With only 16 local malaria cases in 2013, Algeria is working to eliminate malaria by the end of 2015.

Overview

Algeria has reported just 189 local malaria cases and 12 deaths since 2000, and is categorized in the elimination phase by the World Health Organization (WHO). The country has had a historically low case burden, averaging 200 annual cases throughout the 1990s, although importation from neighboring countries has been a constant threat. Between 2012 and 2013, Algeria experienced a 73 percent decline in local malaria cases and a 29 percent decline in imported cases. The majority of Algeria’s local cases in 2013 were due to Plasmodium falciparum. The primary vectors responsible for malaria transmission are Anopheles labranchiae and An. sergentii; secondary vectors include An. multicolor and An. hispaniola, and An. gambiae has been detected along the southern border with Mali.

Algeria currently does not have any active foci of malaria transmission, although nearly 600 imported malaria cases were reported in 2013. Most malaria cases are reported in the southern region of the country, in the provinces of Tamanrasset and Adrar, which share borders with Mali and Niger. Algeria is using geographic information systems (GIS) mapping to more effectively identify imported cases of malaria, conduct epidemiological surveys around each positive case, and implement entomological surveillance to prevent onward transmission among the local population. Active case detection, quality assurance for malaria diagnostics, and radical treatment with primaquine have all recently been implemented. Algeria has a national goal to eliminate malaria by the end of 2015.

Malaria Transmission Limits

Malaria transmission is too low to generate risk maps.
Eliminating malaria in ALGERIA

The burden of malaria in Algeria has been historically low, with the majority of all cases imported across the country’s southern borders. Political instability contributed to an increase in cases during the 1990s, but incidence has remained low since 2000.

Between 1968 and 1978, *P. falciparum* cases had disappeared entirely and *P. vivax* cases fell by 98 percent from 12,530 to only 30. This achievement prompted Algeria to declare the successful elimination of *P. falciparum* in 1978. The development of the trans-Saharan highway across Algeria’s southern border contributed to an increase in human migration beginning in the 1970s, thus leading to a rise in imported malaria even as total cases were declining. In the 1980s, a low level of local *P. vivax* malaria cases ranging from 30 to 200 cases annually was reported. During this period, IRS was ceased but cases continued to be monitored and treated. By 1985, 95 percent of all cases reported in Algeria were imported. In 1987, only 63 cases of *P. vivax* were reported, 11 of which were local cases.

Reported Malaria Cases*

*Graph shows total reported cases from 1990–2007; as of 2008, only local cases are shown.

In 1989, the Algerian government underwent a political restructuring. Over the following decade, unemployment rose by 20 percent and gross domestic product fell by 45 percent, which changed the structure of the health system and contributed to a rise in malaria incidence through 1991. Malaria incidence fluctuated throughout the 1990s but averaged 200 cases per year; most of these were imported from neighboring countries to the south. Between 2000 and 2013, Algeria reported just 189 local cases.

In 2009, Algeria called for increased control at its borders through regional cooperation with Mauritania, Tunisia, Niger, Mali, and Libya in order to prevent illegal and unregulated migration. While these measures were political in nature, the increased focus on cross-border collaboration is essential for preventing the ongoing importation of malaria. In addition, Algeria is now using GIS mapping and entomological surveillance to document the movement of mosquito vectors carrying malaria in the southern region and border areas. The national malaria program is working to maintain epidemiological surveillance, strengthen capacity for testing and diagnosis, standardize treatment, increase training for health personnel involved in malaria control, and develop measures to prevent malaria importation.

### Eligibility for External Funding

<table>
<thead>
<tr>
<th>Funding Source</th>
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</tr>
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<tbody>
<tr>
<td>The Global Fund to Fight AIDS, Tuberculosis and Malaria</td>
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<td>U.S. Government’s President’s Malaria Initiative</td>
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<td>World Bank International Development Association</td>
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### Economic Indicators

<table>
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<tr>
<th>Indicator</th>
<th>Amount</th>
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</thead>
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<td>GNI per capita (US$)</td>
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<tr>
<td>Country income classification</td>
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<tr>
<td>Total health expenditure per capita (US$)</td>
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</tr>
<tr>
<td>Total expenditure on health as % of GDP</td>
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<tr>
<td>Private health expenditure as % of total health expenditure</td>
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</tr>
</tbody>
</table>

### Challenges to Eliminating Malaria

#### Trans-Saharan migration

For the past two decades, the majority of malaria cases reported in Algeria have been imported, primarily from malaria-endemic Niger and Mali. The trans-Saharan highway transects the Sahara from northern Algeria to southern Nigeria, and acts as a major artery for trade across borders. Algeria’s southern borders with Niger and Mali are relatively porous, although each country is only connected to Algeria by one partially paved road. Due to the increase in population movement into Algeria from the south, there is an increased risk of a resurgence of malaria. Political instability in the region has also contributed to increased migration into Algeria, and in May 2014, the Algerian government announced the closure and militarization of its borders with all countries except for Tunisia. These restrictions may help prevent the continued importation of malaria.

### Conclusion

Algeria has demonstrated its ability to successfully control malaria at low levels and has had very few local cases since 2000. However, due to population movement, cases are frequently imported across its southern border, requiring Algeria to maintain a robust surveillance and response system to prevent outbreaks in order to achieve national malaria elimination by the end of 2015.
Sources

About This Briefing

This Country Briefing was developed by the UCSF Global Health Group's Malaria Elimination Initiative. Malaria transmission risk maps were provided by the Malaria Atlas Project. This document was produced by Gretchen Newby; to send comments or for additional information about this work, please email Gretchen.Newby@ucsf.edu.

The Global Health Group at the University of California, San Francisco (UCSF) is an ‘action tank’ dedicated to translating new approaches into large-scale action that improves the lives of millions of people. Launched in 2007, the UCSF Global Health Group’s Malaria Elimination Initiative works at global, regional and national levels to accelerate progress towards eradication by conducting operational research to improve surveillance and response, strengthening political and financial commitment for malaria elimination, and collaborating with country partners to shrink the malaria map.