

# Report from the Regional Malaria Program



Pan American  
Health  
Organization



World Health  
Organization

REGIONAL OFFICE FOR THE **Americas**

Meeting of the Malaria Technical Advisory Group  
PAHO-HQ Washington DC, Room C  
7 - 8 June 2017

# Updates regarding matters discussed during the 2<sup>nd</sup> Malaria TAG meeting (May, 2016 in Bogota)

- **Plan of Action for Malaria Elimination 2016-2020:** adopted by the 55th PAHO Directing Council in September 2016 with very strong support from the countries, partners, and stakeholders
- **Malaria Situation in Venezuela:** As advised by the TAG, PAHO has taken some concrete actions and will be presenting some updates and options regarding the way forward (on session 8)
- **Malaria Research Agenda:** The publication of the manuscript was indefinitely deferred due to the noted changes in priorities resulting from the Region's shift of focus to malaria elimination. This particular aspect of PAHO/WHO's mandate will be taken up again with relevant partners by early 2018.

# Updates regarding matters discussed during the 2<sup>nd</sup> Malaria TAG meeting (May, 2016 in Bogota)

- **Malaria Data Validation / Surveillance Assessment in Mesoamerica:** The methodology has been successfully applied among countries participating in the EMMIE initiative for 2 cycles, and also in GUY, MEX, and PER; findings and recommendations are currently used as reference in developing malaria proposals to the Global Fund and as guide in providing technical support to countries
- **Updates on the Proceedings / Recommendations from the Technical Advisory Group on Public Health Entomology (PHE):** As advised by the Malaria TAG, the Regional Malaria Team presented some key questions to the PHE TAG during their second meeting in Feb. 2017; Related issues will be discussed in Session 9
- **Updates on the WHO Malaria Elimination Operational Manual:** Renamed as “A framework for malaria elimination” and has been officially published as of March 2017; document is used as main reference for the on-going malaria elimination training within WHO, scheduled for PAHO / AMRO on June 13 to 16, 2017 in Colombia



Country level

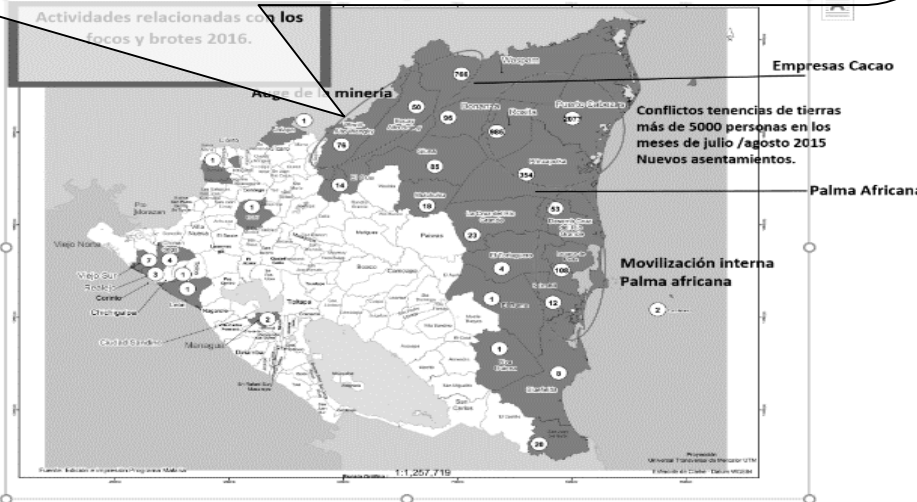
- Epidemiological thinking at local level
- key interventions: “Case detection- investigation – response”
- Understanding the dynamic of the transmission and social processes at focus level (hot spots/ populations)
- Surveillance as an intervention



1. Development of political and strategic platform.



2. Technical support at local level (foci, municipalities)



# Situation of Malaria in the Americas



Pan American  
Health  
Organization

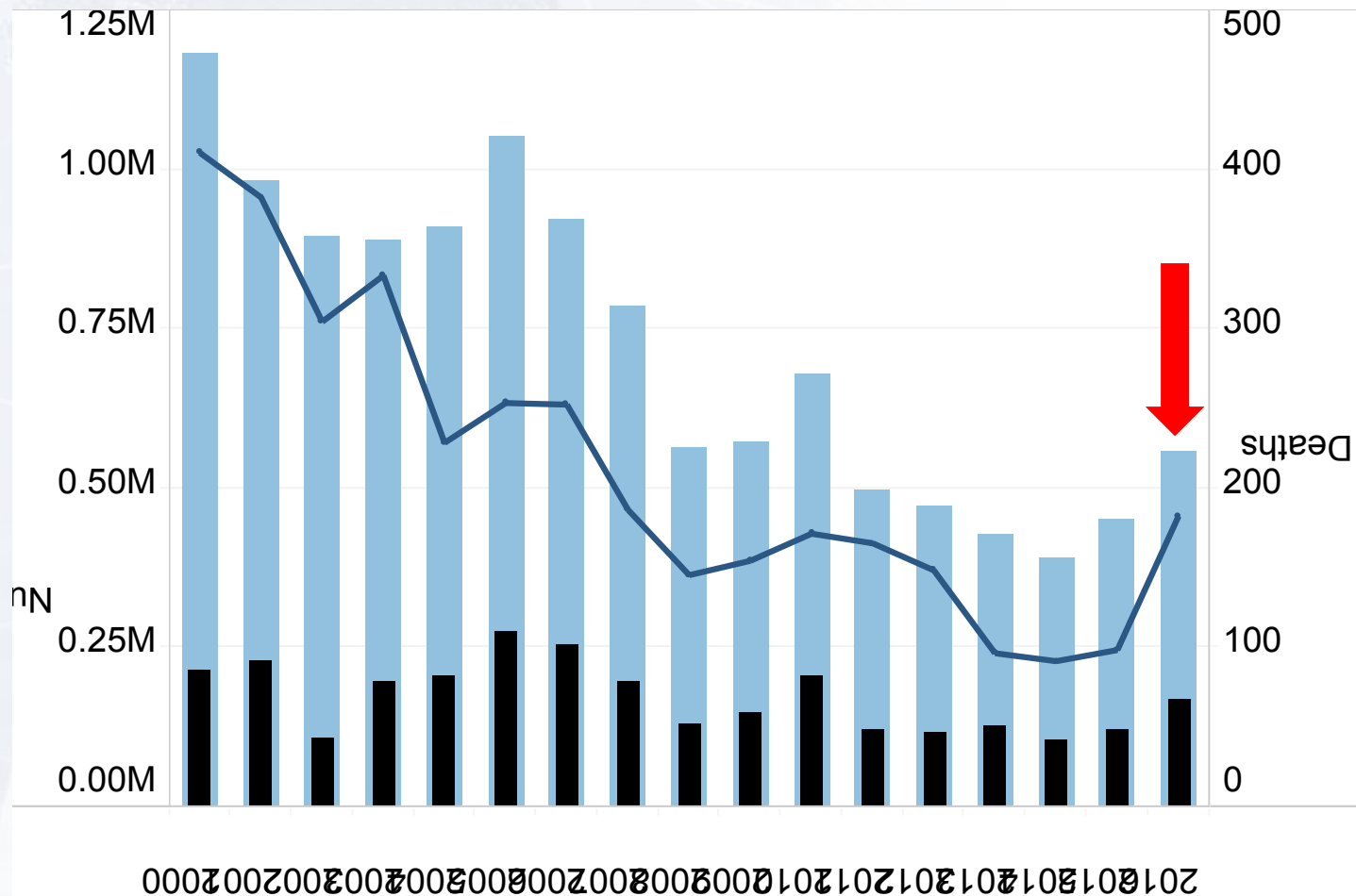


World Health  
Organization

REGIONAL OFFICE FOR THE **Americas**

Meeting of Malaria Partners  
PAHO-HQ Washington DC, Room C  
5 - 6 June 2017

# Morbidity and mortality due to malaria in the Region of the Americas, 2000-2016\*

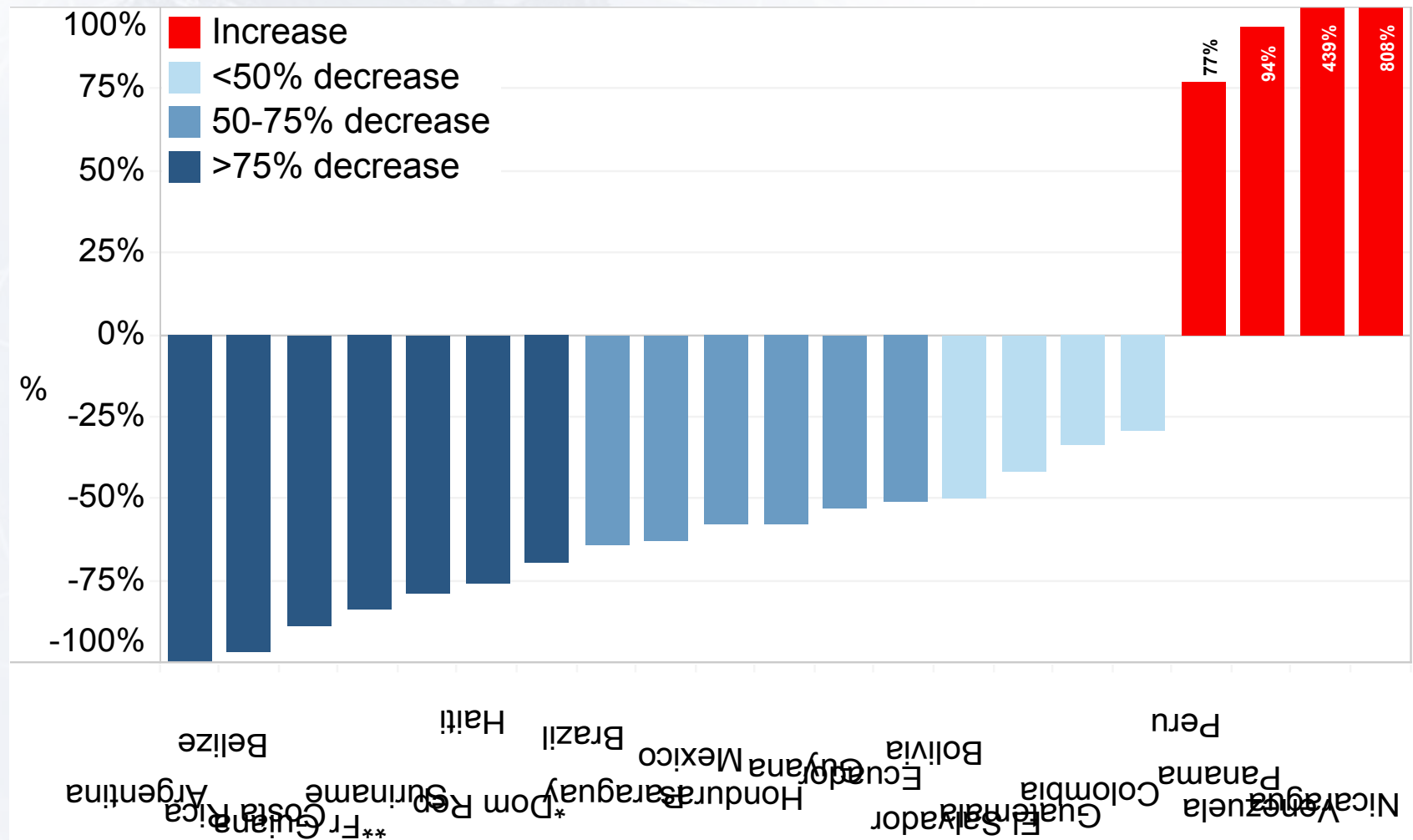


\*Only preliminary data available for 2016.

- Deaths
- P. falciparum and mixed
- Confirmed Cases



# Change in malaria morbidity in the Region of the Americas, 2010 – 2016\*\*\*



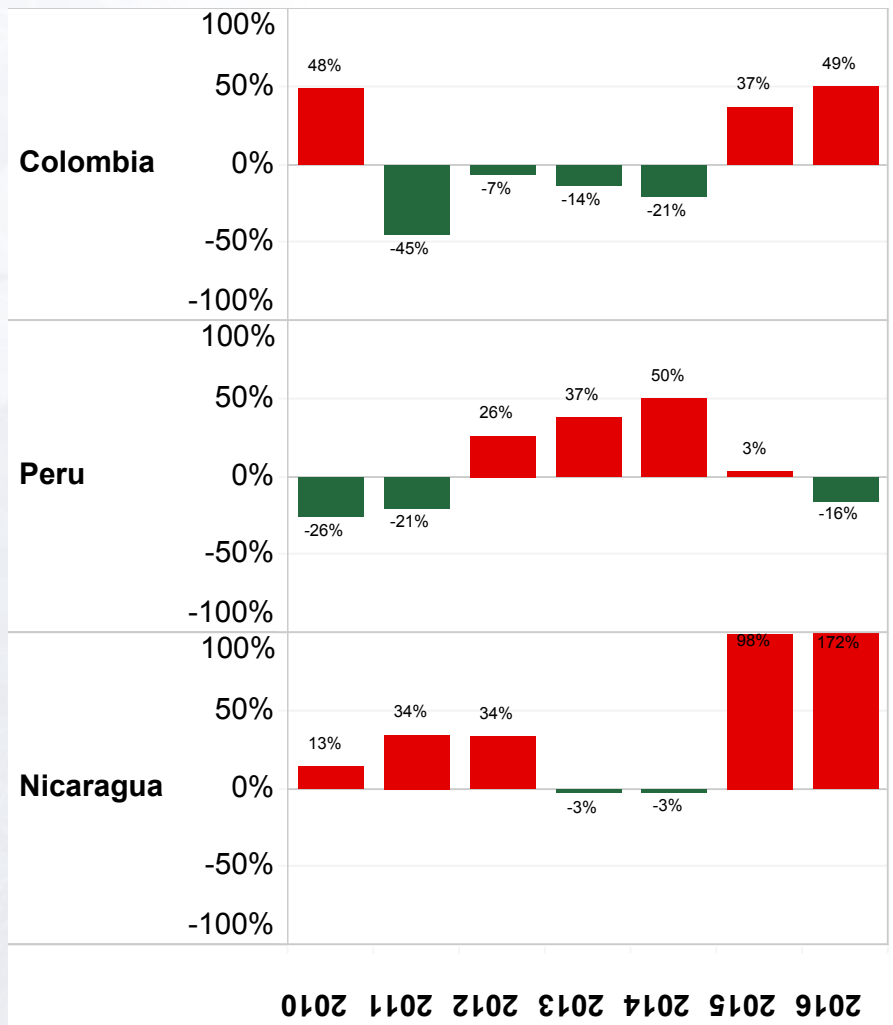
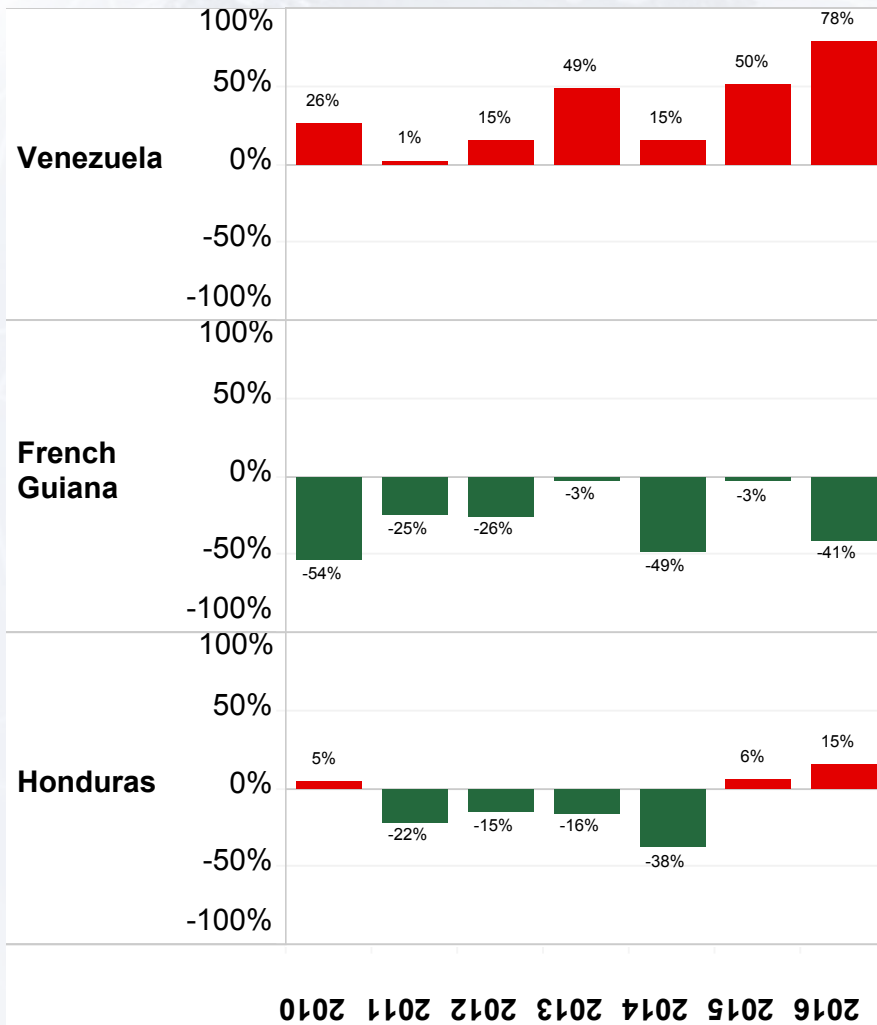
\*Dom Rep - Dominican Republic

\*\*Fr Guiana - French Guiana

\*\*\*Only preliminary data available for 2016.



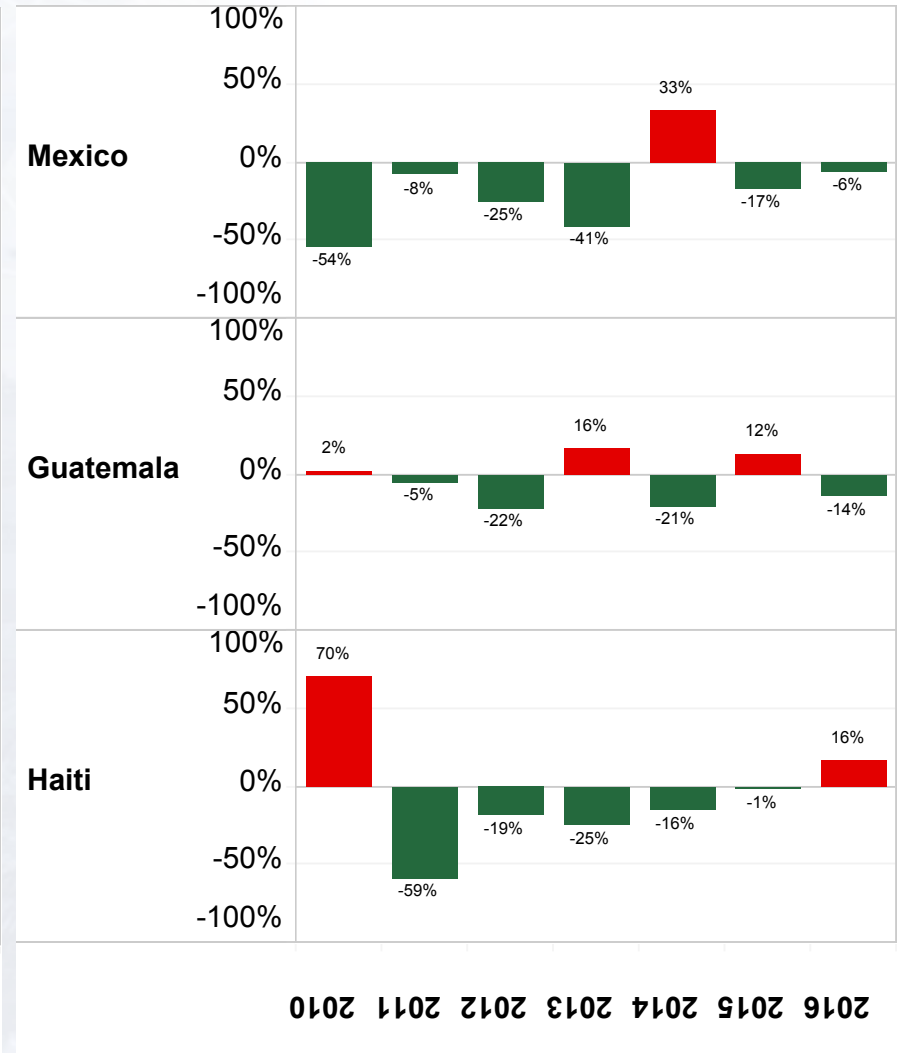
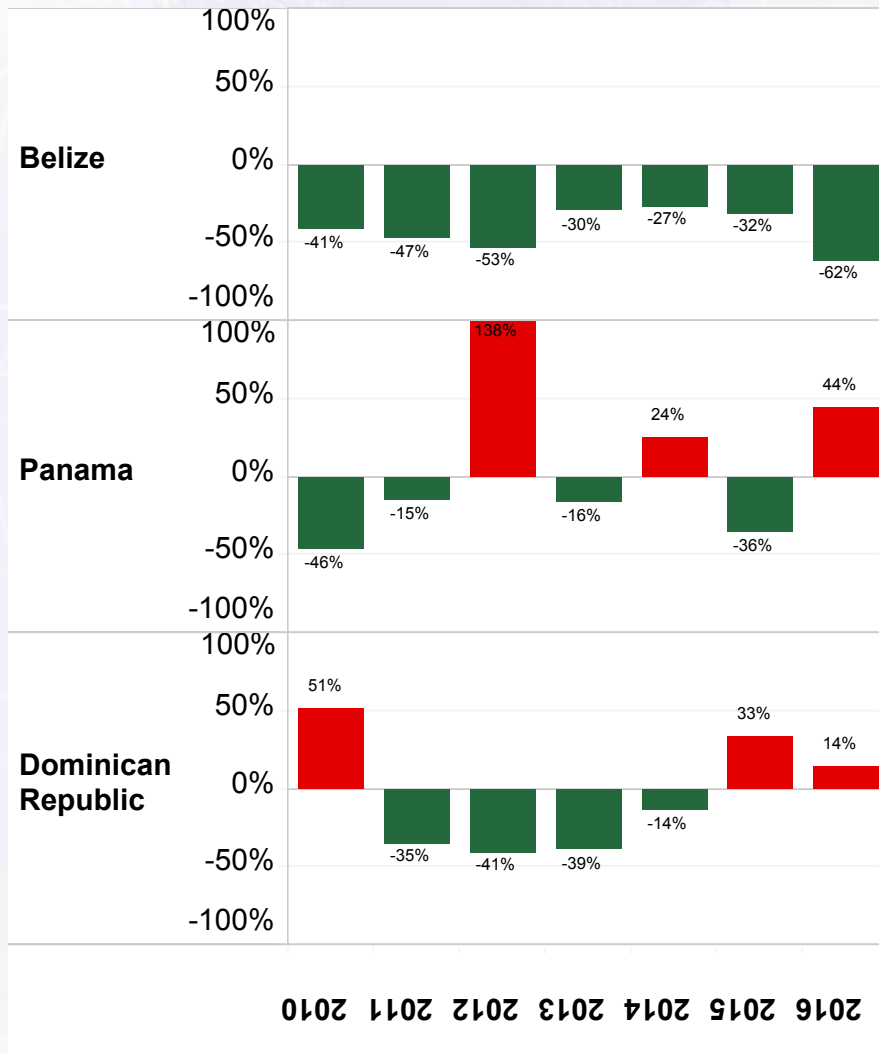
# Percent change in malaria morbidity compared to the previous year, 2010-2016\*



8 \*Only preliminary available for 2016.



# Percent change in malaria morbidity compared to the previous year, 2010-2016\*



# Epidemiological Alert

## Increase in cases of malaria

15 February 2017

In 2016, malaria transmission increased significantly in endemic municipalities of some countries of the Region of the Americas, and there was an increase in cases of malaria by *Plasmodium falciparum* in some endemic foci.

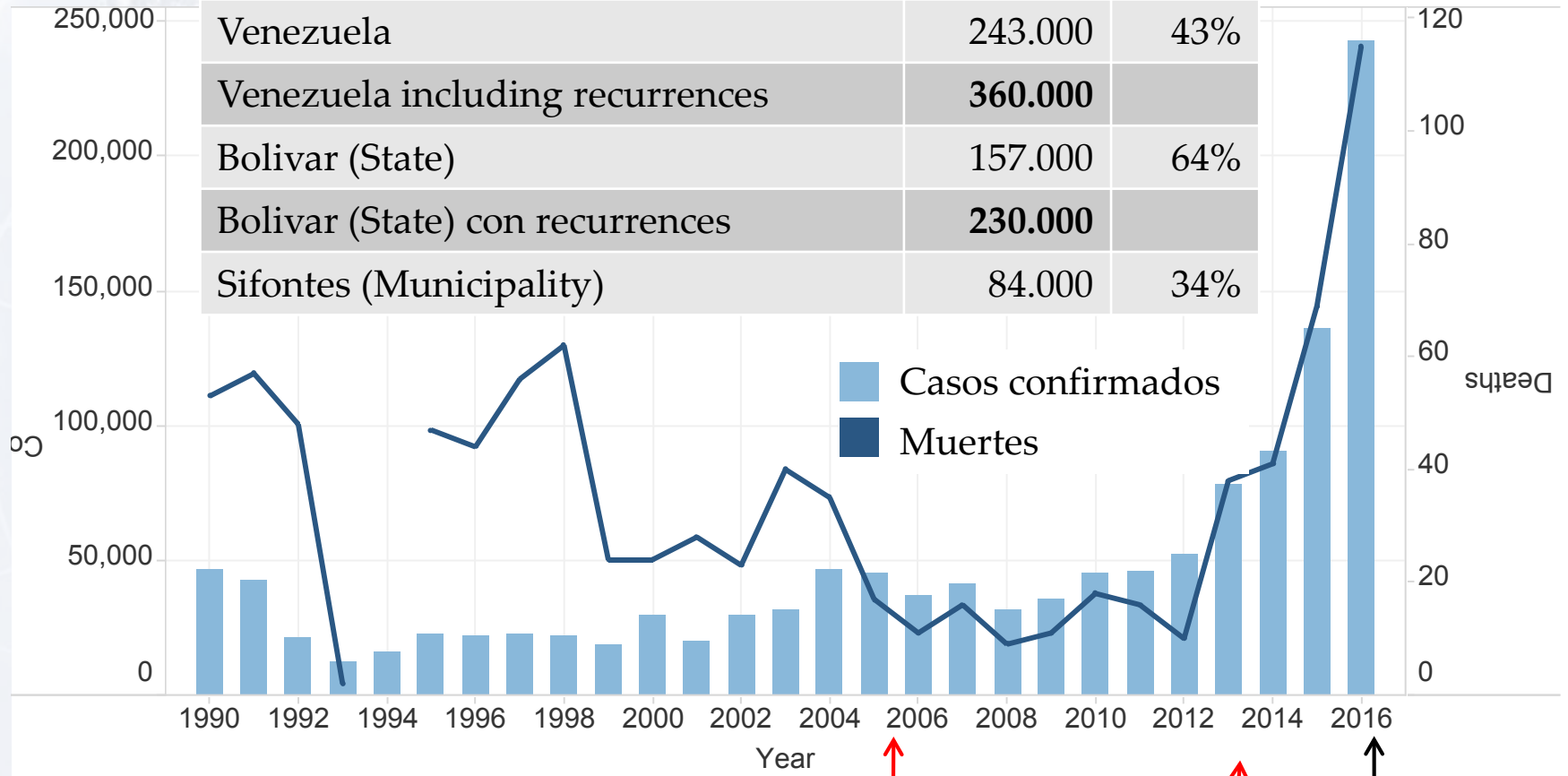
The Pan American Health Organization, Regional Office of the World Health Organization (PAHO / WHO) warns Member States of the Region of the Americas on the risk of the occurrence of outbreaks, increased transmission of malaria in endemic areas, and the possible reintroduction of malaria into areas where transmission had been interrupted. PAHO / WHO urges Member States to strengthen surveillance and control activities, in particular to continue those efforts aimed at addressing barriers at local levels that cause delays or failures of detection, treatment, and follow-up of cases.

### Situation summary

# Cases and deaths Venezuela, 1990-2016

## Cases (2016)

Americas	557.000	
Venezuela	243.000	43%
Venezuela including recurrences	<b>360.000</b>	
Bolivar (State)	157.000	64%
Bolivar (State) con recurrences	<b>230.000</b>	
Sifontes (Municipality)	84.000	34%

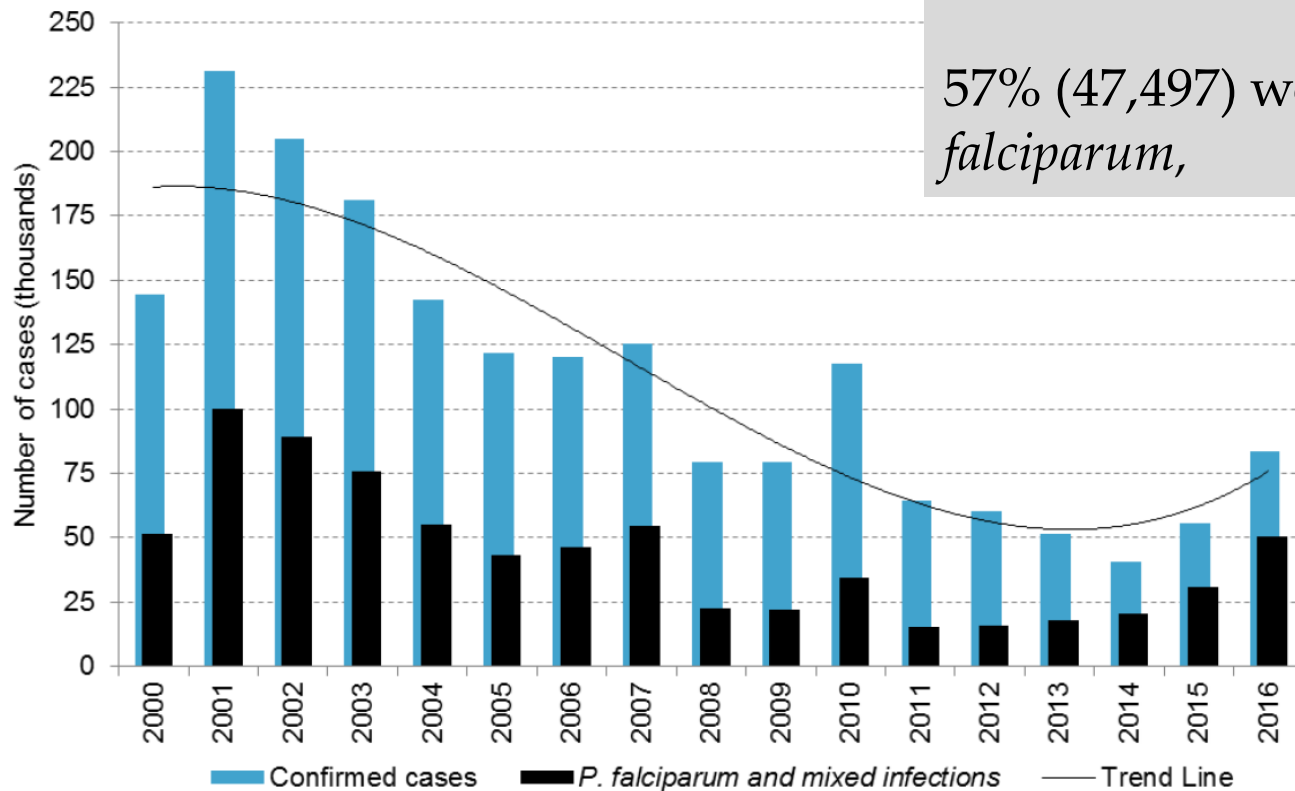


MINERVEN

Minería ilegal



**Figure 1.** Malaria cases reported in Colombia, 2000-2016



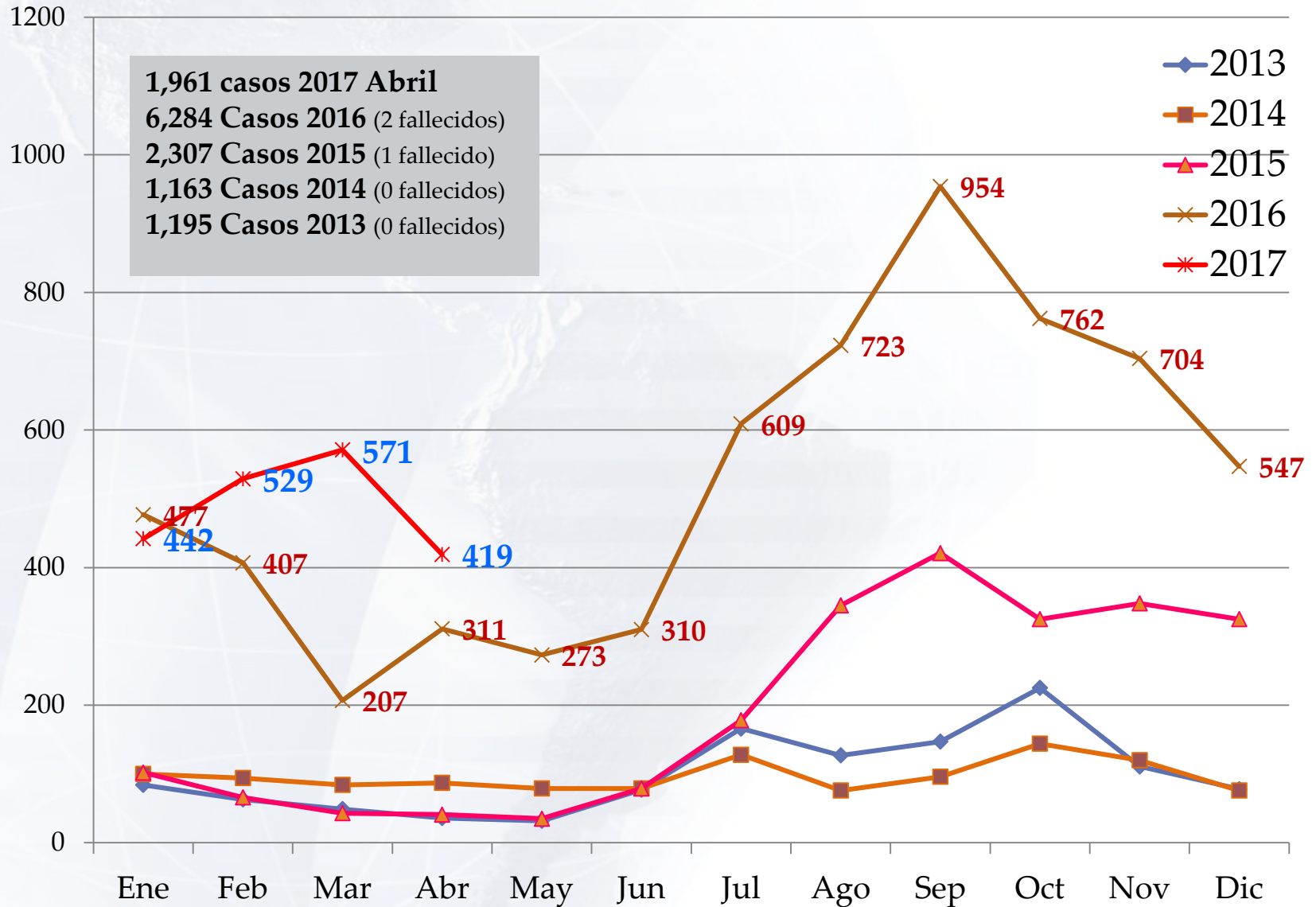
**2016**  
 83,356 malaria cases  
 57% (47,497) were *P. falciparum*,

**Source:** The 2000-2014 data was retrieved from the PAHO/WHO Report on the Situation of Malaria in the Americas 2014. 2015 data was obtained from the WHO 2016 World Malaria Report. 2016 data was published by the Colombia National Institute of Health (Weekly Epidemiological Bulletin EW 52 of 2016)<sup>1</sup>



# Casos de Malaria, Nicaragua

## Comparativo Año 2013-2017 Abril (semana 17)



**Actividades relacionadas con los focos y brotes 2016.**

**Auge de la minería**

**Empresas Cacao**

**Conflictos tenencias de tierras más de 5000 personas en los meses de julio /agosto 2015  
Nuevos asentamientos.**

**Palma Africana**

**Movilización interna Palma africana**

Fuente: Elaboración a partir del Programa M&D

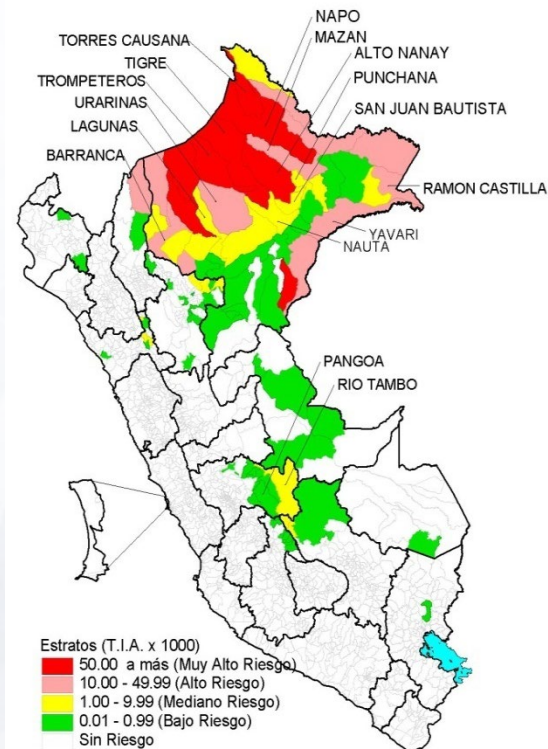
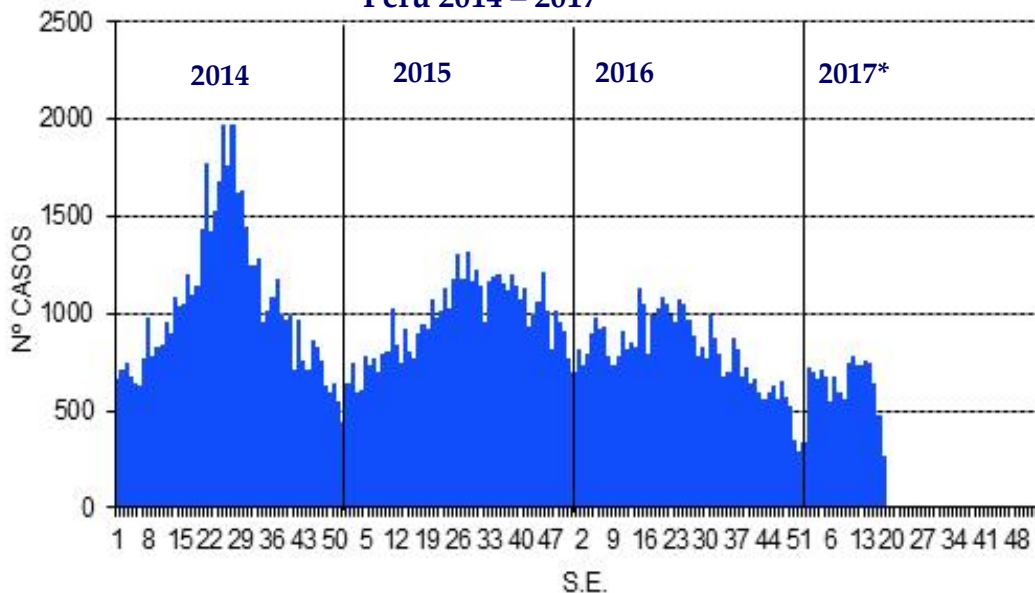
Escala: 1:1,257,719

Proyección:  
Universal Transversa de Mercator UTM  
Elipsoido de Clarke Datum WGS84

# Malaria por *P. vivax*: Perú 2017\*

## Mapa de Riesgo de Malaria por *P. vivax* Perú 2017\*

Curva de casos de malaria por *P. Vivax*  
Perú 2014 – 2017\*



Casos de Malaria por especies y por años  
Perú 2012 - 2016

Tipo Dx	2,012	2,013	2,014	2,015	2,016
<i>P. Vivax</i>	27702	40917	54823	50507	41288
<i>P. Falciparum</i>	4002	7922	10416	12646	15319
<b>Notificados</b>	<b>31,704</b>	<b>48,839</b>	<b>65,239</b>	<b>63,153</b>	<b>56,607</b>

# Confirman malaria en San Luis Potosí

Autoridades señalan que el primer paciente presuntamente responsable del contagio, había regresado de sus vacaciones en el estado de Sinaloa.

0 Ir a comentarios Me gusta 216 0 Compartir 216 G+1 0

## Casos de Paludismo, México, 2017

SALUD  
SECRETARÍA DE SALUD



🌸 Hasta la semana epidemiológica número 16 del 2017, se tienen notificados 109 casos de Paludismo por *P. Vivax*, en comparación con 93 notificados al mismo periodo del 2016

### Estados con Casos Confirmados de Paludismo, 2017



- El **19 de abril** del presente el estado de San Luis Potosí notificó un brote de paludismo en la localidad y municipio de Ciudad Valles, con **fecha de inicio del 01 de abril**.
- Se han notificado **cinco casos confirmados** a *Plasmodium vivax*.
- El brote se presenta después de que el estado había notificado el último caso autóctono desde hace **19 años (1998)**.



NOTICIAS | Nacional

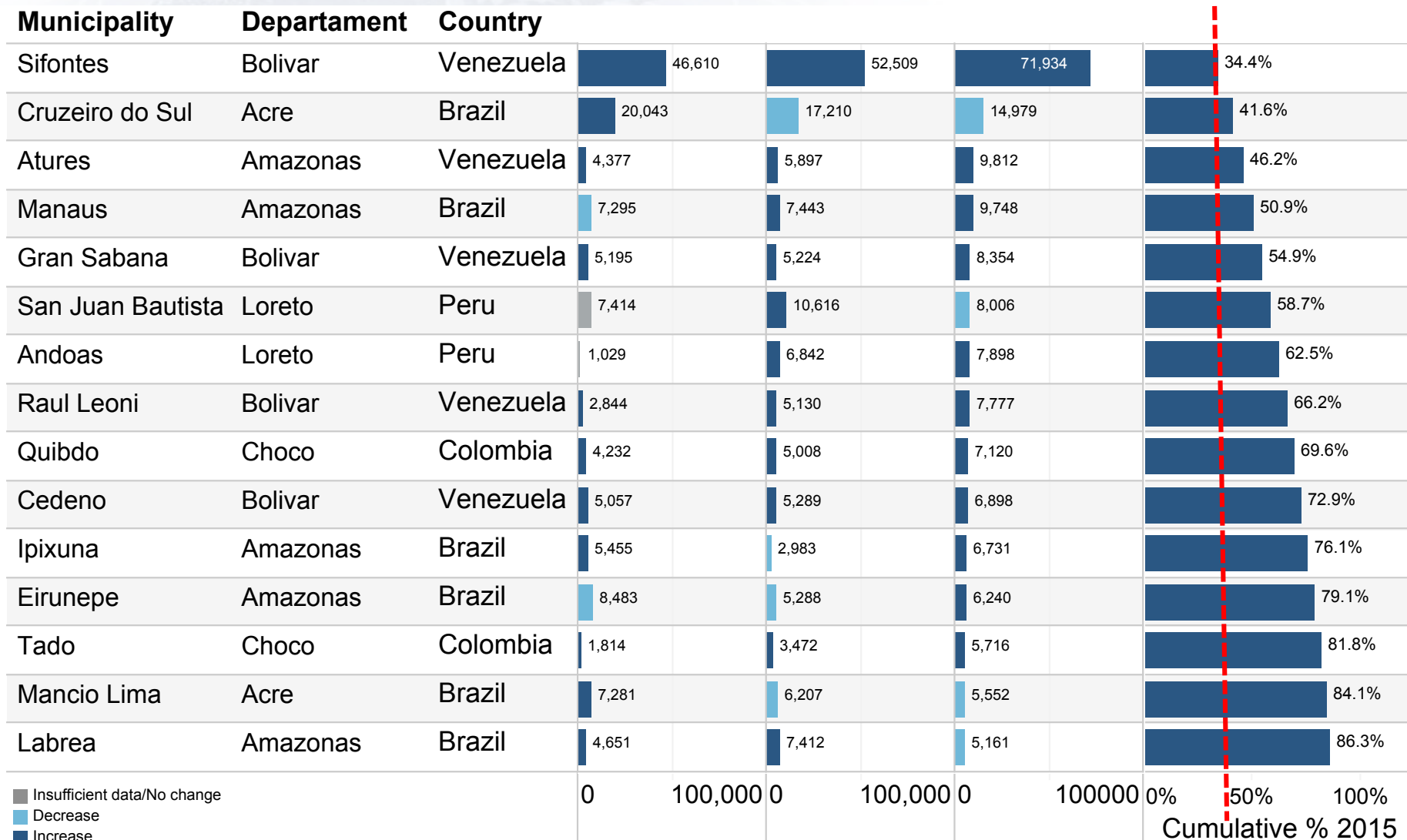
# Cinco nicaragüenses enfermaron de malaria en Matina de Limón

VIDEOS (1)

FOTOS (1)



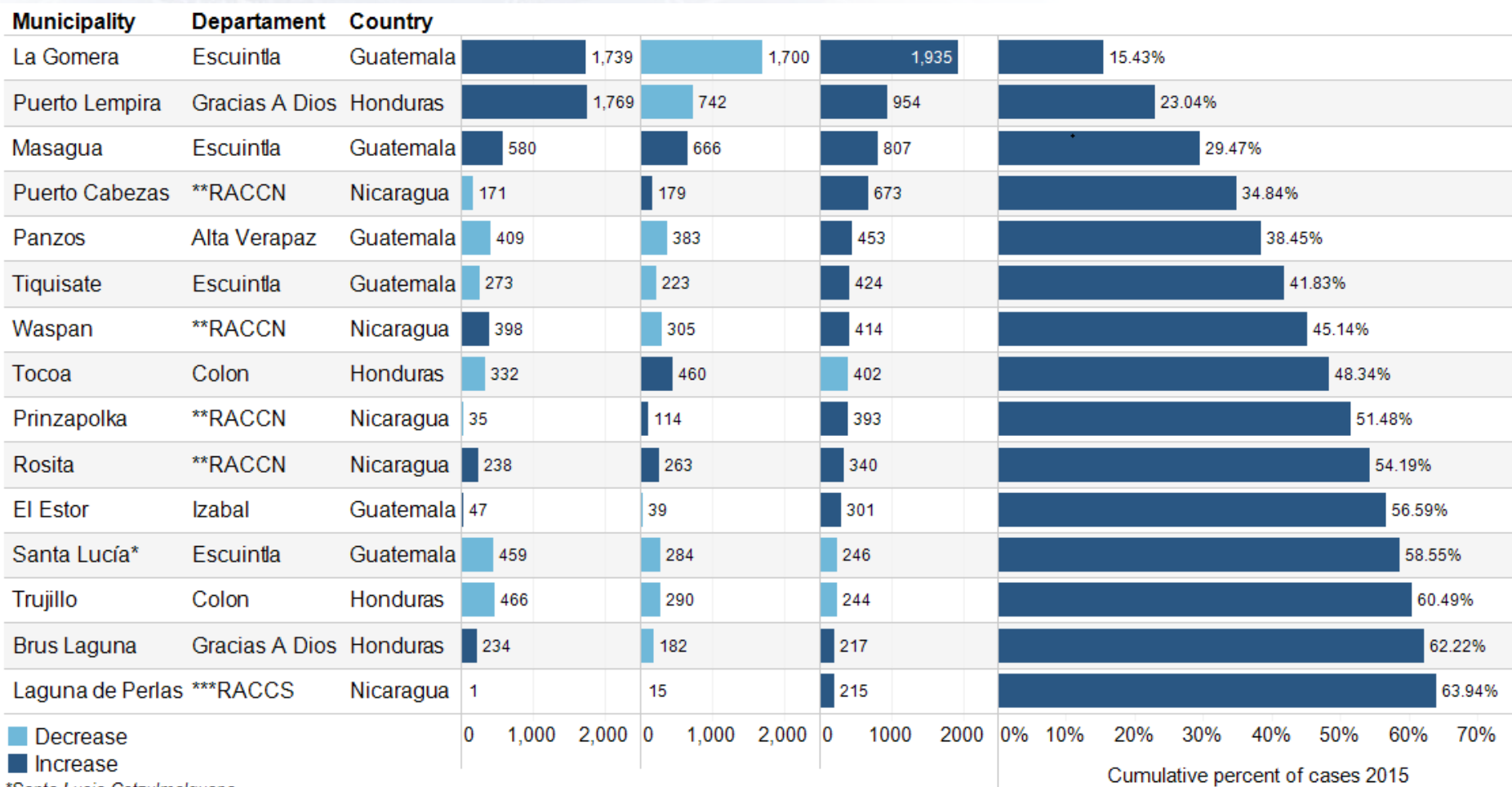
# Top 15 municipalities with the highest number of malaria cases in the Region of the Americas, 2013-2015



"..." indicates unavailable data.

\*Sao Gabriel da Cachoeira

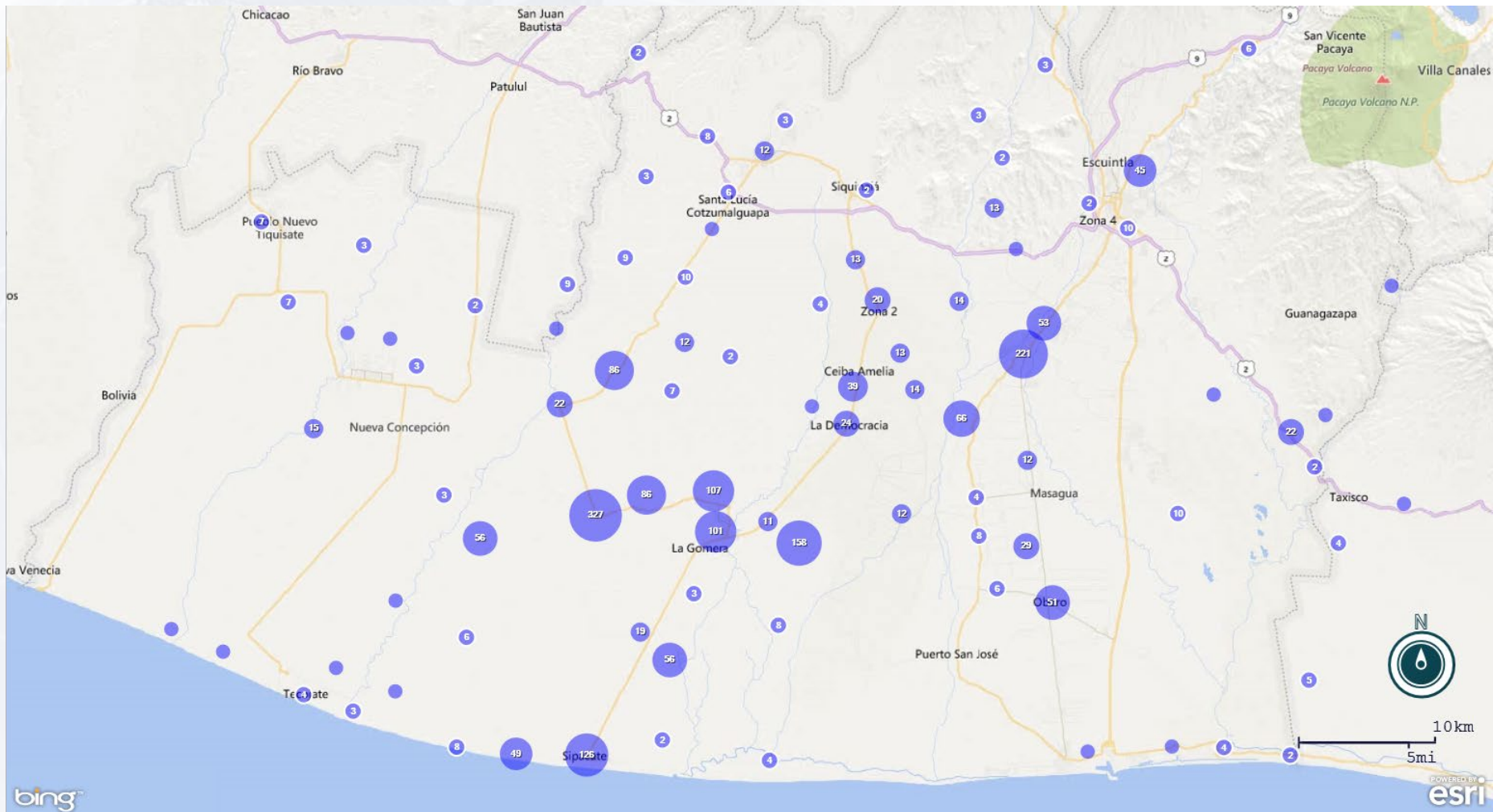
# Municipalities with the highest number of malaria cases in the Mesoamerican sub-region, 2013-2015



\*Santa Lucia Cotzumalguapa

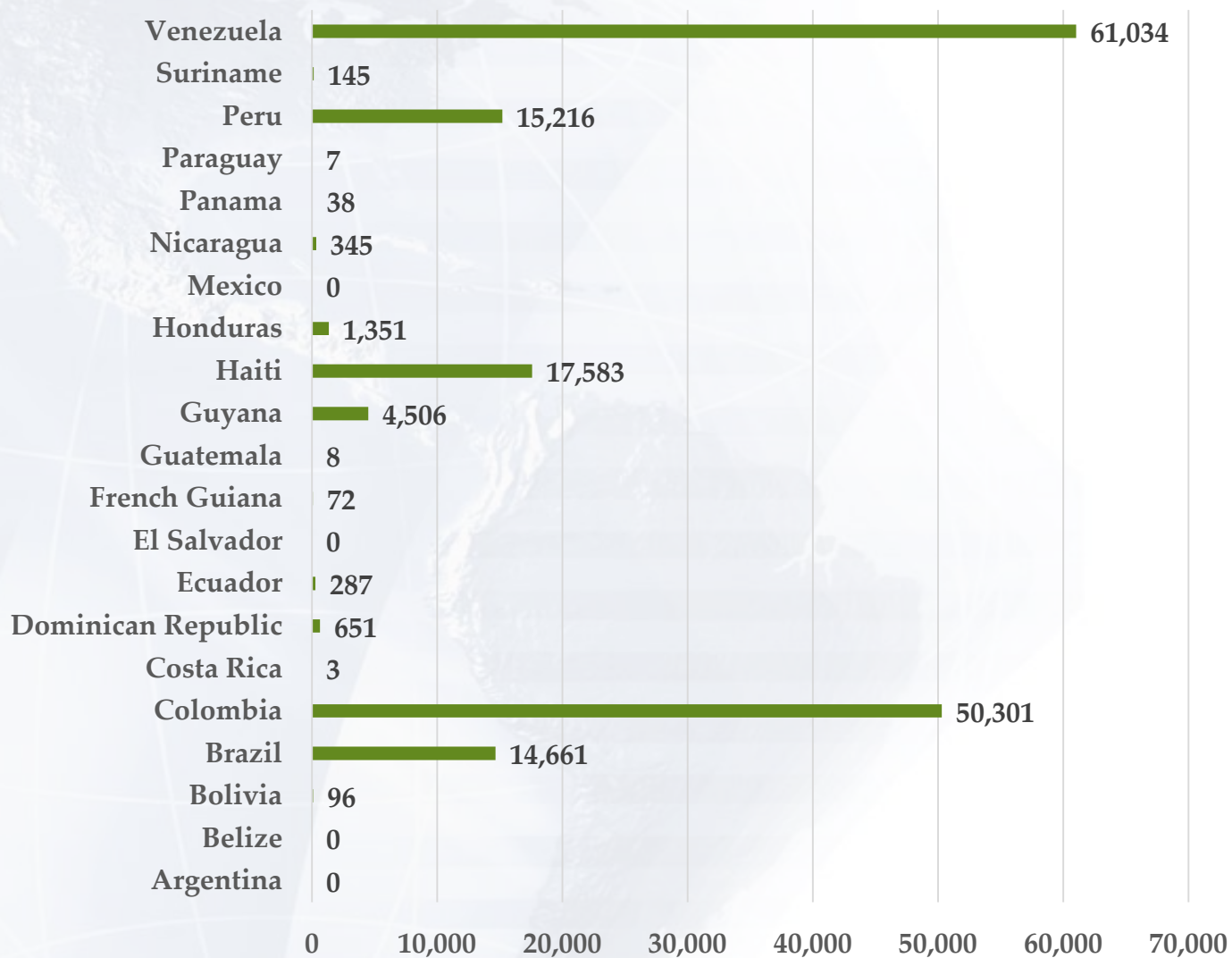
\*\*RACCN - North Caribbean Coast Autonomous Region

\*\*\*RACCS - South Caribbean Coast Autonomous Region



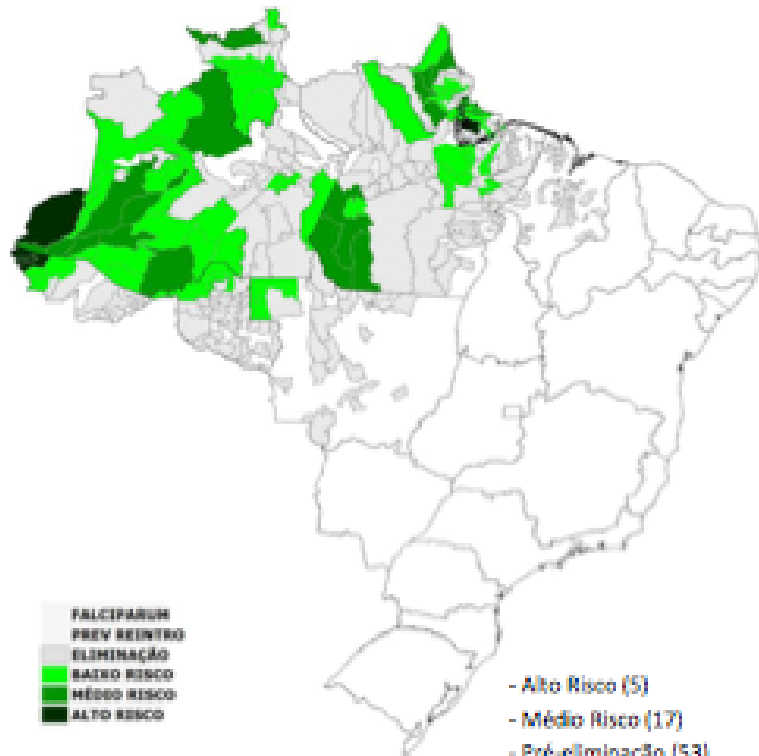


## Number of *P. falciparum* cases by country. 2016



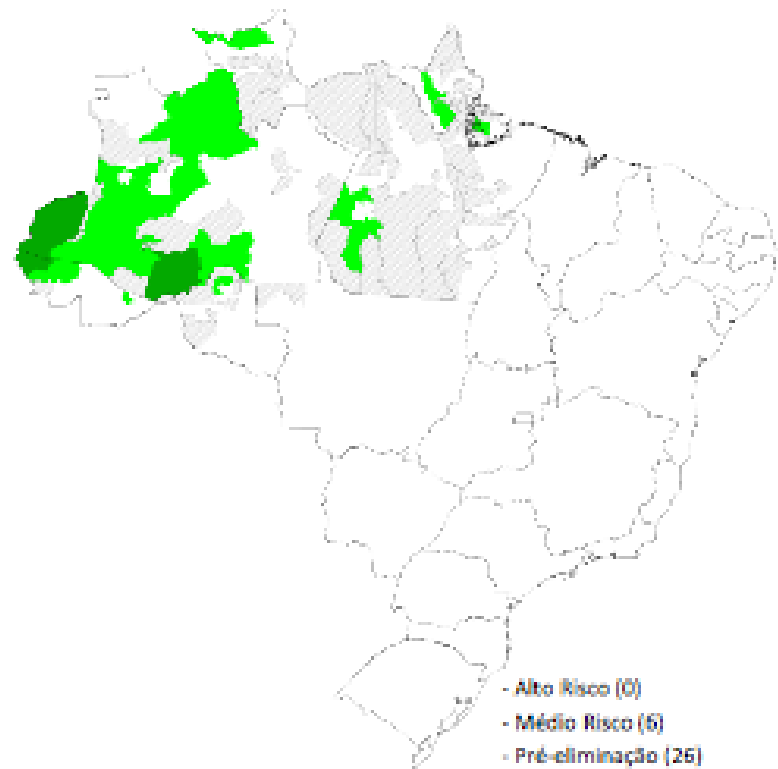
# Malaria falciparum elimination

2015



- Alto Risco (5)
- Médio Risco (17)
- Pré-eliminação (53)
- Eliminação (219)
- Prev. reintrodução (514 + 4.762)

Cenário proposto para 2019



- Alto Risco (0)
- Médio Risco (6)
- Pré-eliminação (26)
- Eliminação (54)
- Prev. reintrodução (722+4.762)

# Brazil's progress 1959 - 2016

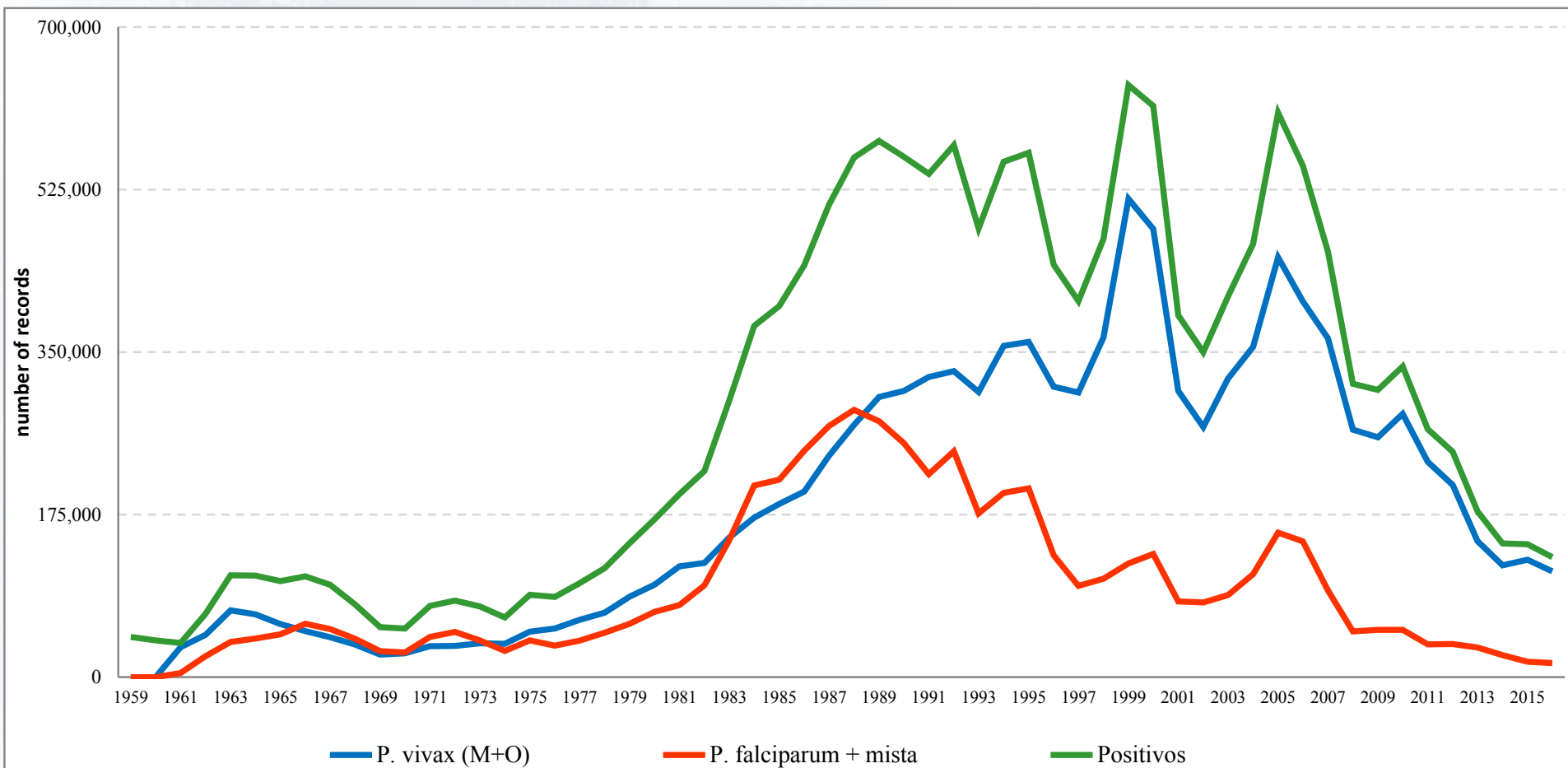
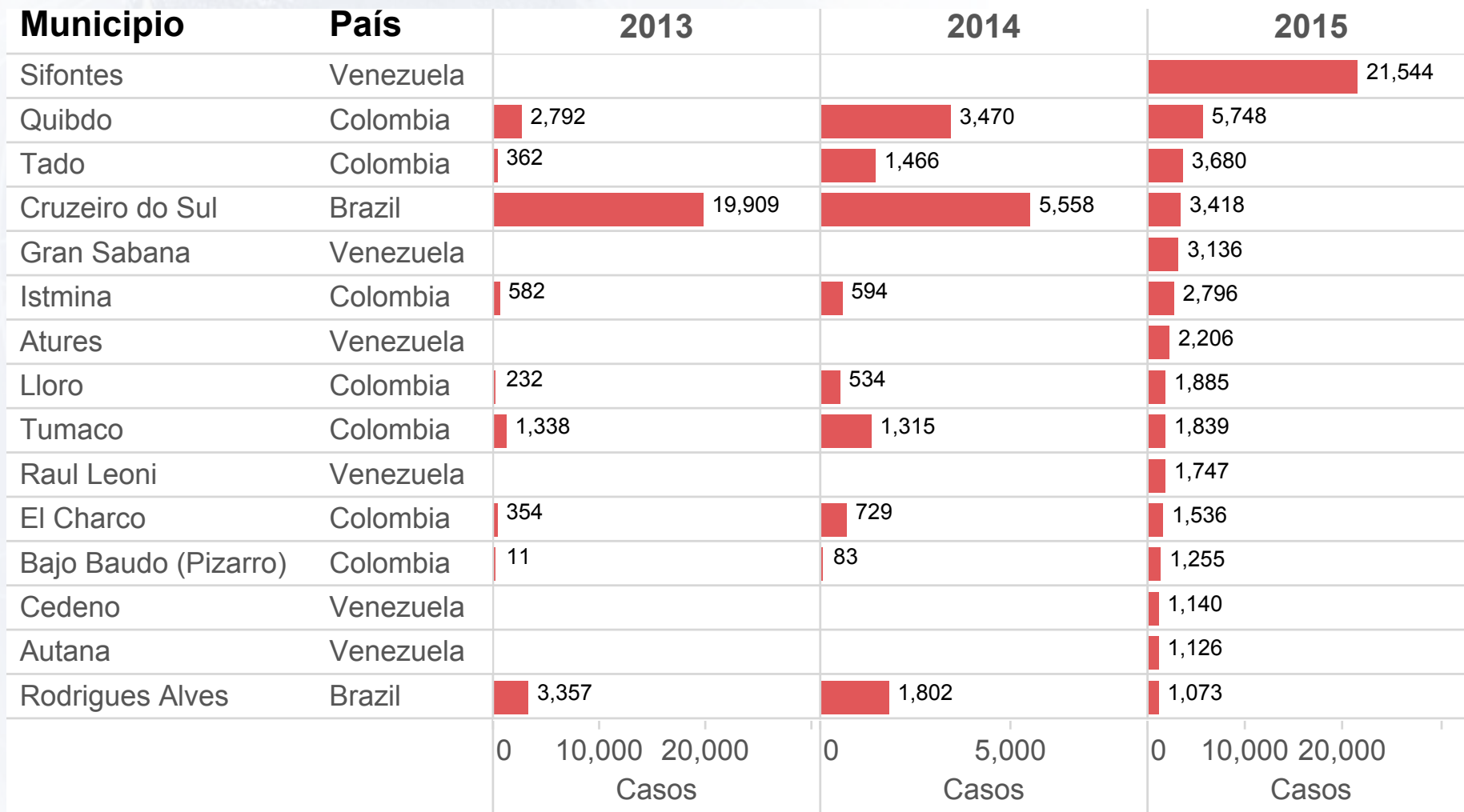


Figure. number of malária cases, per species. Source: SHM (1959 - 1995); Sismal (1996 - 2003); Sivep-Malária (2003-2016) and Sinan/SVS/MS (2004-2016). \*Data from 2016 are not closed. Data from 2016 updated on 04/27/2017.

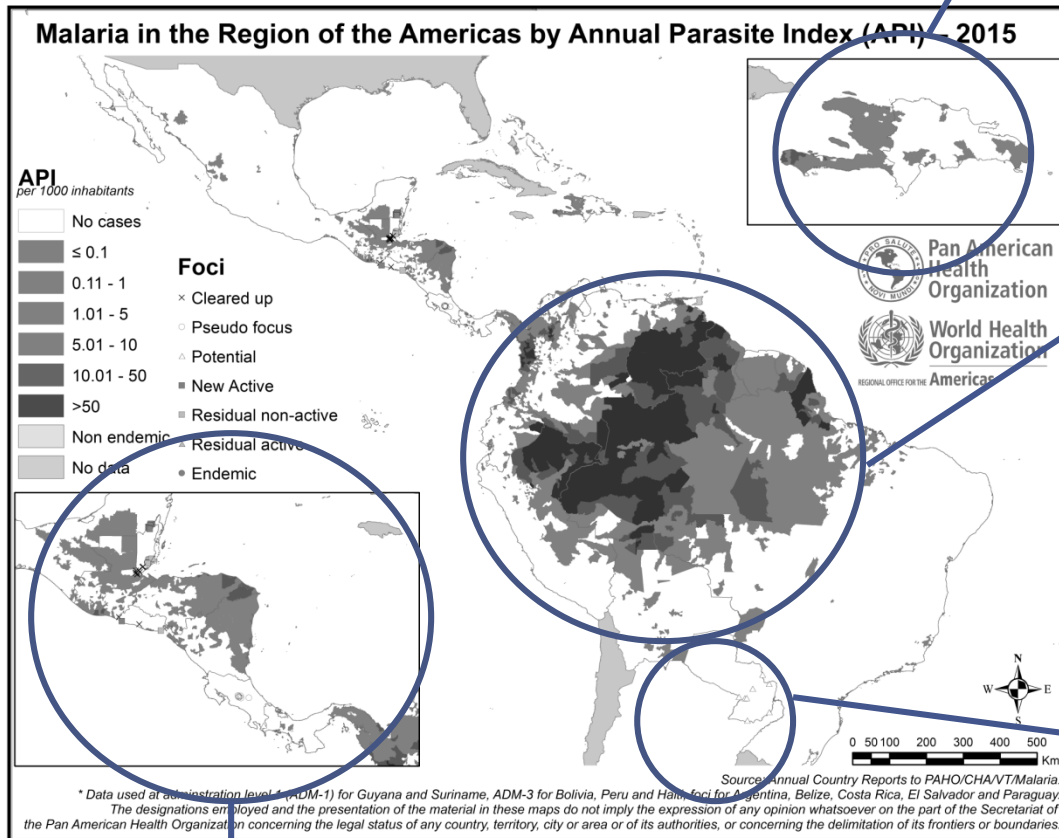
# Top 15 municipalities with the highest number of *P. falciparum* malaria cases in the Region of the Americas, 2013-2015





# Malaria elimination. Where?

**Hispaniola** : Possible as binational target. Critical gaps in access to diagnosis – treatment and vector control core interventions.



## Amazon countries :

- Suriname: few cases.
- Ecuador epidemiological situation changing but still favorable. Common issue: contention of reintroduction from neighbors?
- Bolivia without *P. falciparum*
- *P. falciparum* elimination as a intermediate target in Colombia, Brazil, Venezuela, Perú, Guyana

## Southern cone :

zero indigenous cases in Argentina and Paraguay for more than 3 years. Both countries in certification processes

**Mesoamerica** : Possible as regional target. Three countries very close (Costa Rica, El Salvador, Belize). Two countries with favorable epidemiological situation (Mexico, Panama). Key local specific situations must be addressed (Guatemala, Honduras, Nicaragua)

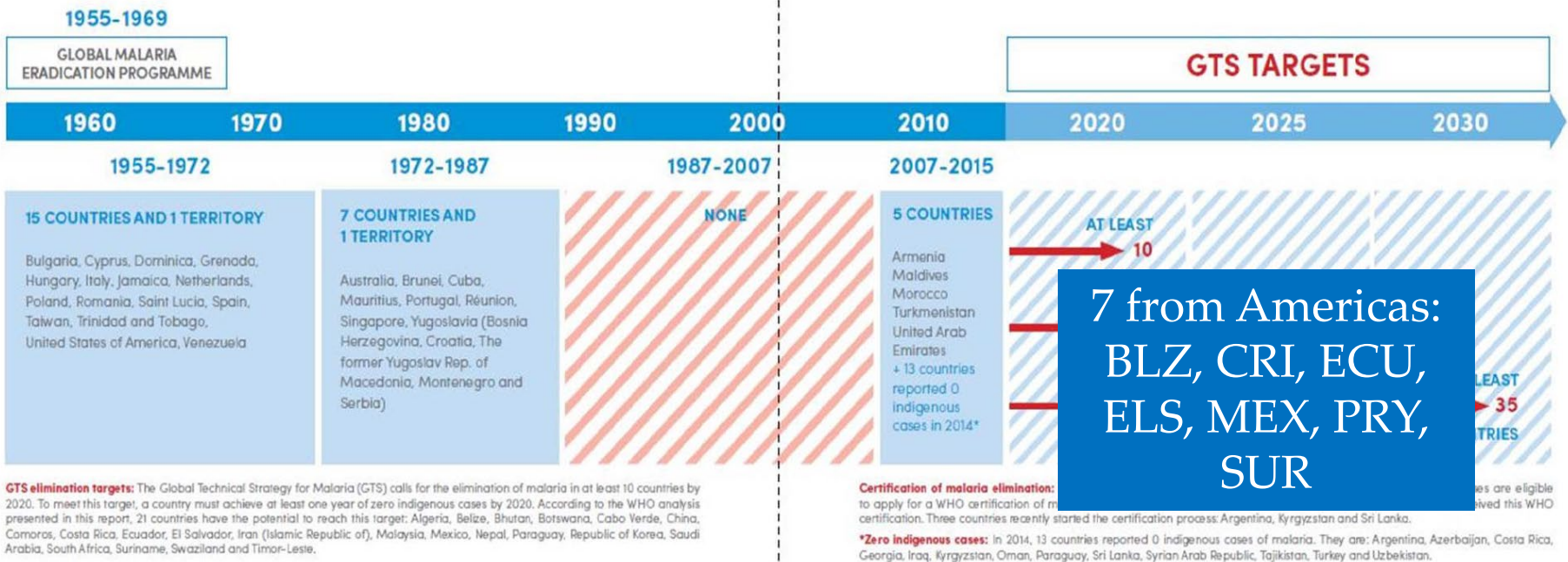
# Malaria en los países en fase de eliminación en la Región de las Américas, 2013-2015

País	Año	Casos confirmados	Casos investigados	Importados	Autóctono - P.f	Importado - P.f	Autóctono - P.v	Importado - P.v
Argentina	2013	4	4	4	0	0	0	4
	2014	4	4	4	0	0	0	4
	2015	1	1	1	0	0	0	1
Belize	2013	26	26	4	0	0	22	4
	2014	19	19	0	0	0	19	0
	2015	13	13	4	0	0	9	4
Costa Rica	2013	6	6	4	0	1	1	3
	2014	6	6	5	0	3	0	2
	2015	8	8	8	0	4	0	4
Ecuador	2013	378	100	10	160	1	208	9
	2014	241	...	...	...	...	...	...
	2015	686	686	68	184	43	434	23
El Salvador	2013	7	7	1	0	0	6	1
	2014	8	8	2	0	0	6	2
	2015	9	9	6	0	0	3	6
Mexico	2013	499	499	4	0	4	495	0
	2014	666	666	10	0	8	656	2
	2015	551	551	34	0	6	517	27
Paraguay	2013	11	11	11	0	7	0	3
	2014	8	8	8	0	7	0	1
	2015	8	8	8	0	6	0	2

"..." significa datos no disponibles.

In 2017, seven countries in the Region have been included by WHO in the [global forum of malaria-eliminating countries](#) indicating that they are among the 21 countries with the potential to achieve zero indigenous cases of malaria by 2020

TABLE 1.  
Countries certified as malaria-free by WHO (1955–2015) and future elimination targets



# Thank you

[www.paho.org/malaria](http://www.paho.org/malaria)  
[malaria@paho.org](mailto:malaria@paho.org)



Pan American  
Health  
Organization



World Health  
Organization

REGIONAL OFFICE FOR THE **Americas**