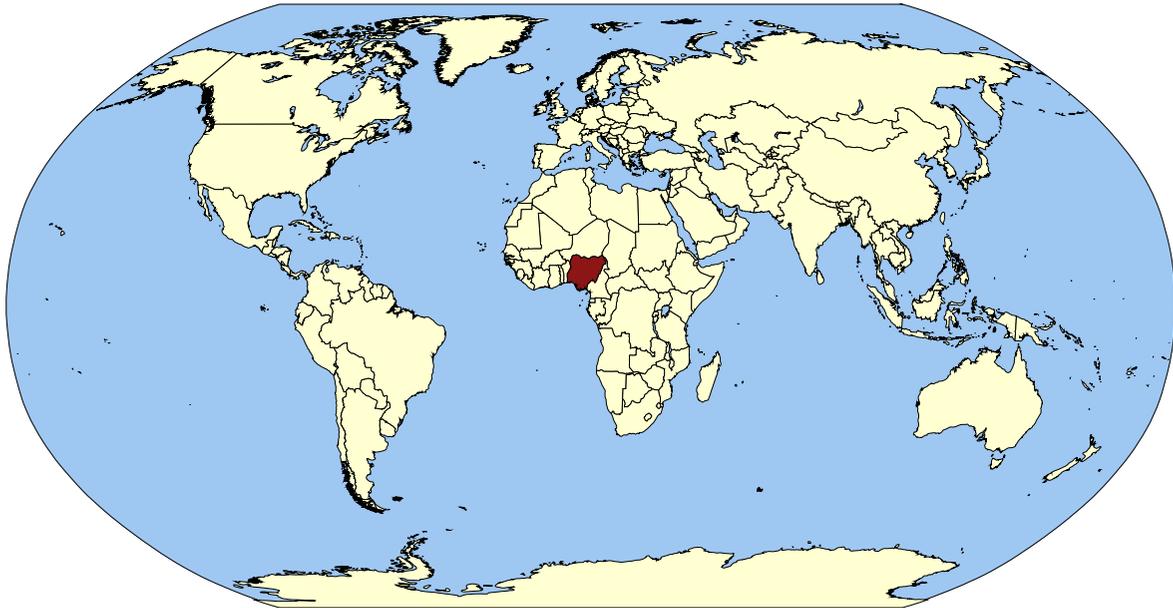


Nigeria



The History of Schistosomiasis in Nigeria

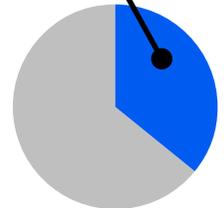
Nigeria has the highest number of schistosomiasis cases in the world - in the African region, over 26% of people requiring chemotherapy reside in Nigeria [1]. Significant gaps in epidemiological data creates difficulties in understanding the true distribution of the disease and necessary intervention [1]. In 1986, an estimated 28% of the population was infected by schistosomiasis, and the most recent estimate suggests country-wide prevalence of 23% [2,3]. Presence of the disease has been known since 1881 [4]. The first mapping project was carried out in 1963 and indicated that the main endemic area was on the Niger border, with smaller endemic areas throughout the country [4]. A 1987 report by the World Health Organization indicated that the urinary form of the disease (*Schistosoma haematobium*) was widespread, with zones of high endemicity in the Niger River basin, the southwest, the central and northern highlands, and around Lake Chad. Intestinal schistosomiasis (*S. mansoni*) was less prevalent but likely equally as extensive in range [4]. In a survey conducted from 1990-1991, *S. haematobium* prevalence was shown to be highest in the north-central and southeast areas of the country [5].

Schistosomiasis in Nigeria [7]

62.3 million people needed treatment in 2013.

36% of the population requires preventative chemotherapy for schistosomiasis

Treatment programs cover over 3 million school-age children each year -- but this is still only 6% of the population in need.



Overview of Nigeria [8]

- » Population in 2015: 181,562,056
- » Official Language: English
- » Capital: Abuja
- » Federal Government
- » Percentage of Population with Access to Improved Drinking Water in 2015: 68.5%
- » Percentage of Population with Access to Improved Sanitation in 2015: 29%

Intermediate Host Distribution

Snail distribution is widespread throughout the country, where the physical landscape provides diverse habitat conducive to supporting established populations of *Bulinus globosus*, *B. truncatus*, *B. senegalensis*, and *Biomphalaria pfeifferi*. The Niger River and Benue River basins, the Lake Chad depression, and lakes dotting the region lend marshy, riparian environments suitable to snail intermediate hosts [4]. Construction of dams and reservoirs has created additional infection hotspots [4]. Rice and cocoa-producing areas and gold and tin mines that use large quantities of water for processing also represent high risk zones [4].



The Niger River Basin [9]

Schistosomes thrive in Nigeria, where river systems such as the Niger River create marshy, tropical, vegetated environments that favor snails, intermediate hosts to *Schistosoma* worms.

Minimal Control Efforts

The Carter Center's schistosomiasis control initiative, launched in 1999 in partnership with the Federal Ministry of Health (FMOH), focuses on Nigeria, with the goal of annual praziquantel distribution to school children in four states - Plateau, Delta, Edo, and Nasarawa [6]. In 2010 1.33 million children received treatment from the Carter Center, and a similar number received treatment through FMOH initiatives in seven other states [1]. Concerted, reliable control remains elusive, with a significant hurdle being public safety and access to health resources amidst ongoing internal violence along ethnic and religious lines.

Nigeria is a country severely affected by schistosomiasis. Unfortunately, control programs have had a minimal effect on the overall elimination of schistosomiasis. Data and resources are scarce, and it is uncertain when reliable control can be achieved.

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