# Eritrea



## The History of Schistosomiasis in Eritrea

Intestinal schistosomiasis, transmitted by Schistosoma mansoni, has been present in Eritrea since at least the 1930's, when the disease was first reported in two Italians who contracted the parasite in the region. Throughout the 1930's S. mansoni spread gradually but slowly, and does not appear to have become common until the 1940's when large movements of civilians and soldiers during World War II likely spread the disease and increased opportunities for infection [1]. Subsequent investigations in response to the increase in patients infected with schistosomiasis in 1947 revealed several foci of infection in the highlands of Asmara. Inhabitants of local villages were found to be infected with schistosomiasis, and infected snails of the genus Biomphalaria were discovered in local streams and slow-flowing bodies of water [1].

In 1956, it was claimed that, while certainly present, foci of infection were few and that a small determined effort at snail control could feasibly eradicate the disease [1].

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### Schistosomiasis in Eritrea [7]

Half a million people require treatment annually

8.4% of the population requires preventative chemotherapy for schistosomiasis

67% of the population requiring treatment for schistosomiasis are school-age children

### Overview of Eritrea [6]

- » Population in 2015: 6,527,689
- » Official Languages: Tigrinya, Arabic & English
- » Capital: Asmara
- » Presidential Republic
- » Percentage of Population with Access to
- Improved Drinking Water in 2015: 57.8%
- » Percentage of Population with Access to Improved Sanitation in 2015: 15.7%

## UPSTREAM

#### History Continued...

Evidently no such effort was undertaken, as S. mansoni currently remains endemic in the regions of Gash Barka, Anseba, Debub, Maekel, and Northern Red Sea, especially around irrigation projects. Biomphalaria tenagophilia and Biomphalaria sudanica are known snail intermediate hosts [2]. A 2002 report by the Partnership for Child Development describing the prevalence of schistosomiasis in school-aged children in various locations (see map of all data points in The Global Atlas of Helminth Infections [3]) found a 2.4% average prevalence of S. mansoni infection amongst the tested cohort [4]. Since the annexation of Eritrea by Ethiopia in 1962, the region has been embroiled in near constant warfare accompanied by drought, famine, and the formation of an increasingly repressive government, greatly impeding the collection of information within the country. Statistical data on the prevalence of schistosomiasis in Eritrea is sparse, making it difficult to assess the full extent of the disease. The most recent estimates put total prevalence at 5% in 2012 [5].

### Prevalence of Schistosomiasis





- 1. Ayad N. Bilharziasis survey in British Somaliland, Eritrea, Ethiopia, Somalia, the Sudan, and Yemen. Bull World Health Organ. 1956;14(1):1-117.
- 2. International Association For Medical Assistance to travellers. World Schistosomiasis Risk Chart. 2015;1-5.
- 3. Distribution of S. haematobium survey data in Eritrea | Global Atlas of Helminth Infections.
- 4. Schistosoma mansoni prevalence in the Bata, Barrio de California and Akalayong-Akurenam communities, Equatorial Guinea Ministry of Education of Eritrea, Asmara. 2002.
- Lai Y-S, Biedermann P, Ekpo UF, Garba A, Mathieu E, Midzi N, et al. Spatial distribution of schistosomiasis and treatment needs in sub-Saharan Africa: a systematic review and geostatistical analysis. Lancet Infect Dis. 2015;15(8):927-40.
- 6. The World Factbook. 2013-14 [cited 2015]; Avail- able from: https://http://www.cia.gov/ library/ publications/the-world-factbook/index.html.
- 7. WHO. PCT Databank for Schistosomiasis from: http://www.who.int/neglected\_diseases/preventive\_chemotherapy/sch/en/.

UPSTREAM

ALLIANCE

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