070	79 895	114 316	74 729	62 444	40 833	33 983	30 190	27 850	18 268	54 249	35 600		
	Confirmed with microscopy	12	28	2743	468	93	226	143	96	18	4	6	5	3	4	0		
Turkmenistan	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Imported cases	795	898	642	533	382	205	143	122	96	107	102	85	3	4	0		
Uzbekistan	Presumed and confirmed	233 785	248 565	244 632	296 123	272 743	216 197	175 894	159 232	158 068	165	112	78	33	14	7		
	Microscopy examined	233 785	248 565	244 632	296 123	272 743	216 197	175 894	159 232	158 068	165 266	173 523	173 367	209 239	213 916	200 241		
	Confirmed with microscopy	19 064	11 387	6160	5428	3588	2309	1344	635	318	165	112	78	33	14	7		
Tajikistan	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	11 432	10 812	10 224	9222	5302	2084	796	358	215	84	78	128	15	7	5		
Turkey	Presumed and confirmed	1 597 290	1 550 521	1 320 010	1 187 814	1 158 673	1 042 509	934 839	775 502	616 570	606 875	507 841	421 295	337 830	255 125	189 854		
	Microscopy examined	11 432	10 812	10 224	9222	5302	2084	796	358	215	84	78	128	15	7	5		
	Confirmed with microscopy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Uzbekistan	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
South-East Asia	Presumed and confirmed Microscopy examined	78 561	63 528	44 555	37 355	26 690	29 782	30 294	33 178	28 569	29 462	32 480	24 897	32 569	41 362	37 921
	Confirmed with microscopy	4 403 739	4 100 778	3 819 773	3 256 939	3 012 710	2 524 788	2 280 070	2 041 733	1 910 982	1 816 383	1 695 980	1 354 215	1 130 757	1 830 090	1 756 528
	RDT examined	78 561	63 528	44 555	37 355	26 690	29 782	30 294	33 178	28 569	29 462	32 480	24 897	32 569	41 362	37 921
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed Microscopy examined	15 212	83 049	86 684	33 411	202 662	130 679	164 413	121 905	143 594	108 434	119 072	36 064	6148	1042	342
	Confirmed with microscopy	15 212	83 049	86 684	33 411	202 662	130 679	164 413	121 905	143 594	108 434	119 072	36 064	6148	1042	342
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Pacific	Presumed and confirmed Microscopy examined	203 164	110 161	100 194	119 712	91 855	67 036	89 109	59 848	58 887	83 777	49 356	57 423	45 553	24 130	26 278
	Confirmed with microscopy	122 555	121 691	108 967	106 330	99 593	88 991	94 460	135 731	130 995	96 886	90 175	86 526	80 212	54 716	48 591
	RDT examined	18 167	23 928	24 954	54 024	18 894	58 791	102 590	46 989	51 036	94 788	103 035	130 186	108 974	94 600	92 525
	Confirmed with RDT	11 122	11 451	8854	29 031	22 356	22 522	45 686	20 437	21 777	39 596	35 079	43 631	30 352	16 711	19 864
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed Microscopy examined	-	26 945	172 200	169 828	145 676	100 106	116 260	133 699	135 467	14 598	7855	7855	4498	2678	4121
	Confirmed with microscopy	-	5 391 809	5 641 752	4 635 132	4 212 559	3 814 715	3 995 227	3 958 190	4 316 976	4 637 168	7 115 784	9 189 270	6 918 657	5 554 960	4 403 633
	RDT examined	-	21 237	25 520	28 491	27 197	21 936	35 383	29 304	16 650	9287	4990	3367	2603	4086	2921
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	556	621	1714	2632	2097	1192	780	-	-	-	2399	4007	2864
Lao People's Democratic Republic	Presumed and confirmed Microscopy examined	279 903	103 983	85 192	88 657	53 808	30 359	20 468	20 364	19 347	22 800	23 047	17 904	46 819	41 385	48 071
	Confirmed with microscopy	256 273	226 399	245 916	256 534	181 259	156 954	113 165	159 002	168 027	173 459	150 512	213 578	223 934	202 422	133 916
	RDT examined	40 106	27 076	21 420	18 894	16 183	13 615	8093	6371	4965	5508	4524	6226	13 232	10 036	8018
	Confirmed with RDT	-	-	-	-	-	-	95 676	113 694	143 368	84 511	127 790	7743	145 425	133 337	160 626
	Imported cases	-	-	-	-	-	-	10 289	11 087	14 382	9166	16 276	11 609	32 970	28 095	40 053
	Presumed and confirmed Microscopy examined	874 894	875 849	842 683	754 540	678 952	573 788	590 945	551 586	588 489	7010	6650	5306	4725	3850	3923
	Confirmed with microscopy	1832 802	1808 759	1761 721	1632 024	1577 387	1425 997	1388 267	1565 033	1562 148	1566 982	1619 074	1600 439	1566 872	1576 012	1443 958
	RDT examined	12 705	12 780	11 019	6338	6154	5569	5294	5456	7390	7010	6650	5306	4725	3850	3923
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaysia	Presumed and confirmed Microscopy examined	1751 883	1643 075	1587 580	1650 662	1868 413	1788 318	1676 681	1618 699	1606 843	1431 395	1379 787	1151 343	878 371	1125 808	644 688
	Confirmed with microscopy	225 535	254 266	227 387	205 103	222 903	267 132	223 464	239 956	240 686	128 335	198 742	184 466	156 495	139 972	83 257
	RDT examined	79 839	94 484	75 748	72 620	91 055	92 957	88 817	82 979	81 657	62 845	75 985	70 603	67 202	70 658	68 114
	Confirmed with RDT	-	-	-	-	-	-	10 756	7643	5955	25 150	20 820	27 391	228 857	468 380	475 654
	Imported cases	-	-	-	-	-	-	5121	3976	2795	14 913	17 971	13 457	82 993	209 336	213 068
	Presumed and confirmed Microscopy examined	36 596	34 968	37 005	48 441	50 850	46 342	35 405	36 235	36 235	23 655	19 316	19 106	9617	8154	4903
	Confirmed with microscopy	-	-	-	-	-	581 871	378 535	403 415	278 652	352 006	301 031	327 060	332 063	317 360	286 222
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Philippines	Presumed and confirmed Microscopy examined	4183	2556	1799	1171	864	1369	2051	2227	1052	1345	1772	838	555	443	638
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Korea	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solomon Islands	Presumed and confirmed Microscopy examined	368 913	373 838	353 114	208 364	412 251	393 288	403 892	150 126	102 140	84 078	95 006	80 859	57 296	53 270	51 649
	Confirmed with microscopy	300 806	297 345	278 178	300 591	321 954	316 898	328 555	311 447	276 639	231 221	212 329	182 847	202 620	191 137	173 900
	RDT examined	68 107	76 493	74 936	92 227	90 297	76 390	75 337	65 404	40 535	33 002	35 302	23 202	21 904	21 540	13 865
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed Microscopy examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with microscopy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RDT examined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Western Pacific	Presumed and confirmed	33 779	19 493	35 151	43 386	42 008	34 912	30 067	20 215	24 279	22 271	16 831	5764	3435	2381	982	
	Microscopy examined	31 668	36 576	54 234	54 524	53 524	61 092	40 625	38 214	38 214	30 267	29 180	19 183	16 981	15 219	18 135	
	Confirmed with microscopy	6768	7647	14 339	15 240	14 653	9834	8055	5471	5471	3473	3615	4013	2077	733	767	190
	RDT examined	-	-	-	-	-	-	-	-	-	1639	2065	10 246	12 529	16 292	13 724	17 435
	Confirmed with RDT	-	-	-	-	-	-	-	-	-	292	574	4156	2743	2702	1614	792
	Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Presumed and confirmed	274 910	188 122	151 961	135 989	108 350	84 473	74 766	59 601	59 601	51 668	49 186	54 297	45 588	43 717	35 406	27 868
	Microscopy examined	2 682 862	2 821 440	2 856 539	2 738 600	2 694 854	2 728 481	2 842 429	3 634 060	3 634 060	1 287 365	2 829 516	2 760 119	2 791 917	2 897 730	2 684 996	2 357 536
	Confirmed with microscopy	74 316	68 699	47 807	38 790	24 909	19 496	22 637	16 389	16 389	11 355	16 130	17 515	16 612	19 638	17 128	15 752
	RDT examined	-	10 000	94 000	-	-	-	130 000	-	78 294	72 087	44 647	7017	491 373	514 725	412 530	416 483
Confirmed with RDT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Imported cases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Regional summary (Presumed and confirmed malaria cases)</b>		<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	
African		33 178 671	44 481 658	47 844 356	69 120 148	74 251 865	75 645 235	75 736 127	79 810 658	71 715 909	94 061 289	103 145 240	100 205 022	110 913 398	124 458 213	126 256 273	
Eastern Mediterranean		9 312 314	7 602 649	8 228 975	8 200 465	4 528 808	7 117 410	7 137 177	8 348 266	8 459 131	7 217 208	6 370 339	5 954 143	5 850 635	4 948 628	5 302 187	
European		248 086	261 964	259 365	307 254	279 279	219 219	177 431	160 033	158 507	451	356	311	422	317	265	
Region of the Americas		1 181 104	982 778	895 134	889 993	909 466	1 050 744	921 236	788 428	565 443	573 032	678 386	493 915	469 577	434 398	389 660	
South-East Asia		3 871 042	3 999 981	3 704 402	3 640 897	3 619 974	3 291 911	3 211 598	2 720 150	2 945 542	2 931 981	3 112 779	2 502 183	2 128 448	1 640 960	1 689 089	
Western Pacific		3 828 225	3 378 990	3 366 879	3 220 750	3 453 027	3 119 991	3 039 644	2 652 600	2 611 827	1 735 776	1 653 707	1 379 140	1 091 303	1 298 514	811 921	
<b>Total</b>		<b>51 619 442</b>	<b>60 708 020</b>	<b>64 299 111</b>	<b>85 379 507</b>	<b>87 042 419</b>	<b>90 444 510</b>	<b>90 223 213</b>	<b>94 480 135</b>	<b>86 456 359</b>	<b>106 519 737</b>	<b>114 960 807</b>	<b>110 534 714</b>	<b>120 453 783</b>	<b>132 781 030</b>	<b>134 449 395</b>	

RDT, rapid diagnostic test

Cases reported before 2000 can be presumed and confirmed or only confirmed cases depending on the country.

1 In May 2013 South Sudan was reclassified to the WHO African Region (WHA resolution 66.21, [http://apps.who.int/gb/ebwha/pdf\\_files/WHA66/A66\\_R21-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R21-en.pdf))

2 Armenia, Morocco and Turkmenistan are certified malaria free countries, but are included in this listing for historical purposes

3 There is no local transmission

4 Combined microscopy and RDT positive cases

# Annex 6C – Reported malaria cases by species, 2000–2014

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
African	Algeria	Suspected	27 733	26 411	18 803	17 059	16 666	18 392	13 869	14 745	11 964	15 635	12 224	11 974	15 790	12 762	8690
		No Pf	261	247	188	313	71	242	91	261	186	88	401	179	860	550	203
		No Pv	277	181	116	111	92	57	24	24	10	10	6	4	12	24	30
	Angola	No Other	-	-	-	-	-	-	-	-	-	0	3	0	0	23	13
		Suspected	2 080 348	1 249 767	1 862 662	3 246 258	2 489 170	2 329 316	2 283 097	3 157 924	4 713 776	5 232 136	4 591 529	4 469 357	4 849 418	5 273 305	6 134 471
		No Pf	-	-	-	-	-	-	106 400	475 900	542 916	-	-	-	-	-	-
	Benin	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Suspected	-	717 290	782 818	819 256	853 034	803 462	861 847	1 171 522	1 147 005	1 256 708	1 432 095	1 565 487	1 875 386	2 041 444	1 955 773
	Botswana	No Pf	-	-	-	-	-	-	-	-	-	534 590	-	68 745	0	-	-
		No Pv	-	-	-	-	-	-	-	-	-	0	-	0	0	-	-
		No Other	-	-	-	-	-	-	-	-	-	0	-	0	0	-	-
	Burkina Faso	Suspected	71 555	48 281	28 907	23 657	22 404	11 242	23 514	30 906	41 153	32 460	12 196	1141	308	506	1485
		No Pf	-	-	-	-	-	-	-	381	914	951	1046	432	386	912	1346
		No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Burundi	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Suspected	-	382 593	1 221 666	1 474 440	1 581 262	1 667 622	2 138 649	2 570 507	3 892 138	4 675 363	6 037 806	5 446 870	7 852 299	7 857 296	9 274 530
		No Pf	-	0	0	0	0	0	0	0	0	-	-	-	-	-	-
	Cabo Verde	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No Other		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Suspected		3 428 846	3 542 424	2 829 030	2 490 095	1 994 514	2 910 545	2 760 683	2 796 362	2 565 593	3 413 317	5 590 736	4 768 314	4 228 015	7 384 501	7 622 162	
Cameroon	No Pf	-	-	-	-	-	-	283 950	482 060	371 986	-	-	-	-	-	-	
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central African Republic	Suspected	6843	7141	8022	6001	9833	7902	8729	8902	9033	21913	47	26 508	8715	10 621	6894	
	No Pf	144	107	76	68	45	68	160	36	70	65	47	36	36	46	46	
	No Pv	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cote d'Ivoire	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Suspected	-	-	-	-	-	277 413	634 507	604 153	1 650 749	1 883 199	1 845 691	3 060 040	2 865 319	3 652 609	3 709 906	
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Democratic Republic of the Congo	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Suspected	89 614	140 742	-	78 094	129 367	131 656	114 403	119 477	152 260	175 210	66 484	221 980	468 986	491 074	625 301	
Equatorial Guinea	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295 088	
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
Chad	Suspected	442 246	456 075	517 760	514 918	481 287	507 617	269 094	535 428	495 401	623 839	743 471	528 454	730 364	1 272 841	1 737 195	
	No Pf	20 977	19 520	21 959	21 532	665	14 770	21 354	24 282	24 015	24 015	-	-	-	-	-	
	No Pv	19 101	18 767	21 974	23 663	695	16 898	23 801	24 006	23 742	-	-	-	-	-	-	
Congo	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Suspected	-	-	-	-	43 918	29 554	54 830	53 511	46 426	64 489	159 976	135 248	168 043	185 779	103 545	
	No Pf	-	-	-	-	-	-	-	-	-	5771	33 791	21 387	43 681	46 032	2203	
Cote d'Ivoire	No Pv	-	-	-	-	-	-	-	-	-	79	528	334	637	72	0	
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	Suspected	-	-	-	-	-	157 757	210 263	210 263	243 703	260 888	446 656	277 263	117 640	209 169	290 346	
Democratic Republic of the Congo	No Pf	967 484	2 200 960	2 642 137	4 389 020	4 136 150	6 337 168	5 011 688	4 163 310	5 929 093	8 829 758	10 568 756	12 018 784	11 993 189	14 871 716	14 647 380	
	No Pv	889	1517	1727	2418	2659	2844	2043	1885	1254	-	0	0	0	4 103 745	-	
	No Other	-	-	-	6	7	110	3	7	27	-	0	0	0	0	0	
Equatorial Guinea	Suspected	-	-	-	-	-	-	-	26 068	72 080	90 081	83 639	40 704	45 792	44 561	57 129	
	No Pf	-	-	-	-	-	-	-	5842	7883	11 603	53 813	22 466	15 169	13 129	17 452	
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
African	Eritrea	Suspected	-	138 667	121 011	107 599	65 025	64 056	49 703	80 428	62 449	77 946	96 792	97 479	138 982	134 183	121 755	
		No Pf	-	8994	5335	8998	3480	7506	5750	9057	3389	5932	3389	9848	10 357	12 467	13 873	23 953
		No Pv	-	722	743	1348	639	1567	791	6508	2832	2832	3244	3989	4932	9204	7361	6780
	Ethiopia	No Other	-	-	-	-	-	-	-	0	0	0	57	19	-	83	35	
		Suspected	-	3 014 879	3 617 056	4 129 225	5 904 132	4 727 209	3 375 994	2 844 963	3 060 407	4 335 001	5 420 110	5 487 972	5 962 646	9 243 894	7 457 765	
		No Pf	-	233 218	262 623	291 402	396 621	374 335	293 326	280 106	640 878	285 261	806 577	814 547	814 547	946 595	1 687 163	1 250 110
		No Pv	-	157 625	164 772	171 387	178 676	158 658	149 020	171 710	173 300	287 114	390 252	665 813	665 813	745 983	958 291	868 705
	Gabon	No Other	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	
		Suspected	127 024	132 918	157 440	166 321	230 246	294 348	214 985	287 969	298 150	114 766	233 770	178 822	238 483	256 531	256 183	
		No Pf	50 810	53 167	62 976	58 212	70 075	70 644	33 458	45 186	40 701	187	2212	-	-	26 432	26 117	
No Pv		-	-	-	-	-	-	-	-	-	23	720	-	-	-	0		
Gambia	No Other	-	-	-	-	-	-	-	-	-	-	0	2015	-	0	1570		
	Suspected	-	481 590	620 767	540 165	395 043	329 426	427 598	439 798	508 846	479 409	492 062	261 967	862 442	889 494	603 424		
	No Pf	-	-	-	-	-	-	-	-	-	-	64 108	190 379	271 038	175 126	99 976		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ghana	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	3 349 528	3 044 844	3 140 893	3 552 896	3 416 033	3 452 969	3 511 452	3 123 147	3 349 781	5 489 798	5 056 851	5 067 731	12 578 946	8 444 417	10 636 057		
	No Pf	-	-	-	-	-	-	-	457 424	918 105	924 095	926 447	593 518	3 755 166	1 629 198	3 415 912		
	No Pv	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0		
Guinea	No Other	-	-	-	-	-	-	-	19 060	38 504	38 504	102 937	31 238	-	0	0		
	Suspected	816 539	851 877	850 147	731 911	876 837	850 309	834 835	888 643	657 003	812 471	1 092 554	1 276 057	1 220 574	775 341	1 595 828		
	No Pf	4800	6238	16 561	4378	103 069	50 452	41 228	28 646	33 405	20 932	20 936	5450	191 421	63 353	660 207		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Guinea-Bissau	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	246 316	202 379	194 976	162 344	187 910	204 555	168 462	160 305	168 326	170 255	195 006	300 233	237 398	238 580	309 939		
	No Pf	-	-	-	-	-	-	-	12 855	-	-	-	-	-	-	-		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Kenya	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	4 216 531	3 262 931	3 342 993	5 395 518	7 577 208	9 181 224	8 926 058	9 610 691	839 903	812 689	7 557 454	13 127 058	12 893 521	14 677 837	15 142 723		
	No Pf	-	-	-	39 383	28 328	-	-	-	839 903	-	898 531	1002 805	1 453 471	2 335 286	2 808 931		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Liberia	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	-	-	-	-	-	66 043	1 455 807	835 082	994 560	1 200 320	3 087 659	2 887 105	2 441 800	2 202 213	2 433 086		
	No Pf	-	-	-	-	-	44 875	761 095	80 373	157 920	212 657	212 927	577 641	1 407 455	1 244 220	864 204		
	No Pv	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0		
Madagascar	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	1 417 112	1 411 107	1 621 399	2 228 721	1 489 944	1 260 575	1 111 192	894 213	589 202	717 982	719 967	805 701	980 262	1 071 310	977 228		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Malawi	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	3 646 212	3 823 796	2 784 001	3 358 960	2 871 098	3 688 389	4 498 949	4 786 045	5 185 082	6 183 816	6 851 108	5 734 906	6 528 505	5 787 441	7 703 651		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	1 564 984	1 280 892	2 905 310		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Mali	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	546 634	612 896	723 077	809 428	1 969 214	962 706	1 022 592	1 291 863	1 045 424	1 633 423	3 324 238	2 628 593	2 171 739	2 849 453	2 590 643		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Mauritania	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	-	243 942	224 614	318 120	224 840	223 472	217 977	222 476	202 297	181 935	250 073	162 820	172 374	135 985	188 194		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Mayotte, France	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	-	-	-	792	743	500	392	421	346	352	2023	1214	1463	82	15		
	No Pf	-	-	-	-	-	-	375	414	335	326	386	86	70	77	13		
	No Pv	-	-	-	-	-	-	3	4	8	10	5	2	1	1	1		
Mozambique	No Other	-	-	-	-	-	-	-	1	7	20	31	0	4	-	-		
	Suspected	-	-	-	-	-	-	-	6 155 082	4 831 491	4 310 086	6 097 263	7 059 112	6 170 561	8 200 849	12 626 716		
	No Pf	-	-	-	-	-	-	-	-	-	-	878 009	663 132	927 841	2 998 874	7 117 648		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014			
African	Namibia	Suspected	-	468 259	265 595	172 024	155 399	102 956	39 855	74 407	10 844	34 002	186 972						
		No Pf	-	-	-	-	1092	505	556	335	194	0	0	136	15 914				
		No Pv	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Suspected	-	681 783	982 245	3 677 661	4 493 676	4 719 439	10 616 033	5 633 601	3 637 778	5 915 671	5 533 601	7 014 724					
		No Pf	-	53 637	44 612	54 515	60 998	77 484	618 578	2 352 422	778 819	2 207 459	2 352 422	3 906 588					
	Niger	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Suspected	2 476 608	2 253 519	2 605 381	2 608 479	3 310 229	3 532 108	3 982 372	2 969 950	113	1245	3 873 463	5 221 656	11 789 970	21 659 831	19 555 575		
		No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nigeria	Suspected	-	1 329 106	1 519 315	1 735 774	1 915 990	2 409 080	2 379 278	2 318 079	2 096 061	3 186 306	2 708 973	1 602 271	3 095 386	3 064 585	4 178 206		
		No Pf	-	-	-	-	-	-	-	-	316 242	698 745	638 669	208 858	483 470	962 618	1 623 176		
		No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Suspected	66 250	84 993	94 249	86 546	105 341	73 050	60 819	49 298	179 061	119 877	58 961	117 279	126 897	108 634	91 445		
		No Pf	-	-	-	-	-	-	-	-	-	-	2219	6363	10 700	9242	1754		
Sao Tome and Principe	No Pv	-	-	-	-	-	-	-	-	-	-	14	4	1	1	0			
	No Other	-	-	-	-	-	-	-	-	-	-	0	6	0	0	0			
	Suspected	1134 587	974 256	1 000 310	1 472 764	1 240 918	1 418 091	1 645 494	1 337 550	1 031 000	947 514	1 043 632	900 903	897 943	1 119 100	1 079 536			
	No Pf	44 959	14 261	15 261	28 272	23 171	38 746	49 366	118 332	194 234	19 614	343 670	277 326	281 080	345 889	265 624			
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Senegal	Suspected	460 881	450 605	514 033	533 340	358 417	243 082	172 707	653 987	1 014 160	1 415 330	2 327 928	1 150 747	2 579 296	2 576 550	2 647 375			
	No Pf	-	2 206	3 702	3 945	2 206	3 702	3 945	-	-	-	273 149	218 473	25 511	1 537 322	1 374 476			
	No Pv	-	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	64 624	26 506	15 649	13 459	13 399	7755	14 456	6327	7796	6117	276 669	382 434	152 561	603 932	543 196			
	No Pf	-	-	-	-	-	-	-	-	-	-	2193	6906	4565	8645	11 563			
Sierra Leone	No Pv	-	-	-	-	-	-	-	-	-	-	0	14	5	0	0			
	No Other	-	-	-	-	-	-	-	-	-	-	5	15	0	0	0			
	Suspected	2 377 712	462 056	462 056	646 673	515 958	337 582	116 473	101 008	201 036	325 634	900 283	795 784	1 125 039	1 855 501	-			
	No Pf	-	-	-	-	-	-	-	-	-	-	-	112 024	-	-	-			
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
South Africa	Suspected	29 374	35 582	23 456	19 425	11 320	10 374	11 637	6338	5881	6624	1722	797	626	669	711			
	No Pf	0	1395	670	342	574	279	155	84	58	106	87	130	345	487	710			
	No Pv	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	498 826	563 872	490 256	490 256	516 942	437 662	566 450	914 590	1193 316	1 304 772	1 419 928	893 588	1 311 047	1 442 571	1 756 700			
	No Pf	-	-	-	-	-	-	-	220 521	344 098	191 357	224 080	237 282	260 526	272 855	1130 234			
Togo	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	5 624 032	5 624 032	8 079 963	10 422 022	11 697 824	10 869 875	11 539 146	13 281 631	13 020 439	14 397 480	15 332 293	12 522 232	16 845 771	26 145 615	19 201 136			
	No Pf	-	-	546 015	785 748	861 451	1 082 223	850 050	1 045 378	979 298	1 301 337	1 612 783	231 873	2 662 258	5 518 853	3 631 939			
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Uganda	Suspected	81 442	404 893	494 245	13 792 604	15 007 921	16 740 283	12 821 375	11 387 904	11 795 223	13 018 946	15 388 319	15 299 205	14 513 120	14 650 226	25 190 092			
	No Pf	17 734	18 385	16 983	15 705	11 936	7 628	1 585	293	77	211	2 338	4 489	215 567	71 705	107 883			
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	324 564	415 293	415 293	13 715 090	14 937 115	16 679 237	12 775 877	11 355 047	11 473 817	12 752 090	15 116 242	14 843 487	13 976 370	14 122 269	24 880 179			
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
United Republic of Tanzania <sup>2</sup>	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	81 442	80 309	78 952	77 514	70 806	61 046	45 498	32 857	32 406	266 856	272 077	455 718	536 750	527 957	309 913			
	No Pf	17 734	18 385	16 983	15 705	11 936	7 628	1 585	293	77	211	2 338	4 489	2931	2246	1274			
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Zanzibar	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

## Annex 6C – Reported malaria cases by species, 2000–2014 (continued)

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
African	Zambia	Suspected	3 337 796	3 838 402	3 760 335	4 346 172	4 078 234	4 121 356	4 731 338	4 248 295	3 080 301	2 976 395	4 229 839	4 607 908	4 695 400	5 465 122	7 859 740	
		No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Zimbabwe	No Other	-	-	-	-	1 815 470	1 494 518	1 313 458	1 272 731	1 089 322	867 135	912 618	480 011	727 174	1 115 005	1 420 946	
		Suspected	-	-	-	-	-	-	-	-	-	-	249 379	319 935	276 963	422 633	535 931	
		No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Region of the Americas	Argentina	No Other	-	-	-	-	-	-	-	-	-	-	0	-	-	-	
			Suspected	7949	6685	5043	3977	3018	3018	3018	6353	5157	86	2547	7872	7027	4913	5691
			No Pf	1	0	0	0	1	1	1	2	0	0	0	0	0	0	0
		Bahamas <sup>3</sup>	No Pv	439	215	125	122	115	251	211	385	130	86	72	18	4	4	4
No Other			-	-	-	-	-	-	-	-	-	-	0	0	0	0	-	
Suspected			22	4	1	34	17	9	546	6	35	0	27 272	31 013	4965	10 605	-	
Belize		No Pf	-	-	-	-	2	2	1	-	14	-	-	-	-	-	-	
		No Pv	-	-	-	-	0	0	0	-	0	-	-	-	-	-	-	
		No Other	-	-	-	-	0	0	0	-	1	-	-	-	-	-	-	
Bolivia (Plurinational State of)		Suspected	18 559	18 173	15 480	15 480	17 358	25 119	25 755	22 134	25 550	26 051	27 366	22 996	20 789	25 351	24 122	
	No Pf	20	6	0	0	6	32	10	0	0	0	1	1	1	0	0		
	No Pv	1466	1156	1134	1084	1060	1517	834	845	540	255	149	78	36	26	19		
Brazil	No Other	-	-	-	-	2	2	0	0	0	0	0	0	0	0	-		
	Suspected	143 990	122 933	137 509	158 299	168 307	208 021	214 616	181 816	164 826	133 614	140 857	150 662	132 904	144 049	124 900		
	No Pf	2536	808	727	793	695	1080	1785	1622	836	574	1592	543	396	1014	341		
Colombia	No Pv	28 932	14 957	13 549	17 319	14 215	19 062	17 210	12 988	8912	8660	13 694	7635	8141	7398	7060		
	No Other	1	-	-	2231	-	-	-	-	0	0	0	0	0	0	0		
	Suspected	2 562 576	2 274 610	2 118 491	2 009 414	2 194 780	2 660 539	2 959 489	2 986 381	2 726 433	2 711 062	2 711 433	2 477 821	2 349 341	1 893 797	1 670 019		
Costa Rica	No Pf	131 616	81 907	81 014	88 174	110 422	155 169	145 858	93 591	49 358	50 933	51 048	35 706	40 159	35 201	24 654		
	No Pv	478 212	306 396	267 245	320 378	354 366	450 687	403 383	364 912	266 300	258 271	283 435	231 368	203 018	143 050	118 724		
	No Other	932	574	826	298	216	211	228	149	80	112	183	143	105	32	37		
Dominican Republic	Suspected	478 820	747 079	686 635	640 453	562 681	493 562	451 240	589 755	493 135	436 366	521 342	418 159	416 767	327 081	403 532		
	No Pf	51 730	100 242	88 972	75 730	55 158	43 472	46 147	54 509	22 392	22 141	34 334	15 404	17 778	21 060	20 634		
	No Pv	92 702	130 991	115 944	105 226	87 083	78 157	73 949	70 753	56 838	57 111	83 255	44 701	51 467	37 862	20 129		
Ecuador	No Other	-	-	35	11	11	17	19	19	917	0	48	16	9	11	5		
	Suspected	61 261	43 053	17 738	9622	9204	12 767	24 498	22 641	17 304	4829	15 599	10 690	7485	16 774	4420		
	No Pf	12	1	2	14	5	3	32	11	0	0	2	4	4	1	3		
El Salvador	No Pv	1867	1362	1008	704	1284	3538	2667	1212	966	261	112	13	13	5	2		
	No Other	-	-	-	-	-	-	-	-	0	0	0	0	0	2	1		
	Suspected	427 297	411 431	391 216	349 717	322 948	397 108	446 839	435 649	381 010	353 336	495 637	477 555	506 583	502 683	416 729		
French Guiana, France	No Pf	1226	1034	1292	1528	2353	3829	3519	2708	1839	1643	2480	1614	950	576	491		
	No Pv	7	4	4	1	2	8	6	3	1	0	2	2	2	3	5		
	No Other	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0		
Guatemala	Suspected	544 646	538 757	403 225	433 244	357 633	358 361	318 132	352 426	367 558	451 732	488 830	460 785	459 157	397 628	370 825		
	No Pf	48 974	37 491	20 015	10 724	5891	2212	1596	1158	396	551	258	296	80	161	49		
	No Pv	55 624	71 412	66 742	41 341	22 839	14 836	8267	7306	4495	3569	1630	937	478	217	199		
Guyana	No Other	-	-	-	-	-	-	-	-	-	-	0	0	0	0	-		
	Suspected	279 072	111 830	115 378	102 063	94 819	102 479	113 754	95 857	97 872	83 031	115 256	100 884	124 885	103 748	106 915		
	No Pf	9	2	0	2	2	1	2	2	1	1	2	2	3	3	0		
Zimbabwe	No Pv	744	360	117	83	111	65	48	38	32	19	22	12	18	7	8		
	No Other	-	-	-	-	-	-	-	-	0	0	0	0	0	0	-		
	Suspected	48 162	44 718	44 718	32 402	32 402	32 402	32 402	32 402	11 994	20 065	14 373	14 429	13 638	22 327	14 651		
Bahamas <sup>3</sup>	No Pf	3265	3166	2707	3080	2437	1777	1847	845	406	424	1548	1060	763	1092	348		
	No Pv	657	657	954	759	600	1637	2227	1804	925	789	476	339	257	337	98		
	No Other	214	-	160	71	27	23	10	6	5	5	5	2	2	-	2		
Bahamas <sup>3</sup>	Suspected	246 642	198 114	197 113	156 227	148 729	178 726	168 958	132 410	175 678	156 652	237 075	195 080	186 645	153 731	314 294		
	No Pf	1474	1044	1841	1310	852	1062	804	196	50	56	35	67	68	152	92		
	No Pv	50 171	34 772	33 695	29 817	28 103	38 641	30 289	15 182	7148	7024	7163	6707	5278	6062	4839		
Bahamas <sup>3</sup>	No Other	36	-	-	-	-	48	-	-	10	-	-	-	0	0	0		
	Suspected	209 197	211 221	175 966	185 877	151 938	210 429	202 688	178 005	137 247	169 309	212 863	201 693	196 622	205 903	142 843		
	No Pf	12 324	12 831	10 599	12 970	12 226	16 438	9818	4677	5741	7542	14 401	20 309	20 329	17 425	5140		
Bahamas <sup>3</sup>	No Pv	11 694	14 291	11 296	14 654	16 141	21 255	10 560	6712	5927	6029	8402	9066	11 244	13 953	7173		
	No Other	-	-	-	3	446	1291	686	267	147	102	132	96	83	101	41		

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Region of the Americas	Haiti	Suspected	21 190	51 067	-	-	30 440	3 541 506	87 951	142 518	168 950	270 438	270 427	184 934	167 772	20 586	258 817
		No Pf	16 897	9837	0	0	10 802	21 778	32 739	29 824	36 768	49 535	84 153	32 969	25 423	20 378	17 662
	No Pv	0	0	-	-	0	0	0	0	1	6	0	0	0	0	0	0
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	Suspected	175 577	174 430	178 616	137 891	145 082	153 474	125 162	130 255	130 255	119 484	108 529	152 961	152 604	155 165	144 673	151 420
	No Pf	1446	938	606	540	834	998	767	813	813	610	1382	986	619	584	1199	601
	No Pv	33 679	23 211	16 617	13 583	16 425	15 011	11 156	9700	9700	7758	7939	8759	7044	5865	4293	2881
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	Suspected	874	596	725	394	3879	2470	6821	199	199	30 732	34 149	10 763	5042	3687	-	-
	No Pf	-	-	-	-	-	-	-	-	-	21	18	-	-	-	-	-
	No Pv	-	2	-	-	-	-	-	-	-	1	4	-	-	-	-	-
	No Other	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	Suspected	2 003 569	1 857 233	1 852 553	1 565 155	1 454 575	1 559 076	1 345 915	1 430 717	1 430 717	1 246 780	1 240 087	1 192 081	1 035 424	1 025 659	1 017 508	900 578
	No Pf	131	69	19	44	49	22	16	16	4	0	1	7	6	9	4	6
	No Pv	7259	4927	4605	3775	3357	2945	2498	2357	2357	2357	2702	1226	1124	833	495	658
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Suspected	509 443	482 919	491 689	448 913	492 319	516 313	476 144	537 637	537 637	543 173	553 717	554 414	536 105	552 722	536 170	620 977
	No Pf	1369	1194	995	1213	1200	1114	336	106	106	61	93	154	150	236	220	163
	No Pv	22 645	9304	6700	5525	5699	5498	2784	1250	1250	701	517	538	775	999	974	1000
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suspected	149 702	156 589	165 796	166 807	171 179	208 582	212 254	204 193	204 193	200 574	158 481	141 038	116 588	107 711	93 624	80 701	
No Pf	45	39	337	627	882	766	62	48	48	4	3	20	1	1	6	8	
No Pv	991	889	1907	3873	4213	2901	1601	1233	1233	740	775	398	353	843	699	866	
No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Suspected	97 026	71 708	99 338	126 582	97 246	85 942	111 361	92 339	92 339	96 313	64 660	62 178	48 611	31 499	24 806	24 832	
No Pf	0	4	1	4	4	1	2	2	2	7	10	5	7	11	9	7	
No Pv	6853	2706	2777	1388	693	376	821	1337	1337	333	81	22	3	4	2	1	
No Other	-	-	1	-	-	-	-	-	-	-	0	0	0	0	0	1	
Suspected	1 483 816	1 417 423	1 582 385	1 485 012	1 438 925	1 438 925	1 438 925	1 438 925	1 438 925	861 290	892 990	744 650	702 952	759 285	864 648	866 047	
No Pf	20 631	17 698	21 184	19 167	20 905	15 058	8437	7766	7766	4768	4044	2374	3018	3501	6843	10 282	
No Pv	47 690	61 680	78 000	66 588	72 676	72 611	56 488	43 031	43 031	33 895	32 976	29 169	22 018	28 164	36 285	54 394	
No Other	13	11	10	13	10	10	-	-	-	7	2	3	3	7	11	-	
Suspected	63 377	67 369	68 070	43 241	56 975	59 855	45 722	33 992	33 992	29 911	34 836	17 133	16 184	21 685	19 736	26 964	
No Pf	10 648	13 217	11 140	8782	6738	6931	2331	547	547	838	929	721	331	126	569	216	
No Pv	1673	1229	1648	1047	915	1611	733	509	509	639	895	817	382	167	359	158	
No Other	811	1549	1388	1153	726	589	225	14	14	17	18	36	17	2	0	0	
Suspected	261 866	198 000	278 205	344 236	420 165	420 165	479 708	396 338	396 338	414 137	370 258	400 495	382 303	410 663	476 764	522 617	
No Pf	5491	2705	2533	5394	4230	5725	6576	7724	7724	5127	7944	10 915	10 633	13 302	27 659	27 843	
No Pv	24 829	17 224	26 907	26 111	41 972	38 985	30 111	33 621	33 621	26 437	27 002	32 710	34 651	39 478	50 938	62 850	
No Other	1	8	12	46	63	38	23	51	51	60	50	60	6	23	46	15	
Suspected	366 865	-	-	-	280 301	548 503	789 186	869 144	869 144	935 043	847 666	847 589	936 252	847 933	787 624	743 183	
No Pf	515	-	84 528	44 243	12 789	5917	6216	6283	6283	4355	4026	6142	5581	1231	1877	3000	
No Pv	89 240	-	330 083	316 697	229 233	110 527	79 913	85 919	85 919	77 219	60 854	63 255	71 968	53 609	43 369	58 362	
No Other	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Suspected	-	-	-	-	-	-	3969	-	7945	6305	-	-	354	1412	-	39 284	
No Pf	-	-	-	-	-	-	413	1796	210	119	-	1010	-	20	0	-	
No Pv	-	-	-	-	-	-	0	0	0	0	-	-	-	-	-	-	
No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Suspected	17	9	8	44	39	23	27	28	28	76	81	82	107	180	243	259	
No Pf	0	-	2	1	4	0	2	2	2	4	13	3	9	26	19	54	
No Pv	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
No Other	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Suspected	2546	2158	2382	4475	1380	2219	1199	1390	1390	1123	637	421	571	144	299	134	
No Pf	-	17 145	13 176	19 087	12 441	16 747	14 710	14 322	14 322	10 337	5485	2610	2668	1418	1073	1109	
No Pv	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
No Pf	-	-	-	-	1	0	0	0	0	1	0	3	4	0	1	0	
No Pv	-	-	-	-	346	154	47	24	3	5	1	4	7	8	7	2	
No Other	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	

**Eastern Mediterranean**

Afghanistan	Suspected	366 865	-	-	-	280 301	548 503	789 186	869 144	935 043	847 666	847 589	936 252	847 933	787 624	743 183
	No Pf	515	-	84 528	44 243	12 789	5917	6216	6283	4355	4026	6142	5581	1231	1877	3000
Djibouti	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egypt <sup>3</sup>	Suspected	17	9	8	44	39	23	27	28	76	81	82	107	180	243	259
	No Pf	0	-	2	1	4	0	2	2	4	13	3	9	26	19	54
Iran (Islamic Republic of)	Suspected	2546	2158	2382	4475	1380	2219	1199	1390	1123	637	421	571	144	299	134
	No Pv	-	17 145	13 176	19 087	12 441	16 747	14 710	14 322	10 337	5485	2610	2668	1418	1073	1109
Iraq <sup>3</sup>	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No Pf	-	-	-	-	1	0	0	0	1	0	3	4	0	1	0
No Pv	-	-	-	-	346	154	47	24	3	5	1	4	7	8	7	2
No Other	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Eastern Mediterranean	Oman	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		No Pf	328	299	275	312	166	159	102	95	95	162	143	101	87	85	134	
		No Pv	366	336	315	428	449	385	341	602	602	870	718	1039	1422	1963	1366	865
		No Other	12	16	9	13	8	6	2	2	2	1	2	3	0	1	0	2
	Pakistan	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pf	-	7 024 978	7 530 636	8 662 496	6 074 739	8 671 271	8 680 304	9 330 723	9 330 723	8 330 040	7 973 246	8 601 835	8 418 570	8 902 947	7 752 797	8 514 341
		No Pv	-	41 771	32 591	39 944	32 761	42 056	37 837	39 871	24 586	24 586	37 084	73 857	73 925	97 996	56 573	42 817
		No Other	-	83 504	75 046	85 176	93 385	85 748	86 999	88 699	79 868	79 868	95 604	143 136	205 879	228 215	283 661	232 332
	Saudi Arabia	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pf	-	2360	1999	1234	0	-	984	2349	833	1649	894	1050	1279	974	1155	1155
		No Pv	-	678	567	462	-	280	515	658	658	672	1023	1719	2088	1527	1144	1144
		No Other	-	-	-	-	-	-	-	0	0	12	24	19	-	6	6	6
	Somalia	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pf	-	-	102 540	28 356	55 423	63 770	16 430	16 058	120 060	106 341	220 698	99 403	70 459	85 174	79 653	-
		No Pv	-	-	15 732	7571	11 436	12 516	16 430	16 058	36 167	24 698	56 629	-	-	-	-	-
		No Other	-	-	0	0	0	0	0	617	738	504	0	0	0	0	0	0
	Sudan	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syrian Arab Republic <sup>3</sup>	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	No Pf	-	14	6	8	9	17	27	35	46	38	22	37	40	21	21	21	
	No Pv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Yemen	Suspected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	No Pf	-	-	667 794	612 693	611 552	629 380	962 017	740 940	900 735	899 320	835 018	804 940	891 394	977 821	725 169	725 169	
	No Pv	-	-	73 667	47 782	47 306	42 627	53 887	65 268	42 796	52 853	77 301	59 696	109 504	102 369	67 274	67 274	
	No Other	-	-	1659	1474	1297	1442	1019	2339	745	589	966	478	398	408	408	239	
European	Armenia <sup>4</sup>	Suspected	571	269	278	223	393	411	460	1315	31231	31467	31026	-	-	-	-	
		No Pf	1	0	0	4	2	0	0	1	1	1	0	1	-	-	-	-
		No Pv	140	79	52	25	45	7	0	0	0	0	0	0	-	-	-	-
		No Other	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
	Azerbaijan	Suspected	527 688	536 260	507 252	536 822	545 145	515 144	498 697	465 033	408 780	451 436	456 652	449 168	497 040	432 810	399 925	399 925
		No Pf	0	1	0	0	0	0	0	2	1	1	0	2	2	1	4	2
		No Pv	1526	1056	506	482	386	242	143	109	72	80	50	50	6	3	0	0
		No Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Georgia <sup>3</sup>	Suspected	173	3575	6145	5457	3365	5169	4400	3400	4398	4120	2368	2032	1046	192	440	440
		No Pf	0	0	1	2	1	0	1	1	1	5	0	3	3	6	6	6
		No Pv	245	438	473	314	255	155	59	24	7	1	0	3	2	1	0	0
		No Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Kyrgyzstan <sup>3</sup>	Suspected	70 500	72 020	69 807	144 070	79 895	114 316	74 729	62 444	40 833	33 983	30 190	27 850	18 268	54 249	35 600	35 600
		No Pf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		No Pv	12	28	2742	468	93	226	318	96	18	4	6	4	2	3	3	3
		No Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Russian Federation <sup>3</sup>	Suspected	795	898	642	533	382	205	143	35 784	28 340	27 382	33 024	28 311	-	-	-	-
		No Pf	60	-	48	51	43	31	41	43	47	62	63	39	-	-	-	-
		No Pv	-	-	-	-	-	-	-	76	46	40	34	40	-	-	-	-
		No Other	-	-	-	-	-	-	-	4	3	5	5	6	-	-	-	-
Tajikistan	Suspected	233 785	248 565	244 632	296 123	272 743	216 197	175 894	159 232	158 068	165 266	173 523	173 367	209 239	213 916	200 241	200 241	
	No Pf	831	826	509	252	151	81	28	7	2	1	1	5	2	2	1	0	
	No Pv	18 233	10 561	5651	5176	3437	2228	1316	628	316	164	111	73	31	13	13	7	
	No Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Turkey	Suspected	1 597 290	1 550 521	1 320 010	1 187 814	1 158 673	1 042 509	934 839	775 502	616 570	606 875	507 841	421 295	337 830	255 125	189 854	189 854	
	No Pf	7	11	12	12	13	32	29	29	23	16	50	97	131	191	204	204	
	No Pv	11 424	10 799	10 209	9209	5289	2052	767	329	191	65	28	30	243	94	94	41	
	No Other	-	-	-	-	-	-	-	0	0	1	0	1	-	-	-	-	
Turkmenistan <sup>4</sup>	Suspected	50 105	50 075	59 834	72 643	71 377	56 982	58 673	65 666	75 524	94 237	81 784	-	-	-	-	-	
	No Pf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	No Pv	24	8	18	7	3	1	1	0	1	0	0	0	0	0	0	0	
	No Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

WHO region	Country/Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		
European	Uzbekistan <sup>3</sup>	Suspected	735 164	691 500	735 164	812 543	893 187	917 843	924 534	858 968	883 807	916 839	921 364	886 243	805 761	908 301	817 347	
		No Pf	1	0	1	0	0	0	3	2	0	0	1	1	1	2	1	
		No Pv	125	77	72	74	66	102	73	87	27	3	3	5	0	0	1	0
	South-East Asia	Bangladesh	Suspected	742 539	516 052	527 577	679 981	512 876	462 322	341 293	270 137	526 701	569 767	496 616	390 102	309 179	93 926	125 201
			No Pf	39 475	39 274	46 418	41 356	46 402	37 679	24 828	46 803	70 281	18 350	52 049	49 194	94 664	36 02	9727
			No Pv	16 124	14 942	15 851	13 298	12 492	10 442	8029	13 063	14 409	6853	3824	2579	396	262	489
		Bhutan	No Other	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0
			Suspected	76 445	65 974	74 696	61 246	54 892	60 152	66 079	51 446	47 389	62 790	54 760	44 494	42 512	31 632	28 776
			No Pf	27 38	2915	3207	1518	966	853	772	379	181	644	175	102	33	14	17
			No Pv	3197	2805	3015	2126	1560	871	963	414	148	413	261	92	47	31	31
Democratic People's Republic of Korea	No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Suspected	204 428	300 000	354 503	76 104	33 803	11 507	9353	7985	24 299	34 818	25 147	26 513	40 925	72 719	38 878		
	No Pf	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	No Pv	-	115 615	98 852	16 538	15 827	6728	6913	4795	16 989	14 845	13 520	16 760	21 850	14 407	10 535		
	No Other	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0		
	India	Suspected	86 790	90 389	91 617 725	99 136 143	97 111 526	104 120	106 606	94 855	95 734	112 496	119 279	119 470	122 159	127 891 198	138 628 331	
		No Pf	1 047 218	1 005 236	897 446	857 101	890 152	805 077	840 360	744 049	779 163	842 705	834 364	665 004	524 370	463 846	722 546	
		No Pv	984 572	1 080 248	943 781	1 012 302	1 025 211	1 011 492	944 769	767 851	750 687	723 697	765 622	645 652	534 129	417 884	379 659	
		No Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Suspected	3 178 212	2 737 927	2 660 674	2 482 906	2 445 538	2 113 265	1 320 581	2 142 747	2 106 957	2 106 957	2 205 293	2 092 187	2 051 425	1 833 256	1 575 907	
No Pf		100 716	82 927	93 419	74 968	123 962	146 353	165 108	158 185	141 127	221 270	221 041	232 197	229 255	191 200	142 807		
No Pv		156 277	184 665	180 374	148 097	180 974	169 041	182 489	175 657	125 150	196 666	221 176	187 989	187 583	150 985	107 260		
No Other		-	-	-	-	-	-	-	-	-	-	503	2547	2261	981	1342	1960	
Myanmar		Suspected	843 087	954 155	1 016 514	1 020 477	883 399	787 691	820 290	1 159 516	1 230 444	1 136 064	1 277 568	1 210 465	1 423 966	1 364 792	890 913	
		No Pf	95 499	130 029	133 187	138 178	114 523	124 644	149 399	152 027	170 630	124 251	72 995	62 624	342 593	234 986	110 324	
	No Pv	21 802	35 783	35 030	35 151	34 045	37 014	50 667	53 351	52 256	40 167	29 944	28 966	135 388	98 860	41 866		
	No Other	-	-	-	-	-	-	-	433	288	319	346	162	-	-	25		
	Suspected	140 768	266 917	304 200	383 322	293 836	361 936	327 981	265 997	302 774	270 798	213 353	188 702	243 432	169 464	296 979		
	No Pf	560	428	2165	1195	743	1181	1358	1391	792	762	766	249	612	612	295		
	No Pv	7056	6216	10 621	8200	3892	5691	3932	3870	3096	2760	2349	1631	1480	1659	1154		
	No Other	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0		
	Sri Lanka	Suspected	1 781 372	1 353 386	1 390 850	1 192 259	1 198 181	974 672	1 076 121	1 047 104	1 047 104	909 632	1 001 107	985 060	948 250	1 236 580	1 069 817	
		No Pf	59 650	10 600	4848	1273	549	134	27	8	47	29	28	17	41	42	20	
No Pv		150 389	55 922	36 563	9237	3171	1506	564	191	623	529	702	158	45	52	28		
No Other		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Thailand		Suspected	4 403 739	4 100 778	3 819 773	3 256 939	3 012 770	2 524 788	2 280 070	2 041 733	1 931 768	1 884 820	1 777 977	1 450 885	1 130 757	1 838 150	1 756 528	
		No Pf	43 717	29 061	20 389	19 024	13 371	14 670	14 124	16 667	12 254	9688	9548	5857	11 553	14 645	14 331	
		No Pv	37 975	34 467	24 166	18 331	13 319	14 921	15 991	16 495	13 886	13 616	13 401	8608	17 506	15 573	20 513	
		No Other	-	-	-	-	-	-	-	16	10	23	20	13	-	3084	3077	
		Suspected	15 212	83 049	120 344	83 785	242 957	185 367	223 002	215 402	215 338	198 867	266 384	225 772	182 854	178 200	117 107	
		No Pf	-	-	26 651	33 411	39 164	43 093	37 896	34 325	34 678	29 664	28 818	15 981	1962	373	203	
	No Pv	-	-	11 148	15 392	16 158	15 523	13 477	12 544	11 295	12 160	11 432	3758	2288	512	139		
	No Other	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0		
	Cambodia	Suspected	281 444	202 179	187 213	208 801	183 062	165 382	207 463	200 050	198 794	210 856	193 210	216 712	194 263	152 137	142 242	
		No Pf	46 150	37 105	33 010	36 338	31 129	17 482	24 779	17 094	37 014	18 637	9483	8637	19 867	9510	14 796	
No Pv		4505	4408	4386	5179	5709	9004	7551	4987	4625	6362	4794	5155	19 575	11 267	10 356		
No Other		-	-	-	-	-	-	-	0	0	0	0	0	0	0	0		
China		Suspected	-	5 397 517	5 788 432	4 776 469	4 331 038	3 892 885	4 076 104	4 062 565	4 435 793	4 642 479	7 118 649	9 190 401	6 918 732	5 554 995	4 403 633	
		No Pf	-	3732	5753	3497	3879	3588	2808	1754	1327	948	1295	1410	1419	3091	1855	
		No Pv	-	17 295	19 581	24 852	23 178	18 187	32 345	27 550	15 323	8214	3675	1907	1080	930	850	
		No Other	-	-	-	-	-	-	-	141	105	125	20	50	184	216		
		Lao People's Democratic Republic	Suspected	496 070	303 306	309 688	326 297	218 884	173 698	210 927	275 602	311 395	266 096	280 549	221 390	369 976	339 013	294 542
			No Pf	38 271	25 851	20 696	18 307	15 648	13 106	28 347	17 178	18 938	5332	4401	5770	38 461	25 494	25 445
	No Pv		1689	1204	712	574	491	473	316	193	247	176	122	442	7634	12 537	22 625	
	No Other		-	-	-	-	-	-	7	21	0	0	1	14	-	-	1	
	Malaysia		Suspected	2 694 991	2 671 828	2 593 385	2 380 226	2 250 185	1 994 216	1 973 918	2 111 163	2 143 247	1 565 982	1 619 074	1 600 439	1 566 872	1 576 012	1 443 958
			No Pf	6000	5643	5486	2756	2496	2222	1790	1979	2559	2129	1854	1126	894	663	409
No Pv			5953	6315	4921	3127	3167	2729	2774	2862	3820	3379	3812	2422	1461	969	732	
No Other			-	-	-	-	-	-	-	615	1011	1502	984	1758	-	2218	2782	

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Western Pacific	Papua New Guinea	Suspected	1 897 579	1 802 857	1 739 219	1 783 145	2 000 261	1 962 493	1 816 963	1 779 343	1 769 032	1 507 122	1 505 393	1 279 140	1 113 528	1 454 166	922 417
		No Pf	63 591	74 117	58 403	54 653	63 053	62 926	62 038	67 929	66 202	50 349	60 824	60 317	58 747	120 748	200 215
		No Pv	14 721	18 113	14 187	14 055	18 730	22 833	22 744	16 239	16 806	11 472	13 171	9654	7108	7579	78 846
	Philippines	No Other	36 596	34 968	37 005	48 441	50 850	593 996	432 111	408 254	278 652	352 006	301 577	327 125	333 084	320 089	314 820
		Suspected	25 912	18 006	22 831	32 948	29 018	20 033	24 515	9016	12 039	14 074	12 038	7043	4774	5051	3995
		No Pf	-	-	-	-	-	6482	8839	3622	4806	4951	2885	2380	2189	1357	834
	Republic of Korea	No Other	-	-	-	-	-	-	-	17	197	262	175	127	-	67	74
		Suspected	4183	2556	1799	1171	864	1369	2051	2227	1052	1345	1772	838	555	443	638
		No Pf	-	-	-	-	-	-	-	-	11	26	51	56	54	33	55
	Solomon Islands	No Pv	-	-	-	-	-	-	-	2227	1052	1319	1721	782	501	397	579
		No Other	-	-	-	-	-	-	-	-	-	-	0	0	0	3	1
		Suspected	601 612	594 690	556 356	416 728	643 908	633 796	657 110	396 169	338 244	282 297	284 931	254 506	249 520	245 014	233 803
Vanuatu	No Pf	46 703	50 806	50 090	64 910	64 449	54 001	54 441	48 751	29 576	19 813	23 092	14 537	14 980	13 640	10 559	
	No Pv	21 322	25 649	24 822	27 399	25 927	22 515	20 971	16 653	11 173	8544	12 281	8665	9339	11 628	7845	
	No Other	-	-	-	-	-	-	-	139	84	-	-	0	-	0	0	
Viet Nam	Suspected	58 679	48 422	75 046	82 670	80 879	86 170	62 637	52 958	52 420	44 960	48 088	32 656	33 273	28 943	35 570	
	No Pf	3226	3402	7016	8406	6999	3817	3522	2484	1623	1979	1738	851	1727	1039	279	
	No Pv	2972	4236	7210	6582	6350	4453	4405	2987	1850	1632	2265	1224	1680	1342	703	
Viet Nam	No Other	-	-	-	-	-	-	-	0	0	4	10	2	0	0	0	
	Suspected	2 883 456	2 950 863	3 054 693	2 835 799	2 778 295	2 793 458	3 024 558	3 755 566	1 409 765	2 907 219	2 803 918	3 312 266	3 436 534	3 115 804	2 786 135	
	No Pf	58 377	52 801	36 961	29 786	19 228	14 394	18 140	11 470	8901	12 719	12 763	10 101	11 448	9532	8532	
Viet Nam	No Pv	15 935	15 898	10 846	9004	5681	5102	4497	4737	2348	3206	4466	5602	7220	6901	7220	
	No Other	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	

Pf, *P. falciparum*; Pv, *P. vivax*

Suspected cases: are calculated by adding «Examined cases» to «Presumed cases».

Presumed cases: are calculated by subtracting «Confirmed cases» from «Presumed and Confirmed cases».

1. In May 2013 South Sudan was reassigned to the WHO African Region (WHA resolution 66.21, [http://apps.who.int/gb/ebwha/pdf\\_files/WHA66/A66\\_R21-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R21-en.pdf))

2. Where national totals for the United Republic of Tanzania are unavailable, refer to the sum of Mainland and Zanzibar

3. There is no local transmission

4. Armenia and Turkmenistan are certified malaria free countries, but are included in this listing for historical purposes

# Annex 6D – Reported malaria deaths, 2000–2014

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
African	Algeria	2	1	-	-	-	-	-	-	-	0	1	5	1	0	0	
	Angola	9510	9473	14 434	38 598	12 459	13 768	10 220	9465	9812	9465	10 530	8114	6909	5736	7300	5714
	Benin	-	468	707	560	944	322	1226	918	1290	918	1375	964	1753	2261	2288	1869
	Botswana	-	29	23	18	19	11	40	6	6	6	6	8	8	3	7	22
	Burkina Faso	-	4233	4032	4860	4205	5224	8083	6472	6472	7834	7982	9024	7001	7963	6294	5632
	Burundi	691	417	483	425	689	776	434	167	167	595	1183	2677	2233	2263	3411	2974
	Cabo Verde	-	0	2	4	4	8	2	2	2	2	2	1	1	1	0	2
	Cameroon	-	-	-	-	-	-	836	930	1811	7673	4943	4536	3808	3209	4349	4398
	Central African Republic	439	535	-	417	859	668	865	856	578	456	667	526	526	1442	1026	635
	Chad	712	957	98	1021	13	568	837	617	617	1018	221	886	1220	1359	1881	1720
	Comoros	-	-	-	-	28	92	56	20	20	47	47	53	19	17	15	0
	Congo	-	-	-	-	-	-	-	113	113	143	116	-	892	623	2870	271
	Côte d'Ivoire	-	-	-	-	-	-	-	797	797	1249	18 156	1023	13 869	1534	3261	2069
	Democratic Republic of the Congo	3856	416	2152	989	13 613	15 322	12 970	14 372	14 372	17 940	21 168	23 476	23 748	21 601	30 918	25 502
	Equatorial Guinea	-	-	-	-	-	-	-	4	4	4	4	23	52	77	66	-
	Eritrea	-	133	86	79	24	49	47	42	42	19	23	27	12	30	6	15
	Ethiopia	-	1681	1607	2138	3327	1086	3327	991	991	1169	1121	1581	936	1621	358	213
	Gabon	2016	1693	1141	692	466	353	238	216	156	156	197	182	74	134	273	159
	Gambia	-	275	259	192	153	426	150	403	424	403	240	151	440	289	262	170
	Ghana	6108	1717	2376	2103	1575	2037	3125	4622	4622	3889	3378	3859	3259	2855	2506	2200
	Guinea	626	517	440	586	528	490	441	472	472	441	586	735	743	979	108	1067
	Guinea-Bissau	-	635	780	1137	565	565	507	507	370	487	369	296	472	370	418	357
	Kenya	48 767	48 286	47 697	51 842	25 403	44 328	40 079	-	-	-	-	26 017	713	785	360	472
	Liberia	-	-	-	-	-	41	877	310	310	345	1706	1422	-	1725	1191	2288
	Madagascar	591	742	575	817	715	699	441	428	428	355	348	427	398	552	641	551
	Malawi	-	3355	5775	4767	3457	5070	6464	8048	7486	8048	8915	8206	6674	5516	3723	4490
	Mali	748	562	826	1309	1012	1285	1914	1782	1782	1227	2331	3006	2128	1894	1680	2309
	Mauritania	-	-	-	-	-	67	142	142	142	-	91	211	77	106	25	19
	Mayotte, France	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0
	Mozambique	-	-	-	-	-	-	-	5816	5816	4424	3747	3354	3086	2818	2941	3245
	Namibia	-	1728	1504	1106	1185	1325	571	181	181	152	68	63	36	4	21	61
	Niger	1244	2366	2769	2248	1333	2060	1150	1358	1358	2161	2161	3929	2802	2825	2209	2691
	Nigeria	-	4317	4092	5343	6032	6494	6586	10 289	8677	8677	7522	4238	3353	7734	7878	6082
	Rwanda	-	4275	3167	2679	2362	2581	2486	566	1772	566	809	670	380	459	409	496
	Sao Tome and Principe	254	248	321	193	169	85	26	16	23	16	23	14	19	7	11	0
	Senegal	1275	1515	1226	1602	1524	1587	1678	741	1935	741	574	553	472	649	815	500
	Sierra Leone	-	328	461	157	126	50	90	324	324	871	1734	8188	3573	3611	4326	2848
	South Africa	424	81	96	142	88	63	87	37	37	43	45	83	54	72	105	174
	South Sudan <sup>1</sup>	-	-	-	-	-	-	-	-	-	263	254	1053	406	1321	1311	-
	Swaziland	-	62	46	30	28	17	27	17	17	13	10	8	1	3	4	4
	Togo	-	1394	1661	1130	1183	1024	819	2663	1236	2663	1556	1507	1314	1197	1361	1205
	Uganda	-	-	-	-	-	-	-	4252	7003	2372	6296	8431	5958	6585	7277	5921
	United Republic of Tanzania <sup>2</sup>	379	1 228	815	15 251	19 859	18 322	20 962	12 593	12 593	12 497	16 776	15 867	11 806	7 820	8 528	5 373
	Mainland	379	838	441	14 943	19 547	18 075	20 825	12 405	12 529	12 405	16 696	15 819	11 799	7812	8526	5368
	Zanzibar	-	390	374	308	312	247	137	92	64	92	80	48	7	8	2	5
	Zambia	-	9369	9021	9178	8289	7737	6484	3781	6183	3781	3862	4834	4540	3705	3548	3257
	Zimbabwe	-	-	1844	1044	1809	1916	802	232	401	232	108	255	451	351	352	406
Region of the Americas	Argentina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bahamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Belize	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	Bolivia (Plurinational State of)	11	0	4	1	3	0	0	0	0	0	0	0	0	0	0	1
	Brazil	245	142	95	104	102	123	110	93	68	85	68	76	70	60	41	36
	Colombia	124	168	162	118	126	87	77	68	54	28	54	42	23	24	10	17
	Costa Rica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dominican Republic	6	17	11	12	16	16	10	17	11	14	14	15	10	8	5	4
	Ecuador	66	84	64	46	37	22	9	8	8	5	6	4	2	1	4	-
	El Salvador	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	French Guiana, France	0	3	2	5	1	2	2	5	-	2	1	1	2	2	3	0
	Guatemala	0	0	0	0	2	4	2	2	-	0	0	0	0	0	1	1

WHO region	Country/area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Region of the Americas	Guyana	29	30	28	44	38	33	20	-	11	20	24	36	35	14	11	
	Haiti	16	70	77	109	24	29	32	28	17	7	8	5	6	10	9	
	Honduras	0	0	0	0	0	1	0	0	2	1	3	2	1	1	2	
	Jamaica	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
	Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Nicaragua	4	2	8	7	1	6	1	0	0	0	0	1	1	2	0	
	Panama	1	1	2	4	2	1	1	1	1	1	0	0	1	1	0	
	Paraguay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Peru	20	25	12	9	6	4	4	6	2	2	2	0	1	7	4	
	Suriname	24	23	15	18	7	1	1	1	1	0	1	1	0	1	0	
	Venezuela (Bolivarian Republic of)	24	28	23	40	35	17	17	11	16	9	11	18	16	10	5	
	Eastern Mediterranean	Afghanistan	-	-	-	-	-	0	-	25	46	32	22	40	36	24	32
		Djibouti	-	-	-	-	-	-	29	1	1	0	0	0	0	17	28
		Egypt	-	-	-	-	-	-	0	0	0	2	2	4	-	3	2
Iran (Islamic Republic of)		4	2	2	5	1	1	1	1	3	3	2	2	0	-	0	
Iraq		-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	
Morocco <sup>4</sup>		-	-	-	-	-	1	2	2	2	1	2	2	4	-	9	
Oman		-	-	-	-	-	-	0	0	0	0	2	0	0	0	0	
Pakistan		-	-	-	-	-	52	9	24	0	0	-	4	4	260	244	
Saudi Arabia		-	0	0	0	0	0	0	2	0	0	0	0	2	0	0	
Somalia		-	8	54	54	79	15	58	45	45	49	6	5	10	23	14	
Sudan		2162	2252	2125	2479	1814	1789	1193	1125	1254	1125	1023	612	618	685	823	
Syrian Arab Republic <sup>3</sup>		-	-	-	-	-	2	2	1	1	1	0	0	0	1	4	
Yemen		-	-	-	-	-	-	73	-	-	38	92	75	72	55	19	
European		Armenia <sup>4</sup>	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
	Azerbaijan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Georgia	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Kyrgyzstan	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	Russian Federation	2	3	2	4	5	3	4	3	3	2	1	1	1	-	-	
	Tajikistan	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Turkey	0	0	0	0	0	0	0	1	1	3	1	0	4	0	1	
	Turkmenistan <sup>4</sup>	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	
	Uzbekistan	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
	South-East Asia	Bangladesh	484	470	598	574	505	501	508	228	154	47	37	36	11	15	45
		Bhutan	15	14	11	14	7	5	7	2	2	4	2	1	1	0	0
		Democratic People's Republic of Korea	-	-	-	-	-	-	-	0	0	0	0	0	-	-	0
		India	892	1015	973	1006	949	963	1708	1055	1311	1055	1018	754	519	440	561
		Indonesia	833	-	-	508	508	88	494	669	900	669	432	388	252	45	64
Myanmar		2556	2814	2634	2476	1982	1707	1647	1087	1261	1087	788	581	403	236	92	
Nepal		-	1	3	5	7	10	42	3	3	-	6	2	0	0	0	
Sri Lanka		77	52	30	4	1	0	1	1	1	0	0	0	0	0	0	
Thailand		625	424	361	204	230	161	113	97	97	101	70	80	43	37	36	
Timor-Leste		-	-	-	-	65	71	68	60	60	33	53	58	16	3	1	
Western Pacific		Cambodia	608	476	457	492	382	296	396	241	209	279	151	94	45	12	18
		China	31	27	42	52	31	48	37	18	23	23	10	19	33	14	23
		Laos	350	242	195	187	105	77	21	14	14	11	5	24	17	44	28
		Malaysia	35	46	38	21	35	33	21	18	30	26	33	18	16	14	9
	Papua New Guinea	617	562	647	537	619	725	668	559	628	604	616	523	381	307	203	
	Philippines	536	439	71	162	167	145	124	73	56	24	30	12	16	12	10	
	Republic of Korea	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	
	Solomon Islands	38	55	61	71	51	38	12	15	15	21	53	34	19	18	23	
	Vanuatu	3	4	13	14	3	5	4	5	4	2	1	1	0	0	0	
	Viet Nam	142	91	50	50	34	18	41	20	25	26	21	14	8	6	6	
	Regional summary	African	77 642	103 036	110 516	152 657	114 045	137 269	136 955	102 490	103 664	131 224	150 490	104 069	104 106	116 336	97 381
		Region of the Americas	570	593	503	518	401	346	286	234	182	176	194	169	157	100	90
		Eastern Mediterranean	2166	2254	2135	2538	1894	1860	1367	1357	1357	1229	1263	1149	742	1001	959
		European	2	3	2	4	5	3	4	5	5	2	1	6	0	3	1
South-East Asia		5482	4790	4610	4283	4254	3506	4588	2963	3101	3199	2421	1821	1226	786	801	
Western Pacific		2 360	1 942	1 574	1 566	1 427	1 385	1 321	964	1 007	1 030	931	733	542	422	297	
<b>Total</b>		<b>88 222</b>	<b>112 618</b>	<b>119 340</b>	<b>161 586</b>	<b>122 026</b>	<b>144 369</b>	<b>144 521</b>	<b>108 013</b>	<b>109 188</b>	<b>136 894</b>	<b>155 186</b>	<b>107 540</b>	<b>107 032</b>	<b>118 701</b>	<b>99 529</b>	

Deaths reported before 2000 can be presumed and confirmed or only confirmed deaths depending on the country.

1 In May 2013 South Sudan was reassigned to the WHO African Region (WHA resolution 66.21, [http://apps.who.int/gb/ebwha/pdf\\_files/WHA66/A66\\_R21-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R21-en.pdf))

2 Where national totals for the United Republic of Tanzania are unavailable, refer to the sum of Mainland and Zanzibar

3 There is no local malaria transmission

4 Armenia, Morocco and Turkmenistan are certified malaria free countries, but are included in this listing for historical purposes