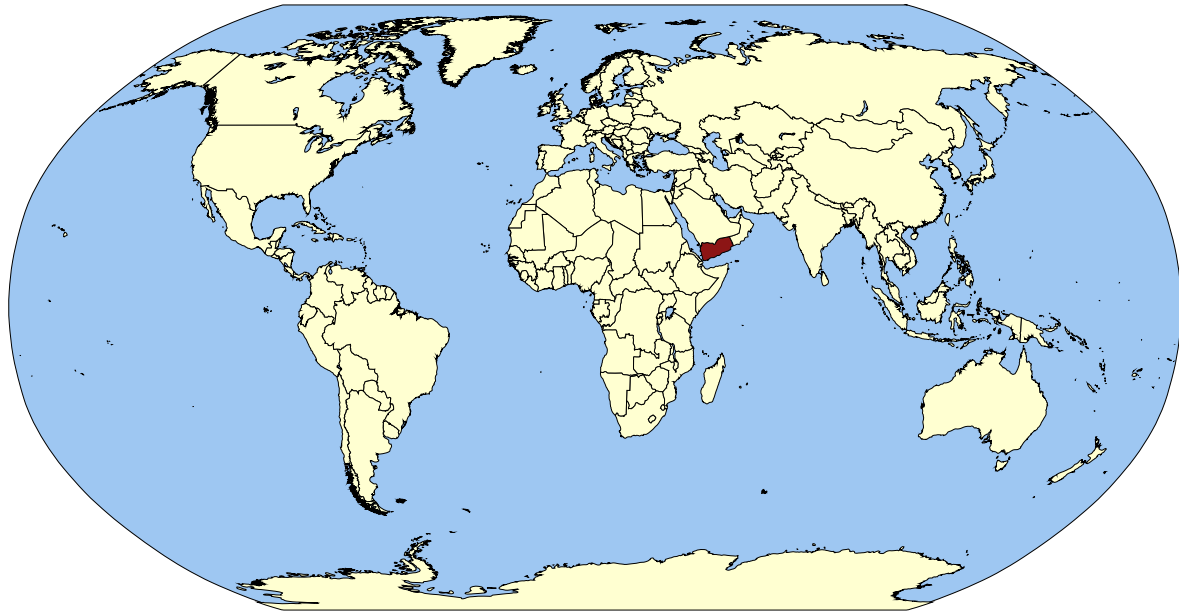


Yemen



The Schistosomiasis Situation in Yemen

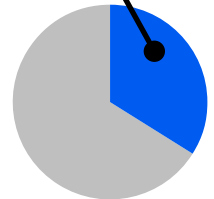
Both the urinary form and the intestinal form of schistosomiasis are endemic in Yemen and transmission is widespread. While the disease is highly concentrated in the western mountainous region, 213 out of 334 districts are considered endemic or likely to be endemic.[1,2] Irrigation systems in Yemen are extensive, and the growing networks of dams and agricultural expansion have greatly expanded suitable habitats for *Bulinus truncatus* and *Biomphalaria arabica*, the intermediate snail hosts for *S. haematobium* and *S. mansoni* infection, respectively.[1] Infection risk is especially high in Yemen due to inadequate access to safe water sources (47% - rural population with access to improved water sources), lack of indoor latrines (37% of households), and the country's status as a predominately agricultural society (96% in 1997 to 70% in 2012).[3] Agricultural workers and children are most at risk.[1]

Schistosomiasis in Yemen [6]

Yemen's control programs cover **nearly 80%** of those in need

Schistosomiasis treatment was distributed to **34%** of the population

3 million children and 6 million adults require treatment every year



Overview of Yemen [7]

- » Population in 2015: 26,737,317
- » Official Language: Arabic
- » Capital: Sanaa
- » Republic
- » Percentage of Population with Access to Improved Drinking Water in 2015: 54.9%
- » Percentage of Population with Access to Improved Sanitation in 2015: 53.3%

Control Efforts

The Yemen National Schistosomiasis Control Program (NSCP), the first comprehensive control strategy in the country, was initiated in 2008 with financial support from the World Bank that includes a 6 year program beginning in 2009 to dramatically reduce the prevalence and intensity of schistosomiasis by 2016. The NSCP delivery program in 2008 marked the first year that praziquantel was distributed on a national level, with 85% coverage of the targeted areas. Prior to this (since the early 2000's), a small number of schools in high infection areas had been targeted for annual drug therapy.[2] The current 6 year control strategy, run by the Yemen Ministry of Public Health and Population, the World Bank, the WHO and the Schistosomiasis Control Initiative, is based on preventative chemotherapy using praziquantel (alongside albendazole or mebendazole to target STH) with two drug delivery strategies: campaign based delivery in schools and communities and routine administration in health facilities. Yemen's full strategy is shown **on the next page**. [1,2,4]

As of 2014, since active chemotherapy began in 2010 (program interrupted in 2011 due to civil and political unrest), prevalence has been reduced from a baseline of 19.4% to 8.3%. [4,5]

Challenges Ahead

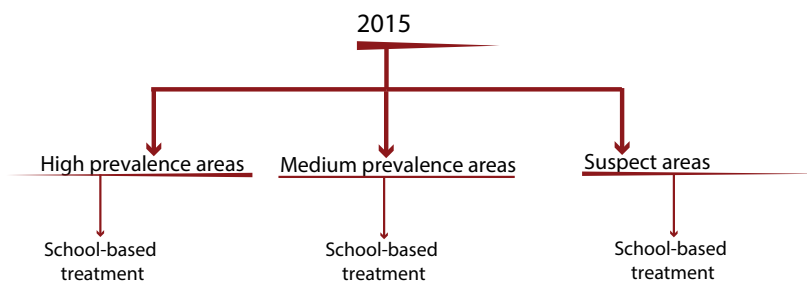
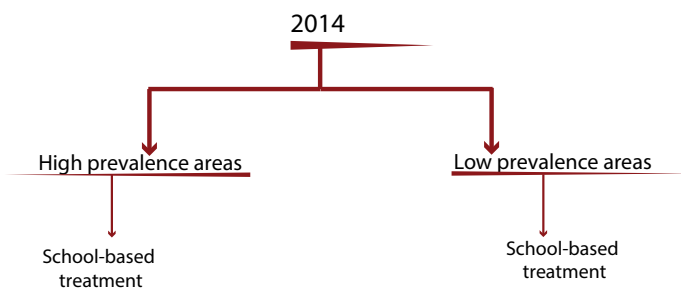
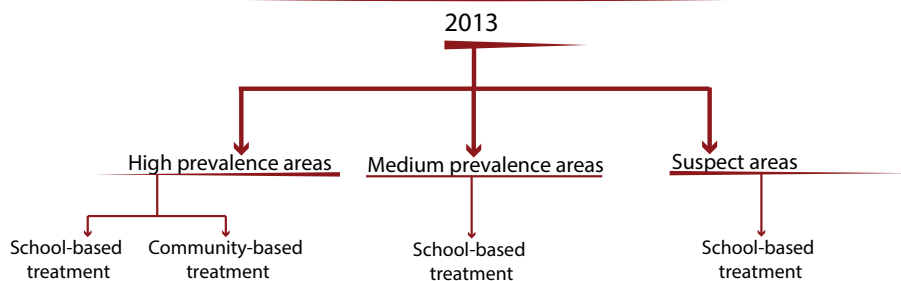
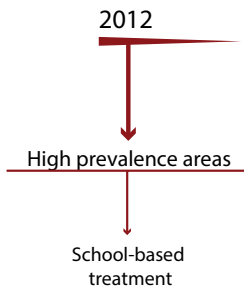
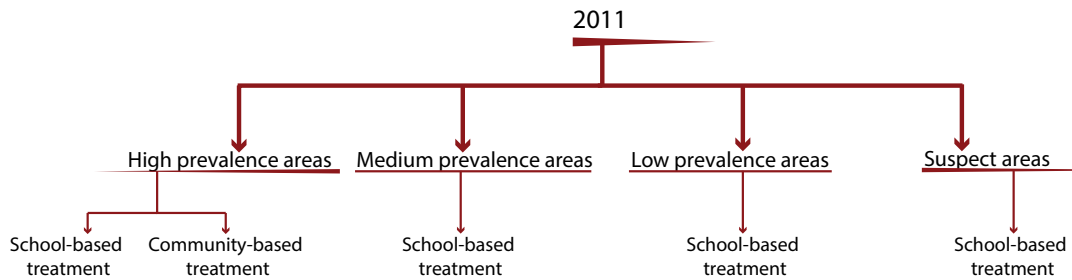
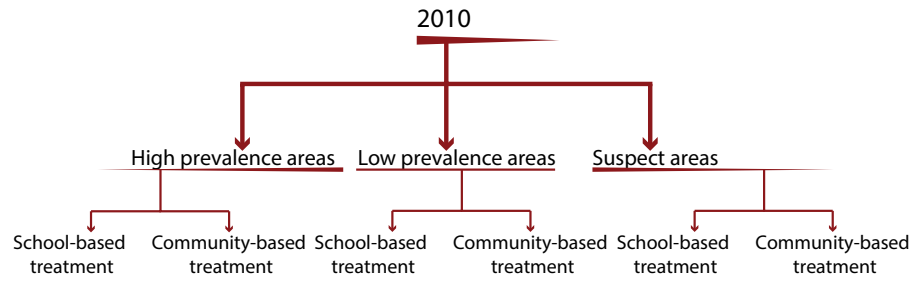
Yemen is one of the poorest countries in the Arab world with one of the fastest growing populations in the world, leading to increasing levels of poverty and food and water insecurity. [4] Challenges to schistosomiasis control in Yemen include widespread poverty and lack of sanitation facilities and safe water, increasing snail habitat due to habitat modification, and weak governance and institutional structure to deliver proper control measures.

References

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For a detailed glimpse into Yemen's rigorous contemporary control program, see the chart on the following page.

Area	Criteria
High Prevalence Area	>40% of either infection
Medium Prevalence Area	10-40% of either infection
Low Prevalence	<10% of either infection
Suspect Area	Currently unmapped



Yemen's Contemporary Control Strategy

Yemen's control program is oriented around treating areas of varying prevalence rates. Each area receives either school-based treatment or community-based treatment, or both, depending on infection severity and year. As of 2014, prevalence rates dropped to 8.3% of the population.