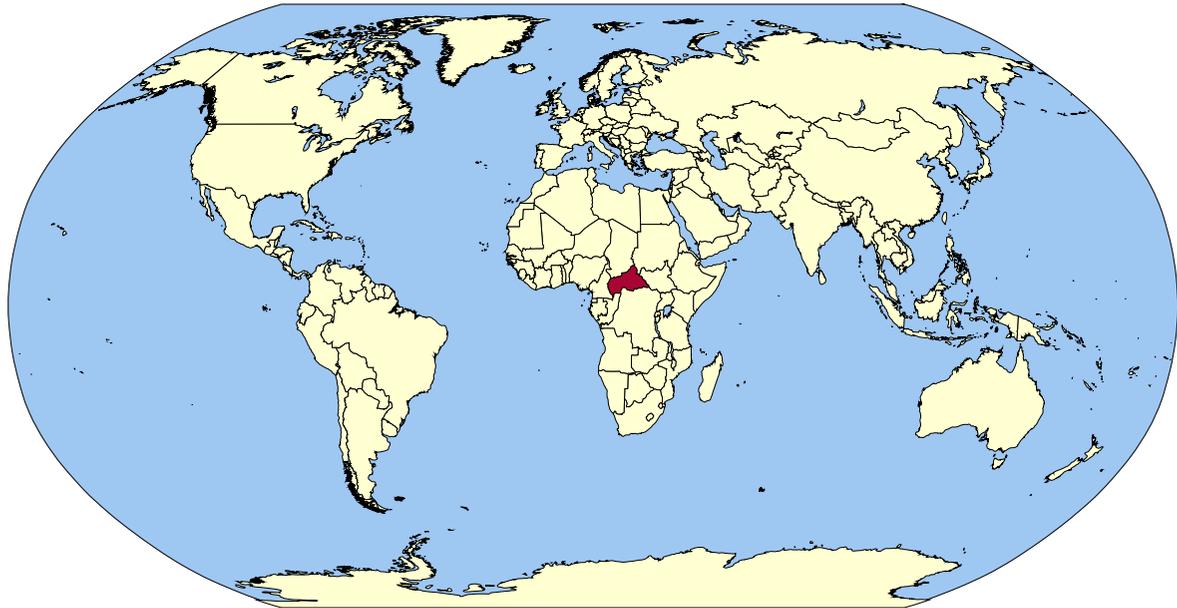


Central African Republic



The History of Schistosomiasis in Central African Republic

Three schistosome species have been reported from the Central African Republic: *Schistosoma mansoni*, *S. haematobium*, and *S. guineensis*. *S. mansoni* is widespread, and *S. haematobium* is prevalent in some rivers [1]. During the mid 20th century, *S. guineensis* (formerly mis-classified as *S. intercalatum* [2]) was found focally in the south, but its current presence remains unclear and requires confirmation [1].

Large-scale irrigation systems, and the agricultural development that usually follows them, have been mostly absent from the Central African Republic [3, 4]. However, the low natural relief of the country (500-1000m elevation overall) and plentiful rainfall makes for perennial, slow-flowing rivers that ensure year-round natural habitat for schistosome-carrying snails, even without large man-made irrigation systems [3].

War and conflict have likely hindered schistosomiasis control efforts in the Central African Republic. After achieving independence from French colonial rule in 1960, three decades of military rule and unrest left the country destabilized [8]. One decade of civilian government from 1993 to 2003 ended in another military coup, and subsequent elections have been deemed “likely flawed” [8]. The infamous Lord’s Resistance Army has been a violent destabilizer in the southeast of the country, active as recently as 2012. New general elections are scheduled for October 2015 [8].

Schistosomiasis in Central African Republic [10]

910,000 people required schistosomiasis treatment in 2014

9.4% of the population requires preventative chemotherapy for schistosomiasis

Schistosomiasis treatments have so far focused on school-age children in Central African Republic



Overview of Central African Republic [8]

- » Population in 2015: 5,391,539
- » Official Language: French
- » Capital: Bangui
- » Republic
- » Percentage of Population with Access to Improved Drinking Water in 2015: 68.5%
- » Percentage of Population with Access to Improved Sanitation in 2015: 21.8%

Treatment of Schistosomiasis in Central African Republic

The first evidence of any national- or focal-scale schistosomiasis intervention in the Central African Republic was reported in 2009, as a result of the donation of praziquantel by the company Merck KGaA in partnership with the World Health Organization [9, 10]. In 2009, the World Health Organization PCT databank reports 167,000 people (4.5% of the approximately 800,000 people needing treatment) received praziquantel in Central African Republic. The mass drug administration was reportedly scaled up to a coverage of 26% in 2010 and 30% in 2012 (reaching about 223,000 and 263,000 people each of these years, respectively [11]). The End Fund also contributed to schistosomiasis mapping efforts in the Central African Republic in 2012, but the efforts were cut short by conflict [12].

Looking Ahead

The mass drug administration has covered, at best, 30% of the population in need in the Central African Republic, so it is not surprising that positive results on a national scale - in terms of reduced country-level prevalence - are yet to be documented. Low access to improved sanitation adds to the problem. According to World Bank indicators, 68% of the country's population has access to improved water and only 20%, or 1 in 5 people, have access to improved sanitation [12]. In addition, the people of the Central African Republic suffer from other neglected tropical diseases [13]. The situation in the Central African Republic has been described as a "perfect storm" of poverty, conflict and disease [11].

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Prevalence of Schistosomiasis

Prevalence of schistosomiasis in the Central African Republic has hovered around 10-15% over the past several decades. Infection rates were estimated at 10% of the 2.6 million people in 1986 [5], and ~10% (330,000 of the 3.3 million population) in 1995 [6]. The countrywide prevalence remained at 10% in 2003 and dropped meagerly to 9.8% in 2010 [2]. A recent reassessment using Bayesian spatial analysis places Central African Republic at roughly 15.8% national prevalence (confidence interval 10.2 to 28%) in 2012 [7]. However, the authors of this study point to a dearth of recent studies to draw upon for current schistosomiasis prevalence estimates in this country [7], making the 15.8% estimate uncertain.

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