

## SECTION IV: COUNTRIES

### ARGENTINA

Argentina has achieved 100% reduction in malaria since 2000 and only reports imported cases (Figures 1-3). The country is currently in the elimination phase. It has surpassed the WHA58.2 target for MDG6C, and in 2014 only 4 cases had been reported. Also, there was only one malaria-related death during 2000-2014.

Since 2011, Argentina has implemented a two-pronged strategy based on classification of endemic area into two strata. Stratum 1 comprises of a low endemicity area where elimination measures are being implemented and stratum 2 comprises of transmission-free areas monitored by surveillance. Stratum one includes the departments (ADM2) of Oran and General San Martin (of Salta province) and stratum 2 includes the departments of El Carmen, Santa Barbara, Palpala, San Pedro, Ledesma, and Doctor Manuel Belgrano (of Jujuy province).

There have been no autochthonous cases reported since 2011 (Figure 2 and Table 1). During 2000-2014, cases have only been reported from 5 provinces: Chaco, Jujuy, Salta, Tucuman, and Misiones. All other provinces in Argentina have interrupted transmission of the disease. Of the reported cases during 2012-2014, all imported cases were identified as *P. vivax* infections.

Figure 1. Malaria in Argentina by foci, 2014

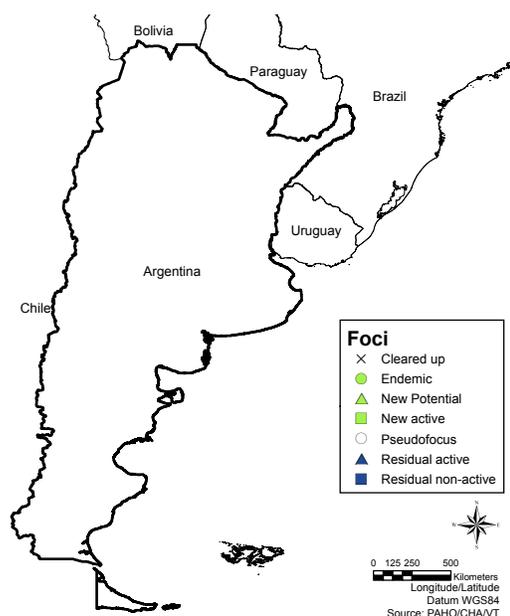


Figure 2. Autochthonous and imported cases in Argentina, 2000-2014

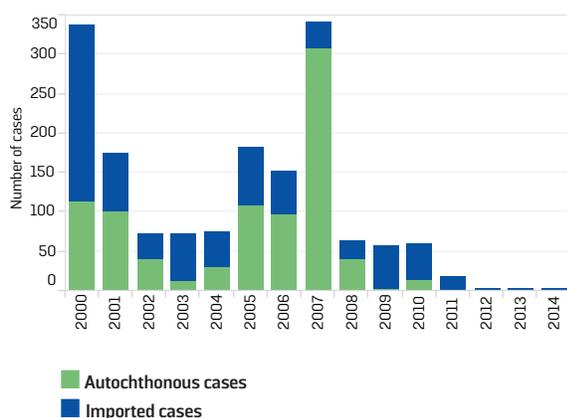
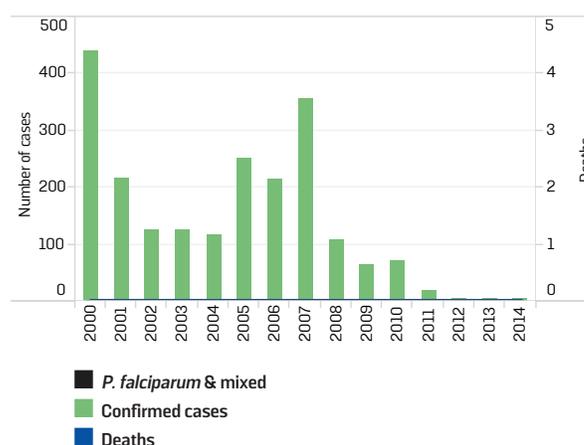


Figure 3. Number of cases and deaths due to malaria in Argentina, 2000-2014

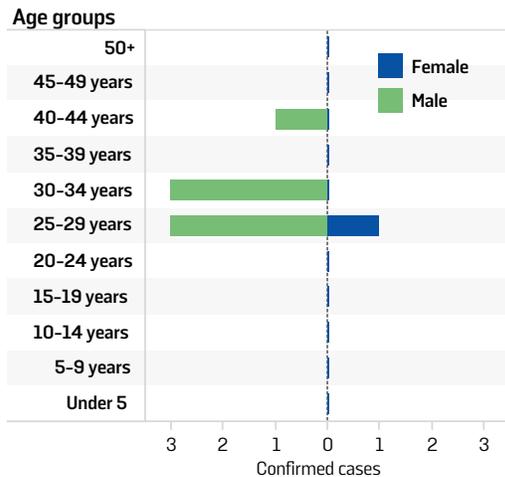


**Table 1. Elimination profile of Argentina, 2010-2014**

	2010	2011	2012	2013	2014
<b>Total Cases</b>	72	18	4	4	4
<b>Cases Investigated</b>	72	18	4	4	4
<b>Autochthonous Cases</b>	14	0	0	0	0
<b>Autochthonous-P.f.</b>	0	0	0	0	0
<b>Autochthonous-P.v.</b>	14	0	0	0	0
<b>Imported Cases</b>	46	18	4	4	4
<b>Imported-P.f.</b>	0	0	0	0	0
<b>Imported-P.v.</b>	46	18	4	4	4
<b>Active Foci</b>	...	...	0	0	0

P.f.: *Plasmodium falciparum*  
P.v.: *Plasmodium vivax*  
"..." indicates unavailable data.

**Figure 4. Malaria cases by age and sex in Argentina, 2012-2013**



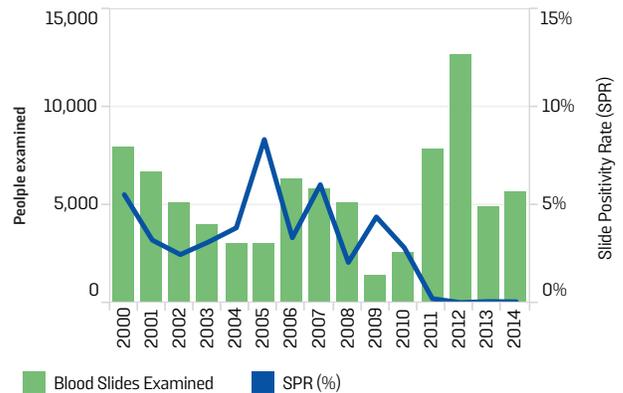
\*Data based on age and sex was unavailable for 2014.

Age and sex information was not available for reported cases in 2014. In 2012-2013, more men than women were reported sick with malaria (Figure 4). The most affected groups were younger males between 25-29 years and 30-34 years old, belonging to the economically productive years of life.

### Diagnosis and Treatment

Argentina does not use RDTs to diagnose malaria (Figure 5). *Plasmodium falciparum* is treated with

**Figure 5. Blood slides examined and SPR in Argentina, 2000-2014**



artesunate-mefloquine or artemether-lumefantrine combination drugs, while chloroquine and primaquine (0.5 mg/kg for 7 days) are used for *P. vivax* infections.

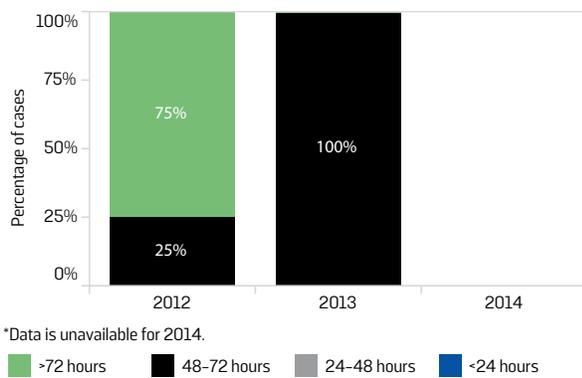
Data for timeliness of treatment were not available for 2014, but time to treatment improved in 2013 compared to 2012 (Figure 7). While these figures are based on a small number of cases, shortened diagnosis and treatment time is an important factor

for countries striving to eliminate malaria and preventing re-introduction.

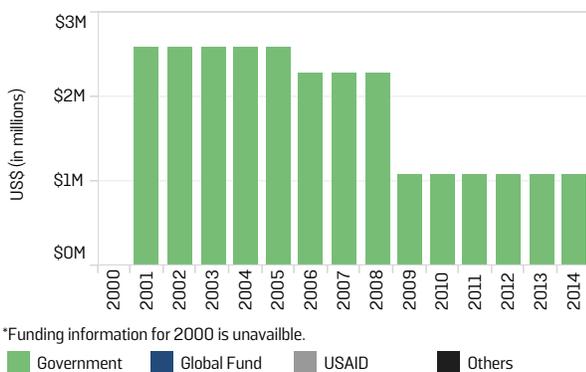
### Vector Control

Historically, IRS use has been an important factor in achieving malaria elimination in Argentina. They have even used a trans-border approach, implementing a binational project spraying houses in bordering Bolivian towns. As of 2014, IRS usage has decreased substantially and currently protects about 300 people (Figure 8). This is due to the fact that low transmission areas (stratum 1) have graduated into areas with no detectable transmission (stratum 2) and thus no longer need IRS. Argentina does not use ITNs as a means of vector control.

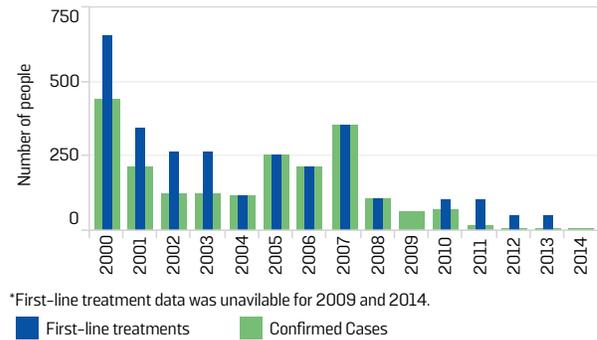
**Figure 7. Time between first symptom and initiation of treatment in Argentina, 2012-2014**



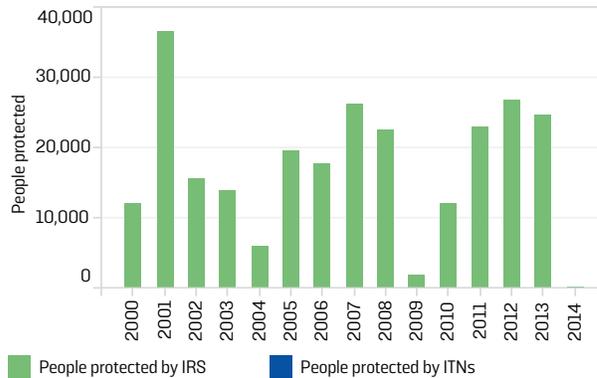
**Figure 9. Funding for malaria in Argentina, 2000-2014**



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



**Figure 8. People protected by IRS and by ITNs in Argentina, 2000-2014**



### Funding

The government has consistently provided around US\$1.08 million for malaria since 2009. The budget has been on a steady decline since 2001 (Figure 9). The government has exclusively funded malaria prevention since 2000.