

6 December 2021

World malaria report 2021

Briefing kit

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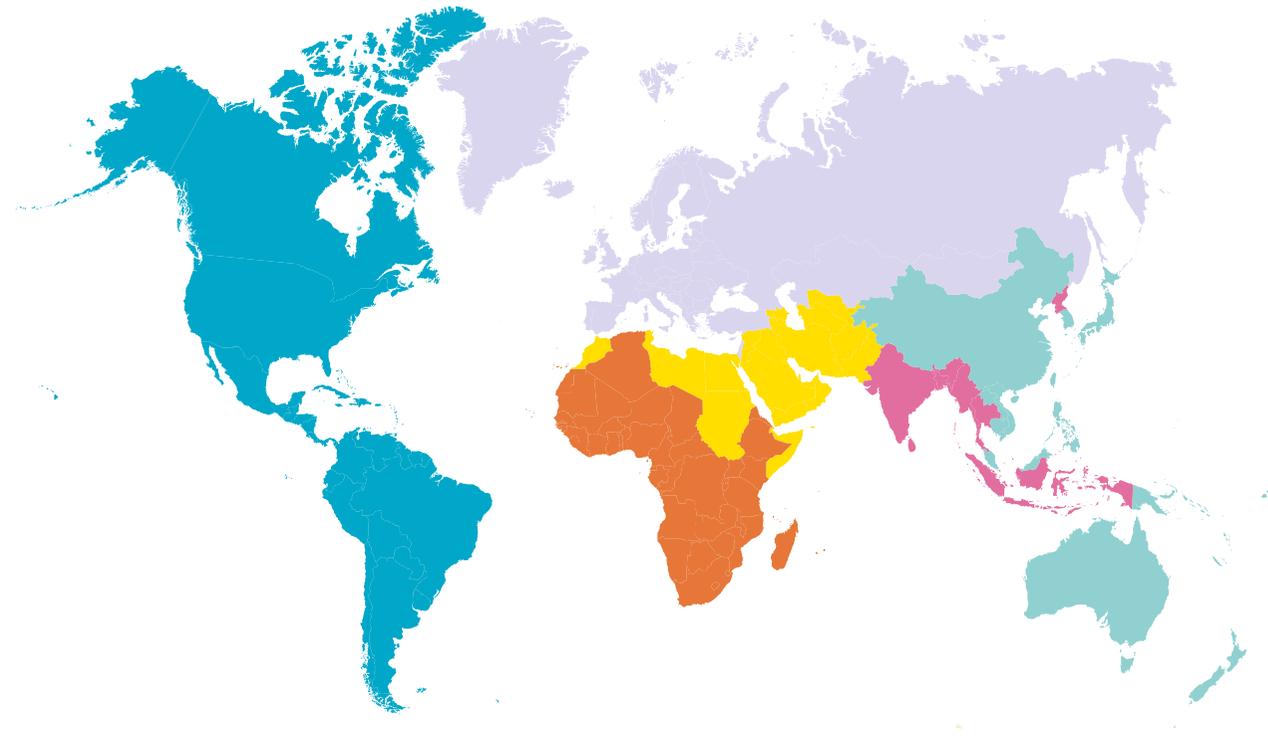


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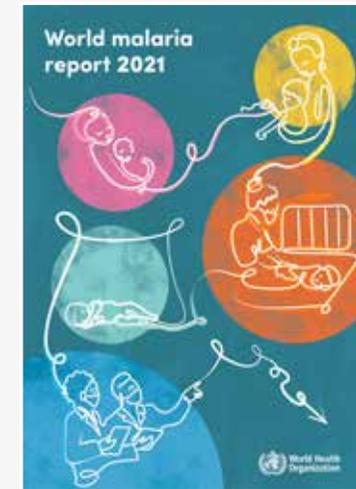
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Goals and milestones of the *Global technical strategy for malaria 2016-2030*

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1. African Region

The WHO African Region continues to shoulder the heaviest burden of malaria. Globally in 2020, the Region accounted for:

- 95% of all malaria cases (228 million);
- 96% of all malaria deaths (602 000); and
- 80% of all malaria deaths in the Region are among children under the age of 5.

Between **2000 and 2019**, the Region made good progress in reducing its malaria burden:

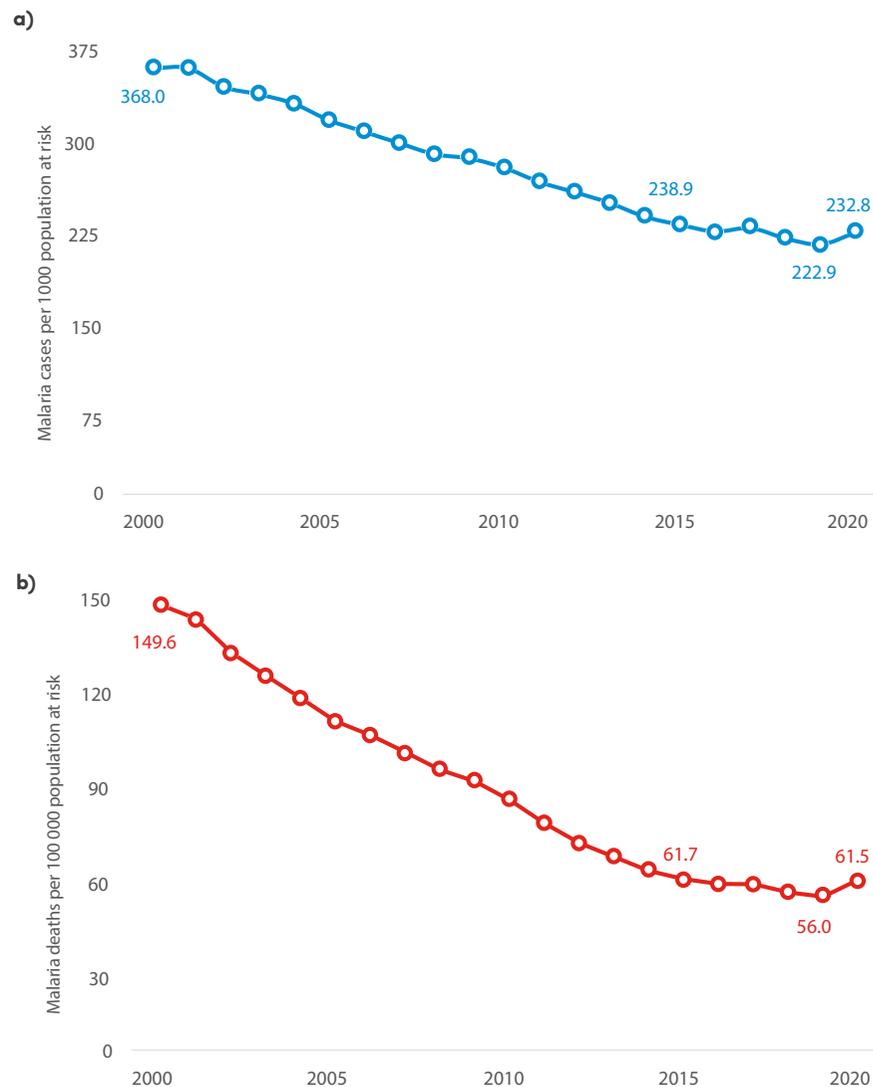
- case incidence (cases per 1000 population at risk) fell from 368 to 222.9 (**Fig. 3.3 a**);
- the mortality rate (deaths per 100 000 population at risk) fell from 149.6 to 56 (**Fig. 3.3 b**).

However, in countries with moderate and high malaria transmission, the rate of progress has levelled off since 2015 and, in 2020, disruptions to malaria services during the COVID-19 pandemic, had an added impact on the malaria burden in the Region. Between **2019 and 2020**:

- total malaria cases increased from 213 million to 228 million;
- case incidence increased from 222.9 to 232.8 cases per 1000 population at risk;
- total malaria deaths increased from 534 000 to 602 000;
- the mortality rate increased from 56 to 61.5 deaths per 100 000 population at risk.

FIG. 3.3.

Trends in a) malaria case incidence (cases per 1000 population at risk) and b) mortality rate (deaths per 100 000 population at risk), 2000–2020 in the WHO African Region, 2020



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In 2020, six countries in sub-Saharan Africa accounted for 55% of all malaria cases globally: Nigeria (26.8%), the Democratic Republic of the Congo (12.0%), Uganda (5.4%), Mozambique (4.2%), Angola (3.4%) and Burkina Faso (3.4%) (Fig. 3.2 c).

Four countries accounted for just over half of all malaria deaths globally: Nigeria (31.9%), the Democratic Republic of the Congo (13.2%), the United Republic of Tanzania (4.1%) and Mozambique (3.8%) (Fig. 3.2 d).

The Region as a whole missed the GTS 2020 milestones for reductions¹ in case incidence and mortality by 38% and 40%, respectively (Fig. 8.4 a + b):

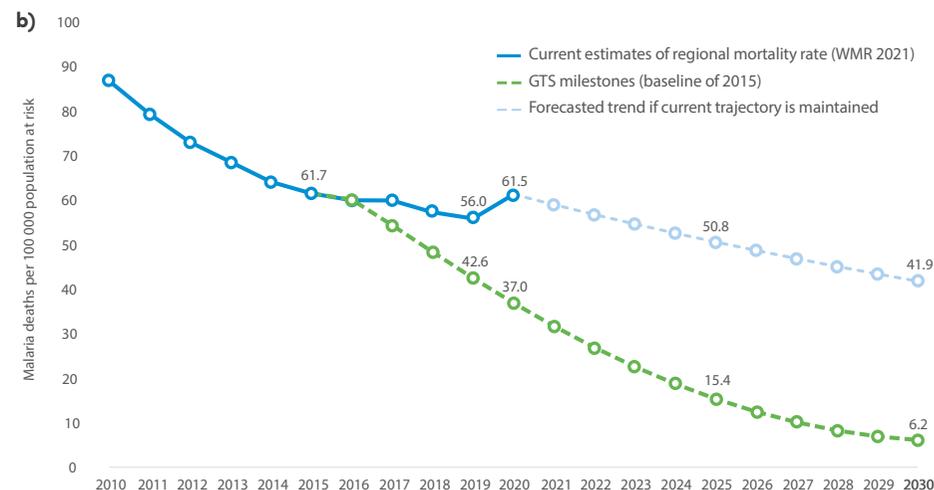
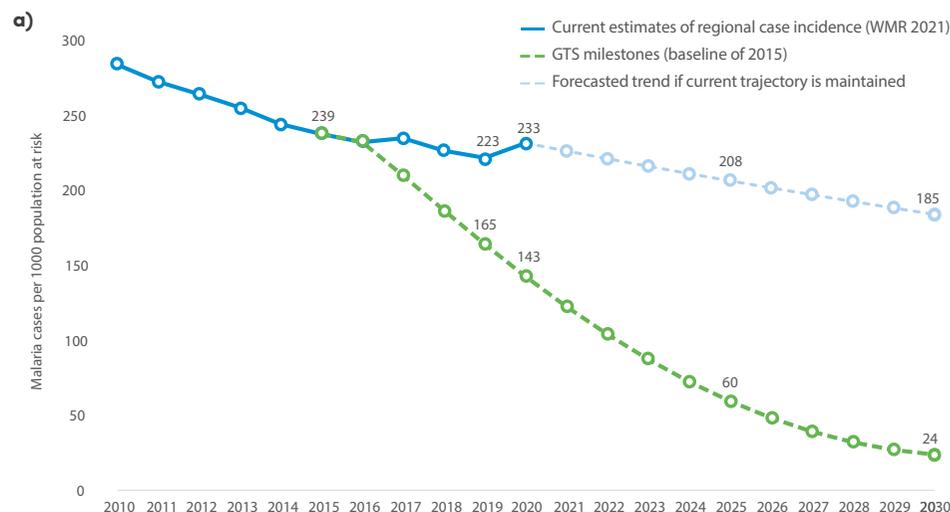
- Increases in mortality rate of 40% or more were reported in Botswana, the Comoros, Eritrea and Madagascar.
- Increases in mortality rate of between 5% and 25% were seen in eight countries: Angola, the Democratic Republic of the Congo, Guinea-Bissau, Liberia, Namibia, Nigeria, South Sudan and Uganda.

However, some individual countries beat the regional trends:

- Cabo Verde, Ethiopia, the Gambia, Ghana and Mauritania met the GTS 2020 target for a 40% reduction in malaria case incidence.
- Cabo Verde, Eswatini and Sao Tome and Principe reported zero malaria deaths in 2020, and Ethiopia and South Africa achieved a reduction in mortality rate of more than 40% or more.
- Algeria was certified malaria-free by WHO in 2019.

¹ The *Global technical strategy for malaria 2016-2030* (GTS) called for reductions in malaria case incidence and mortality of at least 40% by 2020 compared to a 2015 baseline.

FIG. 8.4. Comparison of progress in malaria a) case incidence and b) mortality rate in the WHO African Region considering two scenarios: current trajectory maintained (blue) and GTS targets achieved (green)



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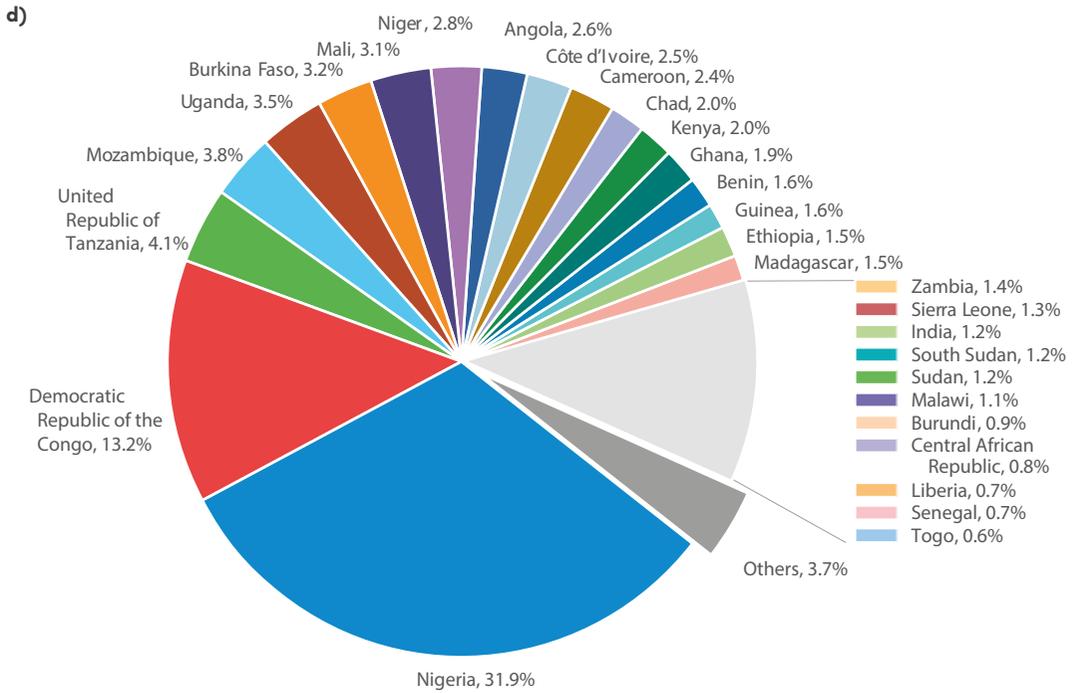
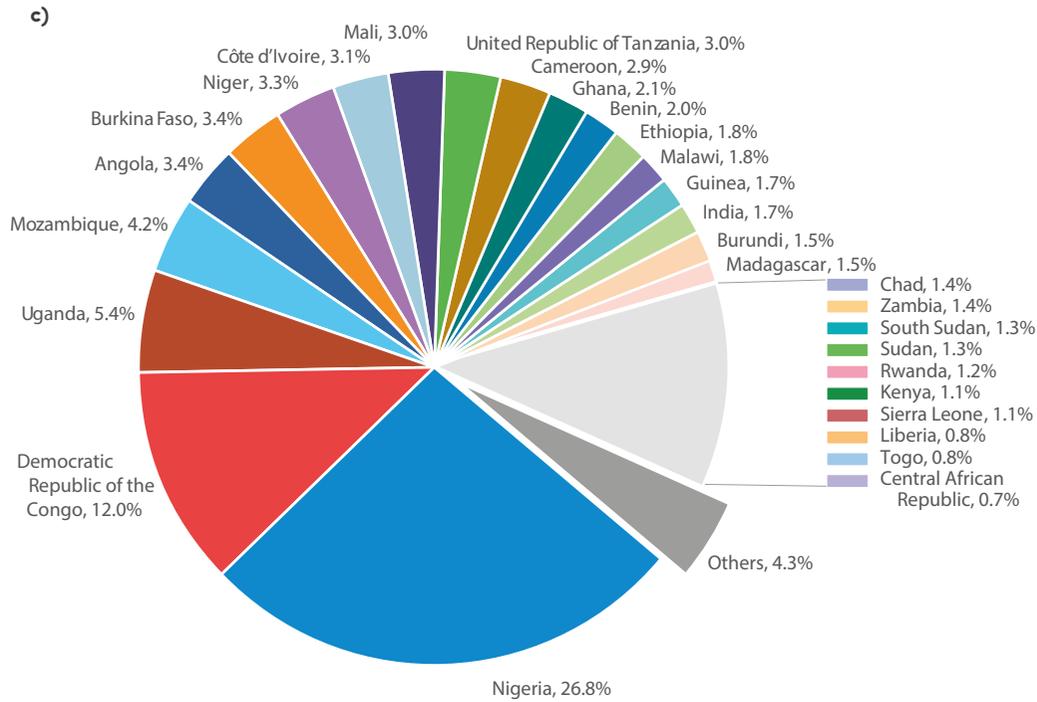


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FIG. 3.2.
Global trends in distribution of c) malaria cases and d) deaths by country, 2020



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2. South-East Asia Region

In 2020, the South-East Asia Region had nine malaria-endemic countries that contributed to about 2% of the burden of malaria globally. Most cases in the region were concentrated in India (83%).

Over the past 20 years, the Region achieved excellent progress in reducing its malaria burden. Between **2000 and 2020**:

- case incidence fell from 18.0 to 3.0 cases per 1000 population at risk (**Fig 3.4 a**);
- total malaria cases were reduced by 78%, from 22.9 million to 5 million;
- the mortality rate fell from 2.8 to 0.5 deaths per 100 000 population at risk (**Fig. 3.4 b**);
- total malaria deaths were reduced by 75%, from 35 000 to 9000.

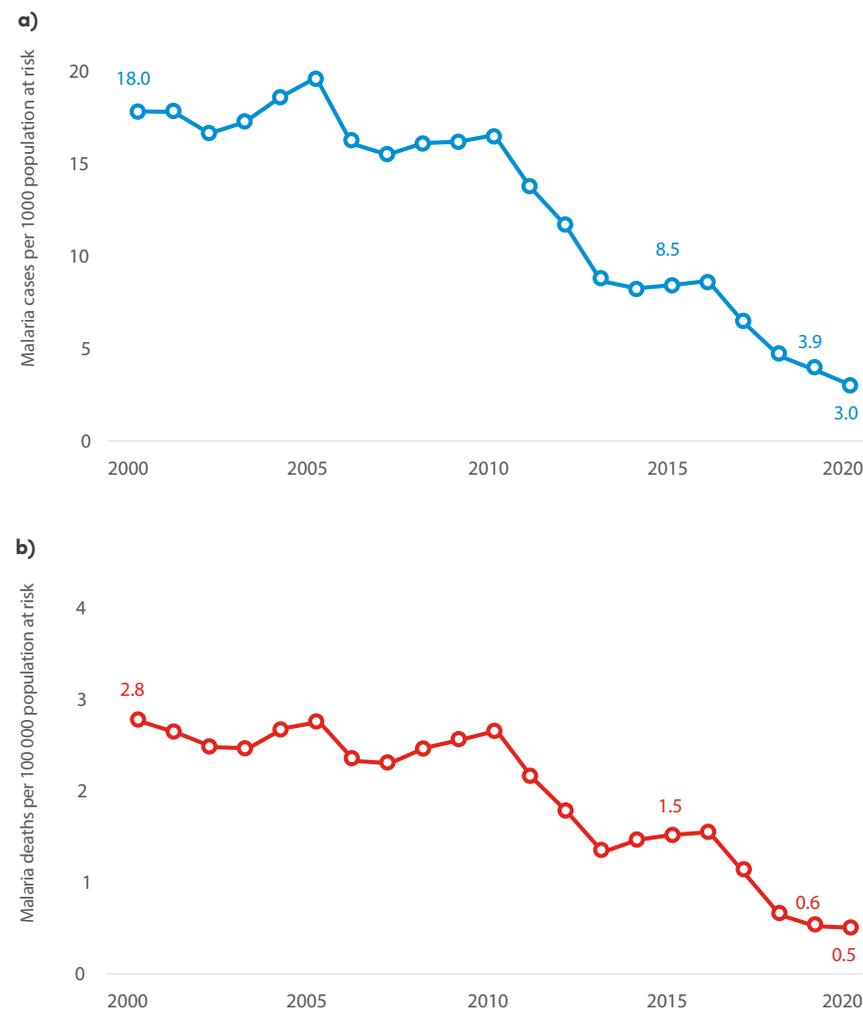
During the COVID-19 pandemic in 2020, there were no major increases in the malaria burden in this Region.

South-East Asia is the only WHO Region that reached the GTS 2020 milestones of a 40% reduction in malaria case incidence and mortality (compared to a 2015 baseline) (**Fig. 8.7 a + b**).

Sri Lanka was certified malaria free by WHO in 2016 and remains malaria-free.

FIG. 3.4.

Trends in a) malaria case incidence (cases per 1000 population at risk) and b) mortality rate (deaths per 100 000 population at risk), 2000–2020 in the WHO South-East Asia Region, 2020



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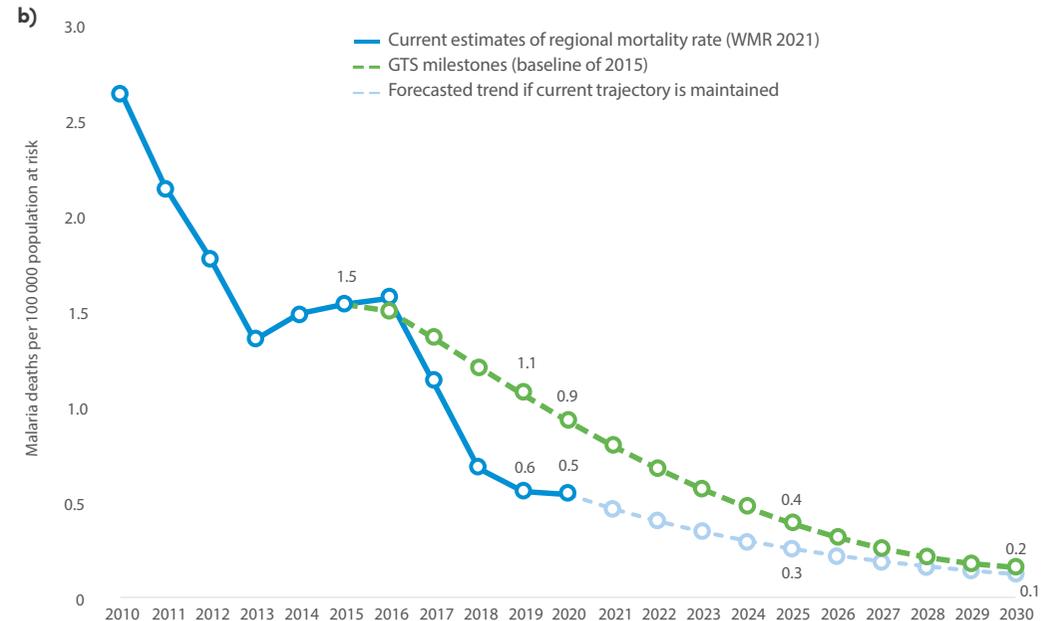
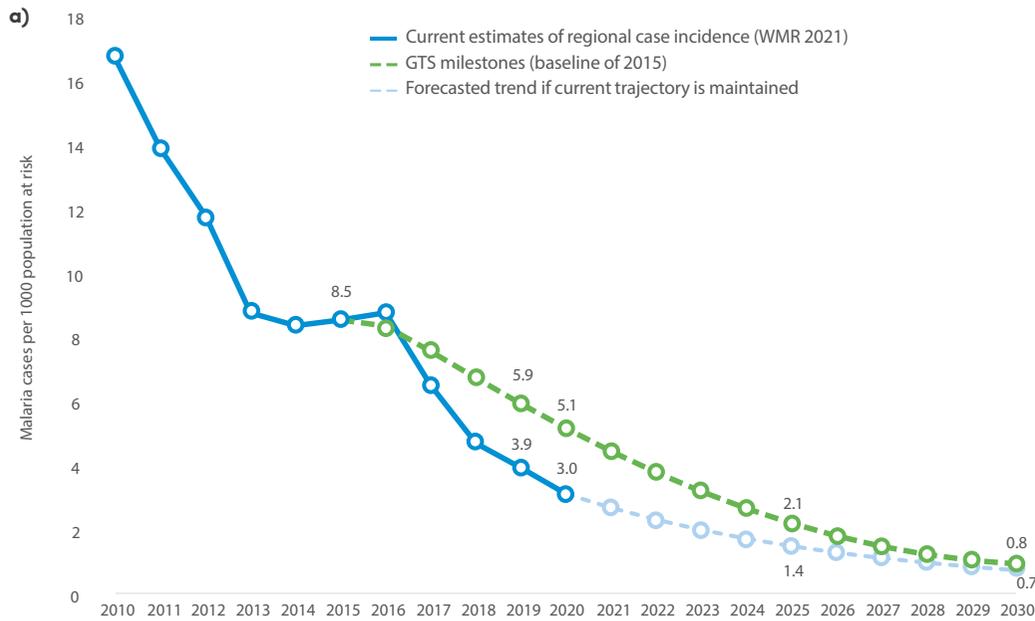


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FIG. 8.7. Comparison of progress in malaria: a) case incidence and b) mortality rate in the WHO South-East Asia Region considering two scenarios: current trajectory maintained (blue) and GTS targets achieved (green)



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3. Eastern Mediterranean Region

In 2020, the Region's eight malaria-endemic countries accounted for 2.4% of global malaria cases.

Between **2000 and 2020**, the region achieved good progress in reducing its malaria burden:

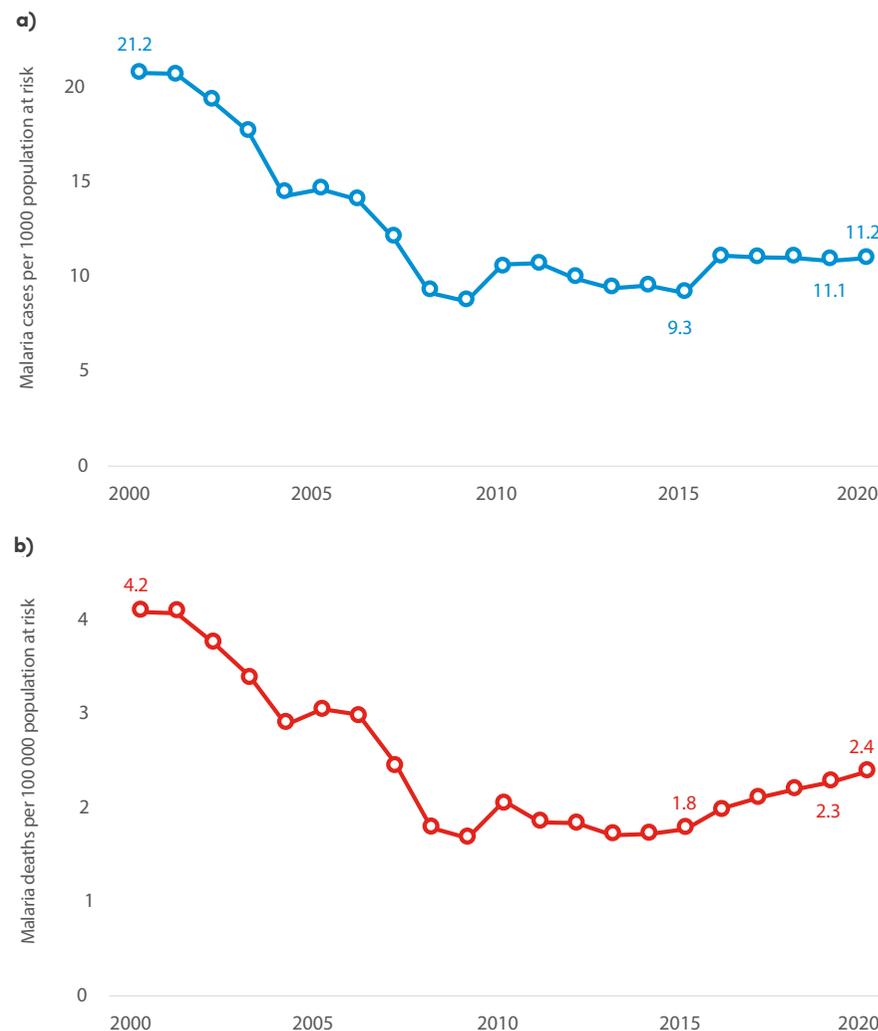
- case incidence fell from 21.2 to 11.2 per 1000 population at risk (**Fig. 3.5 a**);
- total malaria cases were reduced from an estimated 7 million to 5.7 million;
- mortality incidence fell from 4.2 to 2.4 per 100 000 population at risk (**Fig. 3.5 b**);
- total malaria deaths were reduced from about 13 700 to 12 300.

However, during the COVID-19 pandemic, the region as a whole saw an increase of approximately 200 000 malaria cases, from 5.5 million in 2019 to 5.7 million in 2020. The largest increases were seen in the Sudan (410 000 more cases), Somalia (71 000 more cases) and Djibouti (23 000 more cases).

In 2020, the Sudan carried the heaviest malaria burden in the region, accounting for 56% of cases and 61% of malaria deaths, followed by Somalia, Yemen, Pakistan, Afghanistan and Djibouti.

FIG. 3.5.

Trends in a) malaria case incidence (cases per 1000 population at risk) and b) mortality rate (deaths per 100 000 population at risk), 2000–2020 in the WHO Eastern Mediterranean Region, 2020



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In 2020, the Eastern Mediterranean Region missed the GTS 2020 targets for 40% reductions in malaria case incidence and mortality by 50% and 55%, respectively (**Fig. 8.6 a + b**).

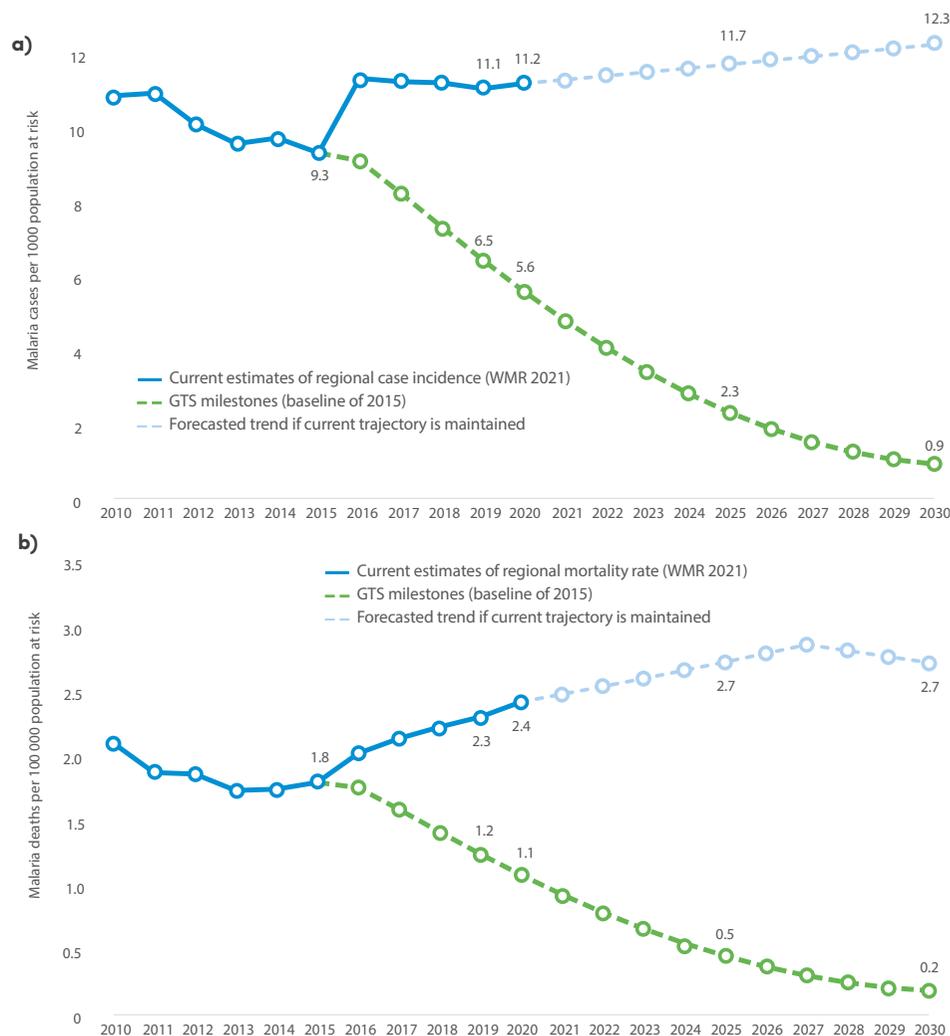
- Djibouti and the Sudan were both off track, with increases in case incidence of 40% or more between 2015 and 2020. In this same period, case incidence also increased in Yemen, but by less than 25%.
- Case incidence was reduced in Afghanistan and Somalia between 2015 and 2020, but by less than 40%.

Some countries bucked the overall regional trend:

- Pakistan reduced its case incidence by more than 40% between 2015 and 2020.
- In 2020, Saudi Arabia reported 83 indigenous malaria cases while the Islamic Republic of Iran reported no indigenous malaria cases for the third consecutive year.
- Iraq, Morocco, Oman and the Syrian Arab Republic last reported indigenous malaria cases in 2008, 2004, 2007 and 2004, respectively.

FIG. 8.6

Comparison of progress in malaria: a) case incidence and b) mortality rate in the WHO Eastern Mediterranean Region considering two scenarios: current trajectory maintained (blue) and GTS targets achieved (green)



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4. Region of the Americas

In 2020, 18 malaria-endemic countries in the Region of the Americas accounted for an estimated 0.3% of global malaria cases.

Between **2000 and 2020**, the Region made strong progress in reducing its malaria burden:

- case incidence fell from 14.1 to 4.6 cases per 1000 population at risk (**Fig. 3.7 a**);
- total malaria cases were reduced by 58%, from 1.5 million to 0.65 million;
- mortality incidence fell from 0.8 to 0.3 deaths per 100 000 population at risk (**Fig. 3.7 b**);
- total malaria deaths were reduced by 56%, from 909 to 409.

Three countries in the Region – Brazil, Colombia and the Bolivarian Republic of Venezuela – account for an estimated 77% of all cases region-wide.

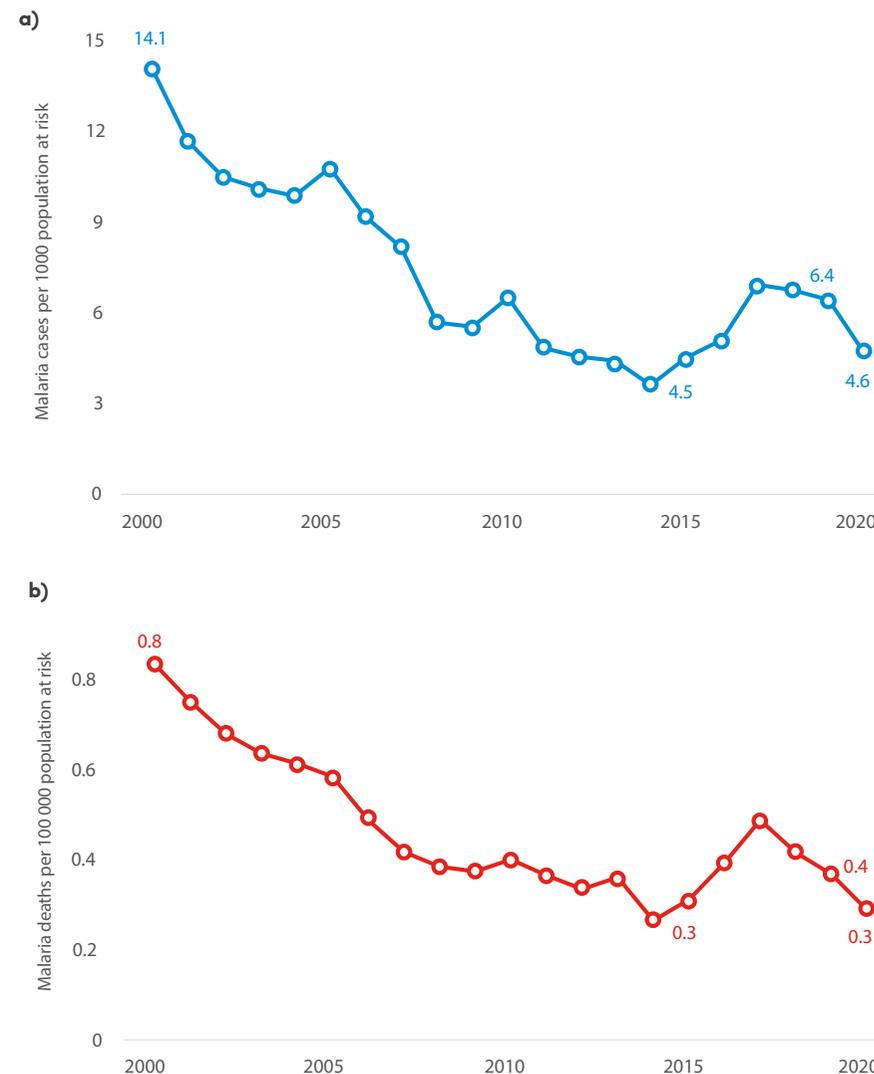
In recent years, the regional trend in cases has been heavily impacted by the malaria epidemic in Venezuela, where cases increased from 35 500 in 2000 to over 467 000 in 2019.

- In 2020, however, cases in this country fell by more than half to 232 000, due, in part, to restrictions on movement during the COVID-19 pandemic and a shortage of fuel which affected the mining industry.² Restrictions on movement may have also affected access to care and, therefore, detection of cases.

² The fuel shortage reduced the risk of exposure to malaria that people working in mines normally face.

FIG. 3.7.

Trends in a) malaria case incidence (cases per 1000 population at risk) and b) mortality rate (deaths per 100 000 population at risk), 2000–2020 in the WHO Region of the Americas, 2020



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- The significant reduction in cases in this country contributed to an overall case reduction region-wide, from 894 000 in 2019 to 653 000 cases in 2020.

Some countries did, however, see substantial increases in cases in 2020 compared to 2019 – notably Haiti (20 375), Honduras (654), Nicaragua (16 527), Panama (643) and the Plurinational State of Bolivia (3852).

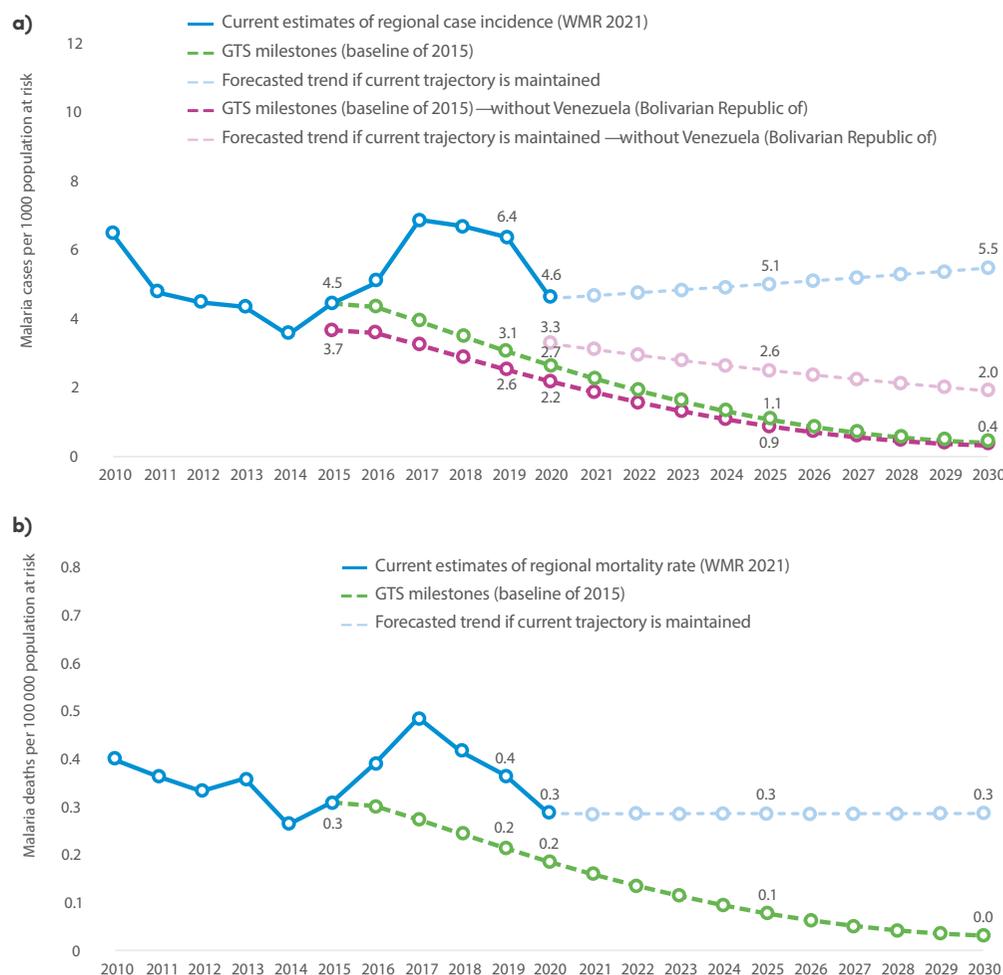
In view of recent trends, the Region of the Americas did not achieve the GTS 2020 milestones for reductions in malaria case incidence and mortality; progress towards these targets was off track by 42% and 50%, respectively (compared to a 2015 baseline) (**Fig. 8.5 a + b**).

The regional trend masks progress in a number of countries:

- El Salvador was certified malaria free in 2021 and Belize reported zero malaria cases for the second consecutive year in 2020.
- French Guiana, Guatemala, Honduras and Peru all met the GTS 2020 malaria morbidity milestone of a reduction of at least 40% in case incidence.
- Mexico reduced its malaria case incidence between 2015 and 2020, but by less than 40%.

FIG. 8.5

Comparison of progress in malaria a) case incidence and b) mortality rate in the WHO Region of the Americas considering two scenarios: current trajectory maintained (blue) and GTS targets achieved (green)



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5. Western Pacific Region

In 2020, the Region's eight malaria-endemic countries accounted for 0.7% of global malaria cases.

Between **2000 and 2020**, the Region reduced its malaria burden substantially:

- case incidence fell from 4.2 to 2.2 cases per 1000 population at risk (**Fig. 3.6 a**);
- total malaria cases were reduced by 39%, from 2.8 million to 1.7 million;
- mortality incidence fell from 0.9 to 0.4 deaths per 100 000 population at risk (**Fig. 3.6 b**);
- total malaria deaths were reduced by 47%, from 6100 to 3200.

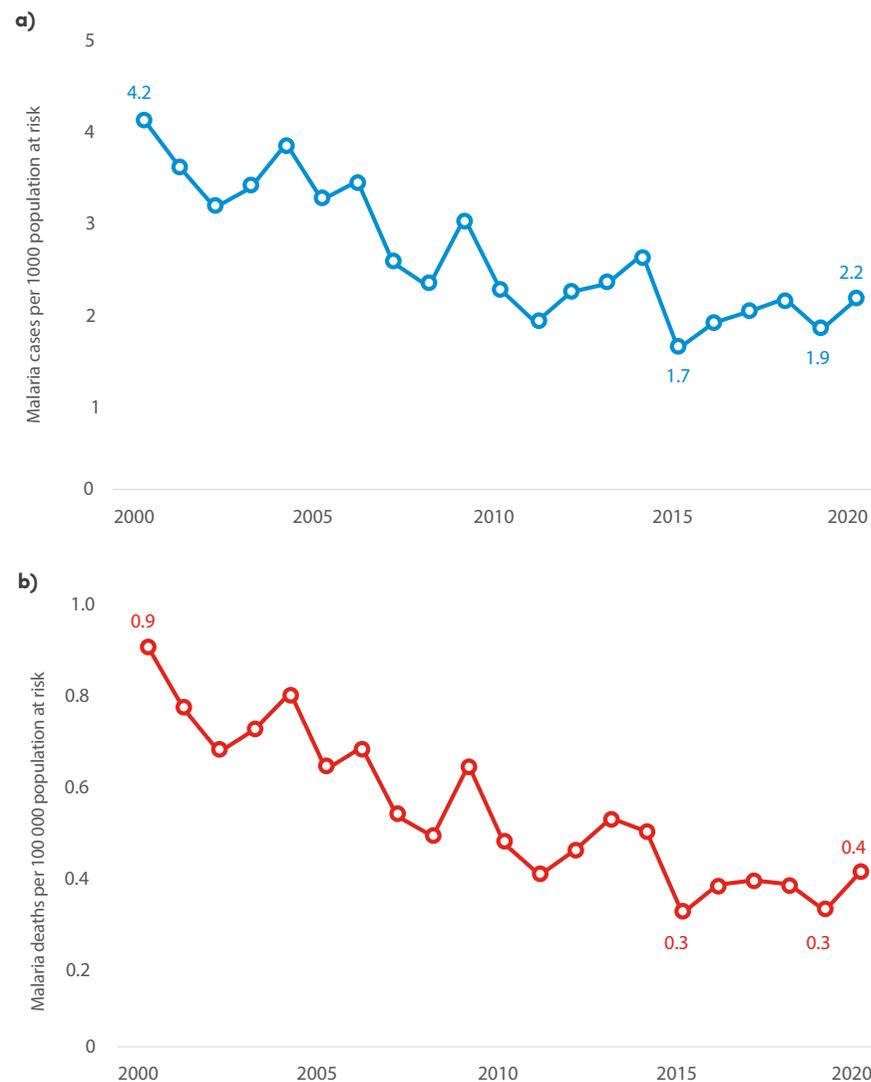
However, between **2015 and 2020**, the Region saw an increase in both cases and deaths:

- Case incidence increased by 33% and the mortality rate by 28%. The Region missed the malaria morbidity and mortality GTS 2020 targets by 55% and 53%, respectively (**Fig. 8.8 a + b**).
- The region-wide trend in case incidence has been heavily impacted by the malaria burden in Papua New Guinea: in 2020, the country accounted for 86% of all cases in the Region and 93% of all deaths.

Between **2019 and 2020**, cases in the Region increased from 1.4 million to 1.7 million. There was also an increase in deaths, from 2600 to 3200,

FIG. 3.6.

Trends in **a**) malaria case incidence (cases per 1000 population at risk) and **b**) mortality rate (deaths per 100 000 population at risk), 2000–2020 in the WHO Western Pacific Region, 2020



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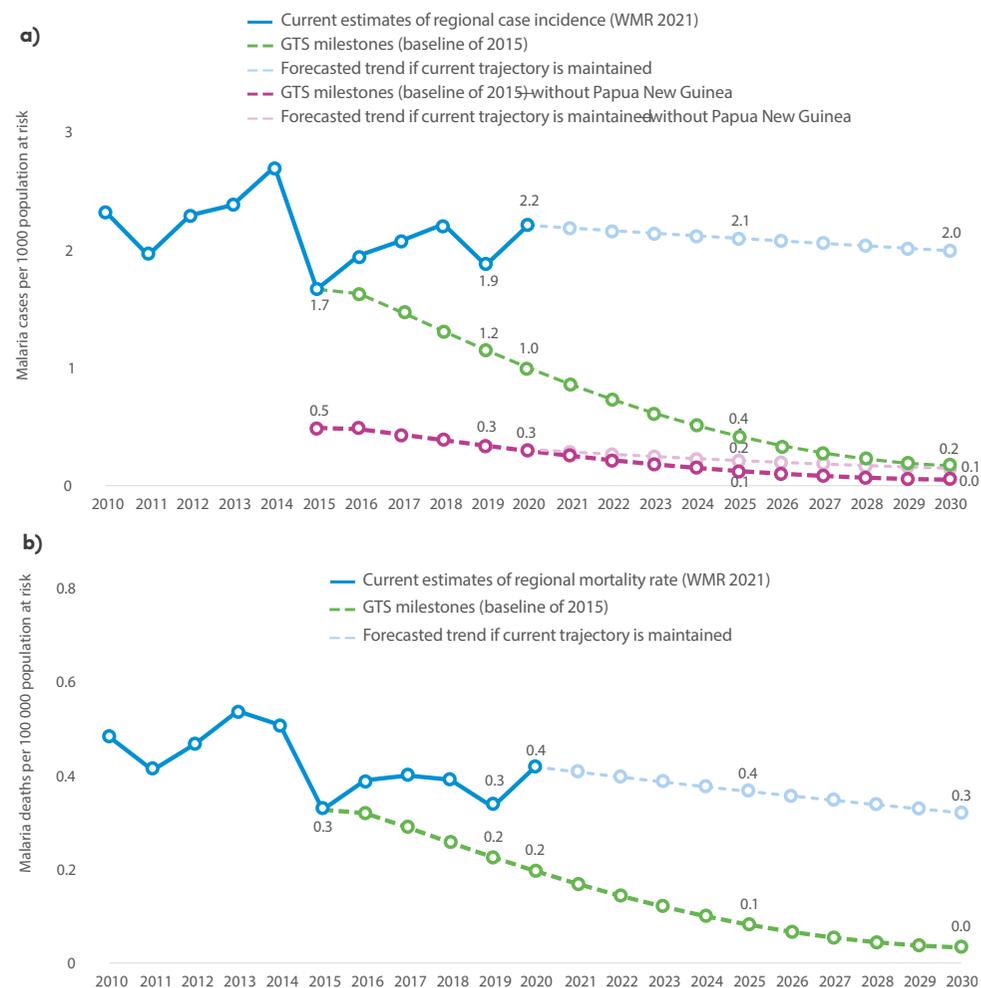
mainly due to increases reported in Papua New Guinea during the COVID-19 pandemic.

The regional trend hides progress in a number of countries:

- China has reported zero indigenous malaria cases since 2017 and was certified malaria-free by WHO in 2021.
- In 2020, Malaysia had zero cases of human malaria for the third consecutive year but reported 2607 cases of *P. knowlesi* (zoonotic malaria).
- Two countries reported fewer than 1000 malaria cases in 2020: the Republic of Korea (356) and Vanuatu (910).
- Cambodia, the Lao People's Democratic Republic, Malaysia, the Republic of Korea, Vanuatu and Viet Nam all reported zero indigenous malaria deaths in 2020.

FIG. 8.8

Comparison of progress in malaria a) case incidence and b) mortality rate in the WHO Region of the Western Pacific considering two scenarios: current trajectory maintained (blue) and GTS targets achieved (green)



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6. European Region

Since 2015, the WHO European Region has been free of malaria.

The last country to report an indigenous malaria case was Tajikistan in 2014.

Throughout the period **2000–2020**, there were no indigenous malaria deaths reported in this Region.

Goals, milestones and targets for the *Global technical strategy for malaria 2016–2030*

GOALS	MILESTONES		TARGETS
	2020	2025	2030
1. Reduce malaria mortality rates globally compared with 2015	At least 40%	At least 75%	At least 90%
2. Reduce malaria case incidence globally compared with 2015	At least 40%	At least 75%	At least 90%
3. Eliminate malaria from countries in which malaria was transmitted in 2015	At least 10 countries	At least 20 countries	At least 35 countries
4. Prevent re-establishment of malaria in all countries that are malaria-free	Re-establishment prevented	Re-establishment prevented	Re-establishment prevented

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All graphs drawn from the *World malaria report 2021*. For more information on sources, please see the report.

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