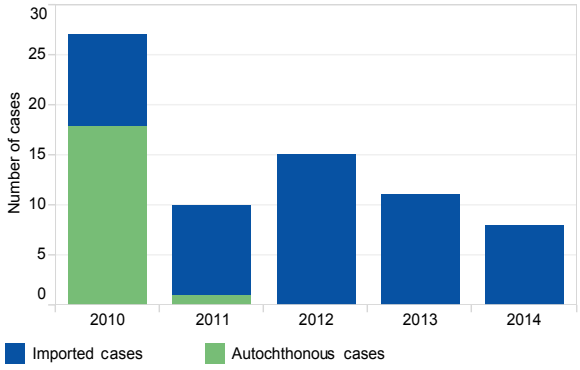
PARAGUAY

Only new potential foci were reported by Paraguay in 2014, most centering around the capital of Asuncion (Figure 1). There have been no autochthonous cases reported in the past 3 years (Figure 2 and Table 1) and most of the imported cases were *P. falciparum* infections from endemic countries in Africa, particularly Equatorial Guinea (n=22), Angola (n=2), and Mozambique (n=1). Imported *P. vivax* cases were also reported from Equatorial Guinea (n=6), Brazil (n=2), and Peru (n=1).

Figure 2. Autochthonous and imported cases in Paraguay, 2000-2014



Paraguay is currently in the elimination phase and has reached a 99.9% decrease in morbidity surpassing the WHA 58.2 targets for MDG 6C (Figure 3). In 2014, only 8 cases were reported in the entire country, all imported. No deaths due to malaria have been reported between 2000 and 2014. Under Paraguay's National Plan for Malaria Elimination 2011-2015 (PEP), the country is committed to elimination of malaria and focuses on prevention of reintroduction and certification of malaria-free status.

Figure 1. Malaria in Paraguay by foci, 2014

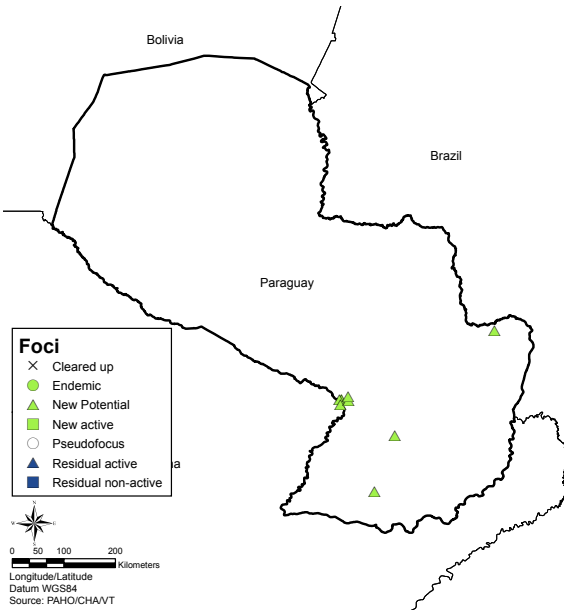


Figure 3. Number of cases and deaths due to malaria in Paraguay, 2000-2014

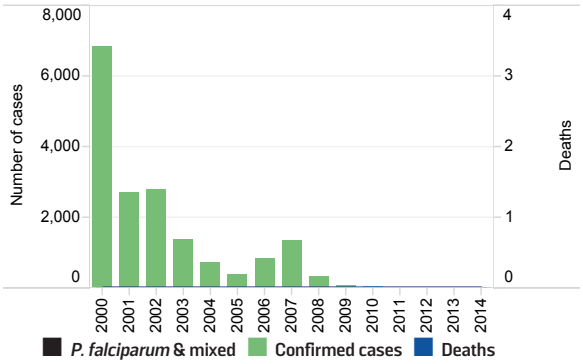


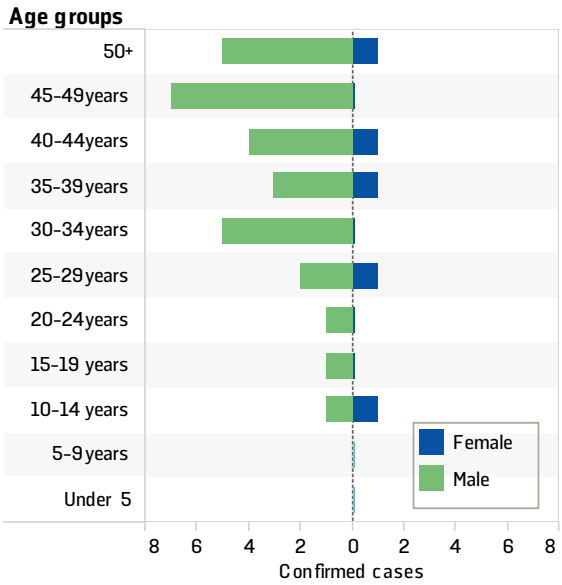
Table 1. Elimination profile of Paraguay, 2010-2014

	2010	2011	2012	2013	2014
Total Cases	27	10	15	11	8
Cases Investigated	27	10	15	11	8
Autochthonous Cases	18	1	0	0	0
Autochthonous- P. f	0	0	0	0	0
Autochthonous- P. v	18	1	0	0	0
Imported Cases	9	9	15	11	8
Imported-P. f	5	7	11	7	7
Imported-P. v	4	2	4	3	1
Imported-P. o	0	0	0	1	0

*P. f.-*Plasmodium falciparum*
P. v.-*Plasmodium vivax*
P. o.-*Plasmodium ovale*

Among the imported cases, there have been more cases in men than women during 2012-2014 (Figure 4). Most cases were in those men aged 45-49 years. Other notable age groups were those between 30-39 years and 50+ years, all age groups in economically productive years of life.

Figure 4. Malaria cases by age and sex in Paraguay, 2012-2014



Diagnosis and Treatment

Microscopy is the main method for diagnosis; however, nearly 2,000 RDTs were used in 2008 to detect cases (Figure 5).

Artemether-lumefantrine combination drugs are used as first-line treatment for *P. falciparum* in those cases imported from Africa, while chloroquine and primaquine (0.25mg/kg for 14 days) are used for *P. vivax* infections.

Figure 5. Blood slides examined, RDTs examined, and SPR in Paraguay, 2000-2014

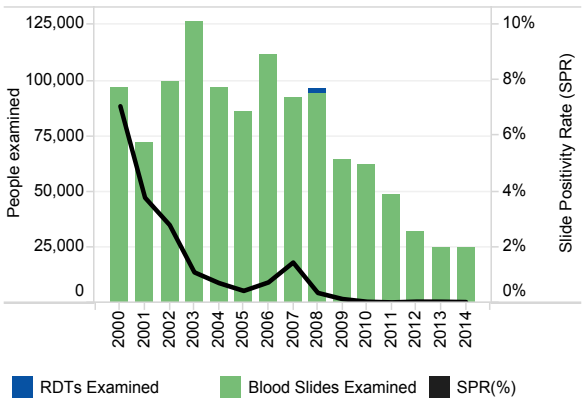
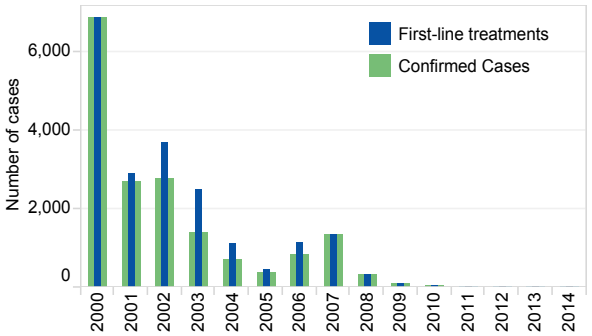


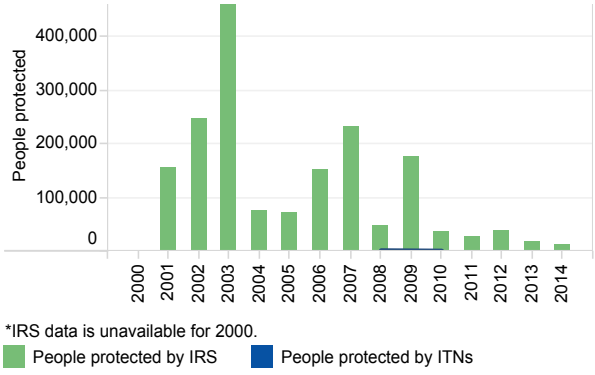
Figure 6. Number of malaria cases and those treated with first-line treatment in Paraguay, 2000-2014



Vector Control

ITNs were distributed once in 2008 (Figure 7). Over the years, IRS usage has decreased substantially and currently only protects about 13,000 people as local malaria transmission has ceased.

Figure 7. People protected by IRS and by ITNs in Paraguay, 2000-2014



Funding

The government has provided a generous amount of funds for malaria. In 2014, almost US$5.6 million was provided domestically, the largest amount of funding since 2000 (Figure 8). The government has been the primary source for malaria funding during 2000-2014. The country is also eligible and was recently approved for a new Global Fund grant.

Figure 8. Funding for malaria in Paraguay, 2000-2014