



# **Health Inequality Data Repository**

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## INDICATOR METADATA

Malaria (DHS Program and UNICEF Data  
Warehouse)

**July 2023**

## Malaria (DHS Program and UNICEF Data Warehouse)

### About

This dataset is from the [WHO Health Inequality Data Repository](#).

This dataset contains data on indicators related to malaria disaggregated by age, economic status, education, place of residence, sex and subnational region from the [Demographic and Health Survey \(DHS\) Program](#) and the [UNICEF Data Warehouse](#).

The DHS Program collects, analyzes, and disseminates accurate and representative data on population, health, HIV/AIDS and nutrition through more than 400 surveys in over 90 countries. Data come from Demographic and Health Surveys (DHS), AIDS Indicator Surveys (AIS) and Malaria Indicator Surveys (MIS). The UNICEF Data Warehouse contains datasets of indicators related to children from a wide range of sources, including UNICEF Multiple Indicator Cluster Surveys (MICS).

### Data source

DHS Program data are sourced via the DHS Program Indicator Data Application Programming Interface (API) (DHS Program; ICF International; Funded by the United States Agency for International Development (USAID); [api.dhsprogram.com](http://api.dhsprogram.com)). These data are prefaced with "DHS Program" in the source.

UNICEF Data Warehouse data are sourced via the UNICEF SDMX API (Available from [data.unicef.org/sdmx-api-documentation](http://data.unicef.org/sdmx-api-documentation)). These data are prefaced with "UNICEF" in the source.

Note: Where the same data was available from both the DHS Program and the UNICEF Data Warehouse, DHS, AIS and MIS data were sourced from the DHS Program.

### Methodology

In general, standard indicator definitions were adopted, as published in DHS, MICS and RHS documentation. Indicators are calculated by the DHS Program as per the methodologies outlined in the [Guide to DHS Statistics](#). UNICEF produces [Indicator Profiles](#) for each indicator, which detail the original data source and calculation methodologies.

### Dataset metadata

<b>Date of first publication</b>	April 2023
<b>Date of updated publication</b>	n/a
<b>Expected frequency of update</b>	Annual
<b>Date of data extraction</b>	DHS Program: 27 February 2023 UNICEF: 09 December 2022
<b>Temporal coverage</b>	2002–2021
<b>Spatial coverage</b>	Global
<b>Spatial granularity</b>	National
<b>Number of countries, territories or areas</b>	81

<b>Number of indicators</b>	20
<b>Number of dimensions of inequality</b>	6

## Inequality dimensions

The **age** dimension refers to the respondent's current age.

**Economic status** was determined using a wealth index. Country-specific indices were based on owning selected assets and having access to certain services and constructed using principal component analysis. For wealth quintiles, within each country the index was divided into five equal subgroups that each account for 20% of the population. Note that certain indicators have denominator criteria that do not include all households and/or are more likely to include households from a specific quintile; thus the quintile share of the population for a given indicator may not equal 20%.

**Education** refers to the highest level of schooling attained.

For **place of residence** and **subnational region**, country-specific criteria were applied.

**Sex** refers to the reported sex (male or female) of the respondent.

## Disclaimer

The estimates presented may differ from, and should not be regarded as, the official national statistics of individual WHO Member States or official WHO estimates.

## Copyright

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UNICEF Data Warehouse data are 'open data' that are freely available without restrictions from copyright, patents or other mechanisms of control (<https://data.unicef.org/open-data/>).

## Indicator metadata

Indicator name	Disaggregation	Definition / Further information	Notes
Children aged < 5 years who slept under a long-lasting insecticide-treated net (LLIN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Children aged < 5 years who slept under an insecticide-treated net (ITN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Children aged < 5 years with fever for whom advice or treatment was sought the same or the next day (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a> <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.
Children aged < 5 years with fever in the last two weeks (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Children aged < 5 years with fever who had blood taken from a finger or heel for testing (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a> <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.
Children aged < 5 years with fever who took antimalarial drugs the same day or next day (%)	Age Economic status Education	<a href="#">DHS Program metadata</a> <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where

Malaria (DHS Program and UNICEF Data Warehouse)

Indicator name	Disaggregation	Definition / Further information	Notes
	Marital status Place of residence Subnational region		DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.
Households with at least one insecticide-treated mosquito net (ITN) for every two persons and/or indoor residual spraying (IRS) in the past 12 months (%)	Age Economic status Education Marital status Place of residence Subnational region	DHS Program metadata not available <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.
Households with at least one insecticide-treated mosquito net (ITN) and/or indoor residual spraying (IRS) in the past 12 months (%)	Age Economic status Education Marital status Place of residence Subnational region	DHS Program metadata not available	Sourced from DHS Program API.
Households with at least one insecticide-treated mosquito net (ITN) for every two people (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Households with at least one insecticide-treated mosquito net (ITN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a> <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.
Households with at least one long-lasting insecticidal net (LLIN) for every two people (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.

Malaria (DHS Program and UNICEF Data Warehouse)

Indicator name	Disaggregation	Definition / Further information	Notes
Households with at least one long-lasting insecticidal net (LLIN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Households with indoor residual spraying (IRS) in last 12 months (%)	Age Economic status Education Marital status Place of residence Subnational region	DHS Program metadata not available	Sourced from DHS Program API.
Malaria prevalence in children aged < 5 years (according to rapid diagnostic testing) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Malaria prevalence in children aged < 5 years (according to microscopy) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Population who slept under a long-lasting insecticidal net (LLIN) last night (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Population who slept under an insecticide-treated mosquito net (ITN) last night (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.

Malaria (DHS Program and UNICEF Data Warehouse)

<b>Indicator name</b>	<b>Disaggregation</b>	<b>Definition / Further information</b>	<b>Notes</b>
Pregnant women who slept under a long-lasting insecticide-treated net (LLIN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Pregnant women who slept under an insecticide-treated net (ITN) (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a>	Sourced from DHS Program API.
Use of $\geq 3$ doses of intermittent preventive treatment in pregnancy (%)	Age Economic status Education Marital status Place of residence Subnational region	<a href="#">DHS Program metadata</a> <a href="#">UNICEF Indicator Profile</a>	Sourced from DHS Program API and the UNICEF Data Warehouse. Where DHS/AIS/MIS data were available in both sources, they were sourced from the DHS Program.