Background

The Republic of Botswana is a landlocked country in Southern Africa. It is bordered by Namibia, South Africa and Zimbabwe. It is an upper-middle income country with a GDP per capita of US$ 6,805 (2021) and has a population of 2.6 million (2021).

Key points

- Botswana has a high burden of communicable and non-communicable diseases (NCDs), with the latter making up 46% of deaths in 2019.
- Botswana had 334,315 people receiving antiretroviral therapy in 2021 and has made excellent progress towards achieving the 95-95-95 goals for HIV, reaching 94-98-98 in 2021.
- Botswana’s coverage rates of vaccination in children have historically been high, with above 90% coverage for the third dose of DTP-containing vaccine and the first dose of measles-containing vaccine in 2021.
- Botswana has improved its child survival rates between 2015 and 2021 but is not yet meeting the SDG targets.
Communicable diseases

Malaria
There is a relatively low incidence of malaria in Botswana. It is a country earmarked for malaria elimination, with an estimated 1,067 cases (4.1 cases per 10,000 population) in 2021, resulting in only two deaths. In 2019, Botswana met the target set as part of the Global Technical Strategy for Malaria target, but these gains were reversed in 2020 and 2021 when the malaria incidence rate per 1,000 population rose above the targets.

Tuberculosis and HIV/AIDS
The mortality rate of TB cases (all forms, excluding HIV coinfection) has increased since 2015, from 24 to 32 per 100,000 population in 2021, whereas the TB mortality rate among HIV-positive people has fallen from 66 to 50 in the same period.
The 95-95-95 goals are very close to being achieved:
- 94% of people living with HIV that know their status.
- 98% of people living with HIV who know their status are on treatment.
- 98% of people living with HIV and on treatment who are virally suppressed.

Approximately 334,351 people were receiving antiretroviral treatment in 2021. In fact, the vertical HIV transmission rate was only 2.2%, down from 9% a decade earlier.

Neglected tropical diseases
Botswana is endemic for two of the five NTDs amenable to preventive chemotherapy through mass drug administration (MDA), namely soil-transmitted helminthiasis and schistosomiasis. In 2020, 422,239 people were targeted for MDA and 86% were treated.

Other notable NTDs that remain endemic are leishmaniasis (cutaneous), taeniiasis and cysticercosis, leprosy and rabies.

Non-communicable diseases

NCDs are a significant health problem in Botswana. The age-standardised mortality rate across four major NCDs (cardiovascular disease, chronic respiratory disease, cancer and diabetes) was 934 per 100,000 in males and 713 in females in 2021.

Botswana has implemented initial efforts on the NCD progress indicators related to NCD policy and plans NCD guidelines, tobacco taxes and alcohol availability, however progress has been more limited on tobacco smoke free/pollution, tobacco health warnings, alcohol advertising restrictions, trans fats policies, salt policies, marketing to children and physical activity guidelines.

Childhood Immunization
Botswana’s coverage rates of vaccination in children have historically been high, with the third dose of DTP-containing vaccine remaining over 90% since 1989. Similarly, the measles vaccination coverage for the first dose has been above 90% since 1999, apart from a dip to 87% in 2020 before coming back up to 97%.

In 2021, there were an estimated 2,963 under-immunised children and 1,185 zero-dose children. While the absolute numbers are low, Botswana should consider the implementation of appropriate catch-up vaccination strategies to protect these populations from vaccine-preventable diseases and reduce the probability of outbreaks in the future.

Child survival
Based on the UN Inter-agency Group for Child Mortality Estimation (UN IGME) estimates, the under-5 mortality rate has fallen from 44 to 35 per 1,000 live births between 2015 and 2021, remaining above the SDG target of 25 per 1,000 live births. Similarly, neonatal mortality also fell from 22 to 18 per 1,000 live births in the same period, above the SDG target of 12.

Broad disease outlook
The country has a high burden of both communicable (tuberculosis, HIV/AIDS) and non-communicable disease (cardiovascular disease, chronic respiratory disease, cancer and diabetes). The latter was estimated to have caused 46% of deaths in 2019.

2019
46%
of deaths due to NCDs

Botswana
ON IMMUNIZATION IN CHILDREN

MALARIA

**POPULATION AT RISK IN 2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2019</th>
<th>2017</th>
<th>2015</th>
</tr>
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<tbody>
<tr>
<td>People</td>
<td>2.6 million</td>
<td>5.0 million</td>
<td>7.5 million</td>
<td>10.0 million</td>
</tr>
</tbody>
</table>

The population at risk of malaria is 1.7 million people

**TOTAL MALARIA CASES IN 2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2019</th>
<th>2017</th>
<th>2015</th>
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<tr>
<td>Cases</td>
<td>1,067</td>
<td>2,067</td>
<td>3,067</td>
<td>4,067</td>
</tr>
</tbody>
</table>

**TOTAL MALARIA DEATHS IN 2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2019</th>
<th>2017</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths</td>
<td>2</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>

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

Botswana is part of E8 countries. However, malaria incidence since 2019 compared to GTS targets shows that the country reversed initial gains from 2015.

**EXPANDED PROGRAMME ON IMMUNIZATION IN CHILDREN**

**HIV AND TUBERCULOSIS**

- **334,351** people receiving antiretroviral therapy in 2021
- 76% Treatment success rate for HIV-positive TB cases
- 87% of children (aged < 5 years) household contacts of bacteriologically-confirmed TB cases on preventive treatment
- 75% Domestic funding for TB
- 65% Domestic funding for HIV

**NCD PROGRESS INDICATORS**

- Achieved
- Partially achieved
- Not achieved/Unknown

**NEGLECTED TROPICAL DISEASES**

- **Endemic NTDs requiring Preventive Chemotherapy (PC)**
  - Lymphatic filariasis (non-endemic)
  - Trachoma (non-endemic)
  - Soil-transmitted helminthiasis
  - Onchocerciasis (non-endemic)
  - Schistosomiasis

- **PC-NTDs treatment in 2020**
  - 422,239 targeted for MDA
  - 364,502 Million treated with MDA

**OTHER MAJOR NTDs**

- Leishmaniasis (cutaneous)
- Leprosy
- Taeniasis and cysticercosis
- Rabies

**WHO Regional Office for Africa**

**Statistics at a glance**