# Mozambique



### The History of Schistosomiasis in Mozambique

Due to the wide distribution of schistosomiasis and the high prevalence rates, Mozambigue is one of the most severely affected schistosomiasis-endemic countries in the world [1]. Schistosomiasis in Mozambique is sometimes called "tropical haematuria," and was first noted in 1904 [2]. The first schistosomiasis national survey in Mozambigue was conducted in 1952-1955 by the Institute of Tropical Medicine in Lisbon. During the mid 20th century, district-level prevalence statistics ranged from 23% to a staggering 91%, with an overall countrywide prevalence of 66.2% [2]. S. haematobium was widespread and extensive among all districts, and S. mansoni in all but 28 districts, although at a much lower prevalence rate (~1%) [2]. More than half of 524 bodies of water surveyed in 1952-1956 harbored schistosome intermediate host snails, with Bulinus globosus nearly ubiquitous (found in 1/3 of the sites surveyed) and Bulinus africanus found in ~6% of the surveyed sites. Biomphalaria pfeifferi, host of S. mansoni, was found in slow-flowing waters with plentiful aquatic vegetation, particularly in the lowlands [2].

### Schistosomiasis in Mozambique [5]

Nearly 13 million people required schistosomiasis treatment in 2014

43% of the population requires preventative chemotherapy for schistosomiasis

Schistosomiasis treatments have so far focused on school-age children in Mozambique

# **Overview of Mozambique [7]**

- » Population in 2015: 25,303,113
- » Official Language: Portuguese
- » Capital: Maputo
- » Republic
- » Percentage of Population with Access to Improved Drinking Water in 2015: 51.1%
- » Percentage of Population with Access to Improved Sanitation in 2015: 20.5%

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#### Mozambique's Geography and Schistosomiasis

Western and northern Mozambique is formed by a plateau deeply cut by the Zambezi River. The construction of the Cahora Bassa dam on the Zambezi river and other dams on the Revue river enabled year round and consistent irrigation in much of Mozambique since the mid 20th century, supporting high-water intensity crops like sugar cane, which may have fostered good snail habitat and extended the transmission period in some areas. The coastal zone contains the highest human population densities and thus, high schistosomiasis rates as well [2].

#### Looking Ahead

The long-term results of schistosomiasis control have yet to be observed in Mozambigue. In the short term, after the initiation of a recent mass drug administration campaign since 2009, countrywide prevalence rates have dropped modestly from an estimated 69.8% in 2003 to 49.6% in 2012 [4.6]. The country has had to overcome several challenges: Mozambigue's independence from Portugal in 1975 left it one of the poorest countries in the world, and the country soon become ensnared in drought, civil war, and mass emigration [7]. However, since the 1990s, Mozambigue has enjoyed relative political stability, and its oil and gas reserves now make its economy one the fastest growing in the world [8]. The recent attention paid to scaling up schistosomiasis control efforts, coupled with their recent stability and growing economy, means that hope still remains for the elimination of schistosomiasis from Mozambique.

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# Treatment and Control

After initial trials in 2007, the Mozambican Ministry of Health launched a national Neglected Tropical Disease control program in 2009 and began active control in 2010, with plans to extend the intervention to 2017 [3]. The Schistosomiasis Control Initiative, USAID, and the WHO also joined in on this effort [4], although the program is primarily supported through the Mozambican government [3]. The control activities in this program have so far focused on the distribution of praziguantel to school-aged children in communities endemic with schistosomiasis [3]. National coverage was slowly ramped up from less than 3% of those in need of treatment in 2007 (18 geographic districts) to nearly 43% of the 12.9 million people deemed in need of treatment during 2014 (at least 76 districts) [3,5].

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