# Country Disease Outlook

# Madagascar

## August 2023



African Region

## Background

The Republic of Madagascar is the fourth largest island in the world, located approximately 400 kilometres off the East African coast, and includes smaller islands located off its coastline including Nosy Be and Sainte-Marie. Madagascar has a diverse population of about 28.9 million people. Madagascar faces challenges of economic development with a GDP per capita of around US\$ 500, varied literacy levels across the population and limited access to healthcare, with around 1 doctor for every 11,000 population

### Key points

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Madagascar's neonatal and under-five mortality rates have remained constant between 2015 and 2021, and it is not yet meeting the SDG targets for these indicators.

In 2021, 8,995 people were receiving antiretroviral treatment. However, only 15% of people living with HIV knew their status in 2021.

Madagascar is endemic for three of the five NTDs amenable to preventive chemotherapy through mass drug administration (MDA), namely lymphatic filariasis, soil-transmitted helminthiasis and schistosomiasis.

Madagascar has historically achieved sub-optimal vaccination coverage in children. Vaccination coverage rates fell in 2021, with the coverage of the first dose of a measles-containing vaccine at a low of just 39% and the third dose of DTP-containing vaccine at 55%. The estimated number of zero-dose children was 303,775, highlighting the urgent need to implement vaccination catch up strategies in children.





### Broad disease outlook

The country has a high burden of both communicable (such as malaria, Tuberculosis, HIV/AIDS) and non-communicable disease (NCDs), with NCDS generally on the rise. Lower respiratory infections, diarrheal diseases, and malaria were the highest-ranking causes of death. NCDs alone are estimated to account for 43% of all deaths.

### Communicable diseases

#### Malaria

Malaria remains a public health problem in Madagascar. Historically endemic to both *P. falciparum* and *P. vivax* with *An. gambiae* s.s., *An. arabiensis* and *An. funestus* are reported as the most important malaria vector. The country reported 2,339,103 Pf malaria cases compared to 637 Pv cases in 2021 (at an incidence rate of 81.85 cases per 1000 population). The total number of reported deaths due to malaria was 547 in 2021. Madagascar has successfully reduced malaria-related morbidity to less than 5% in half of the districts and to less than 10% in other districts.

#### Tuberculosis and HIV/AIDs

The burden of TB is estimated at 233 cases per 100,000 population. Tuberculosis death rate of Madagascar fell gradually from 79 cases per 100,000 people in 2002 to 44 cases per 100,000 people in 2021. There is limited information at the population level on the number of people that know their HIV status. Estimates for reported data in 2021 show that 8,995 people were receiving antiretroviral treatment. Since 2015, there was a small reduction in the mortality rate related to HIV and TB. There is a need to collect more data on the country's progress against the 95-95-95 goals which stand as:

- ▲ 15% of people living with HIV know their status
- ▲ 18.4% of people living with HIV who know their status are on treatment.
- There is limited data on the number of people living with HIV and on treatment who are virally suppressed.

### Neglected tropical diseases

The country was certified free of dracunculiasis disease (Guinea Worm) in 2004 although it was never endemic. It is endemic for three NTDs amenable to preventive chemotherapy through mass drug administration (MDA) (lymphatic filariasis, soil-transmitted helminthiasis and schistosomiasis). Other known endemic NTDs include chromoblastomycosis and other deep mycoses, foodborne trematodiases, leprosy, rabies, mycetoma, taeniasis and cysticercosis. Integrated control and case management approaches for NTDs are yet to be fully adopted and implemented.

### Non-communicable diseases

The age-standardised mortality rate across four major NCDs (Cardiovascular Disease, Chronic Respiratory Disease, Cancer and Diabetes) has been over 600 per 100,000 population since 2015 for both sexes (males and females). A national NCD policy and plan have been implemented along with policies related to tobacco and advertising. However, many other gaps exist and alcohol-related policies have only partially been achieved.

## **Childhood Immunization**

Madagascar's recent immunisation trends suggest a dip in coverage of basic childhood vaccination in 2021. Historically, it is one of the countries where immunisation in children has been sub-optimal. The first dose of the measles vaccine has on average been 55% based on the WUENIC estimate and fell to a low of 39% in 2021. Similarly, the coverage for the third dose of DTP-containing vaccine fell to 55% in 2021. The estimate of zero-dose children was 303,775 in 2021, highlighting the need to address the drop in coverage. Like the neighbouring island of Mauritius, it experienced a measles outbreak in 2019.

## **Child survival**

Based on the UN Inter-agency Group for Child Mortality Estimation (UN IGME) estimates derived from national data from censuses, surveys or vital registration systems, the under-5 mortality in Madagascar stands at 66 per 1000 live births (SDG3 target of 25 per 1000 live births) while the neonatal mortality is 24.1 per 1000 live births (SDG3 target SDG3 target of 12 per 1000 live births).





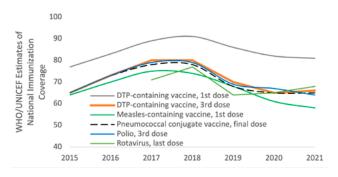


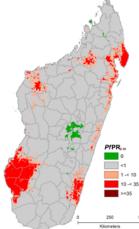
#### MALARIA

POPULATION AT RISK	TOTAL MALARIA	TOTAL MALARIA
IN 2022	CASES IN 2021	DEATHS IN 2021
28.9 million	4.9 million	12,571

ITN use in children under five years (55.6%) and 26.9% use of ACTs among those for whom care was sought and received a finger or heel prick

#### EXPANDED PROGRAMME ON IMMUNIZATION IN CHILDREN



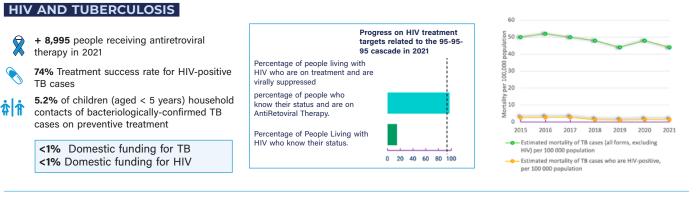


Plasmodium falciparum malaria prevalence in children in Madagascar in 2020. Estimates from the Malaria Atlas project

Malaria incidence in 2021 compared to GTS targets show a reverse trajectory since 2018 and is now off target



Zero dose children 3.7 millionUnder-immunized 43.9 millionThe drop in basic vaccination since 2019 suggests a strong needfor catch-up in routine immunization for preventable diseases



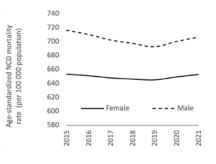
Indicator 1 - Targets
Indicator 2 - CRV Mortality
Indicator 3 - Surveys
Indicator 4 - NCD policy and Plan
Indicator 5A - Tobacco taxes
Indicator 5B - Tobacco smoke free/polutio
Indicator 5C - Tobacco health warning
Indicator 5D - Tobacco advertising ban
Indicator 5E - Tobacco media campaign
Indicator 6A - Alcohol availability
Indicator 6B - Alcohol advertising restriction
Indicator 6C - Alcohol taxes
Indicator 7A - Salt policies
Indicator 7B - Trans fats policies
Indicator 7C - Marketing to children
Indicator 8 - Physical activity awareness
Indicator 9 - NCD guidelines

#### NCD PROGRESS INDICATORS

Achieved

#### **Partially achieved**





World Health Organization

African Region

#### NEGLECTED TROPICAL DISEASES

Endemic NTDS requiring Preventive Chemotherapy (PC)

- Lymphatic filariasis
  Soil-transmitted helminthiasis
- Schistosomiasis
- Limited data on morbidity for Trachoma
- Non-endemic for Onchocerciasis

Leprosv

Rabies

# PC-NTDs treatment in 202124.5 million targeted for MDA0 treated with MDA

#### **OTHER MAJOR NTDs**

 Chromoblastomycosis and other deep mycoses
 Foodborne trematodes



