

# Malaria Situation in Belize:

## Preventing the Reintroduction of Cases in Malaria Free Areas



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## Belize

Population Estimate:  
377,968

Surface Area: 8,867 sq.  
miles/ 22,966 sq. km



# Current Malaria Situation

- Between 2000 and 2016 the country achieved a 99.7% reduction in cases from 1,486 cases to 5 in 2016
- 2015 – 13 cases & 2016 - 5 cases – 61.5% reduction
- Lowest recorded number of cases since 1963 there were 8 cases
- External validation of 2015 cases done by Global Fund & Paho - 30 Nov – 4 Dec 2015.
- In 2016 local transmission occurred in 1 locality (Trio Village) - but there are 27 foci under surveillance
- Last comprehensive assessment resulted in classification of 11 active foci and 8 residual
- 6 Districts in country – Stratum 1 – 2 districts, Stratum 2 – 4 districts, Stratum 3 – none



# Recent Malaria Trend

2014 Malaria by District and Species					2015 Malaria by District and Species					2016 Malaria by District and Species				
District	SPECIES				District	SPECIES				District	SPECIES			
	FALCIP	VIVAX	MIXED	Total		FALCIP	VIVAX	MIXED	Total		FALCIP	VIVAX	MIXED	Total
Corozal	0	6	0	6	Corozal	0	5	0	5	Corozal	0	0	0	0
Orange Walk	0	1	0	1	Orange Walk	0	4	0	4	Orange Walk	0	0	0	0
Belize	0	0	0	0	Belize	0	1	0	1	Belize	0	0	0	0
Cayo	0	0	0	0	Cayo	0	1	0	1	Cayo	0	0	0	0
Stann Creek	0	12	0	12	Stann Creek	0	2	0	2	Stann Creek	0	4	0	4
Toledo	0	0	0	0	Toledo	0	0	0	0	Toledo	0	1	0	1
Total	0	19	0	19	Total	0	13	0	13	Total	0	5	0	5

2016 – 2 local and 3 imported cases



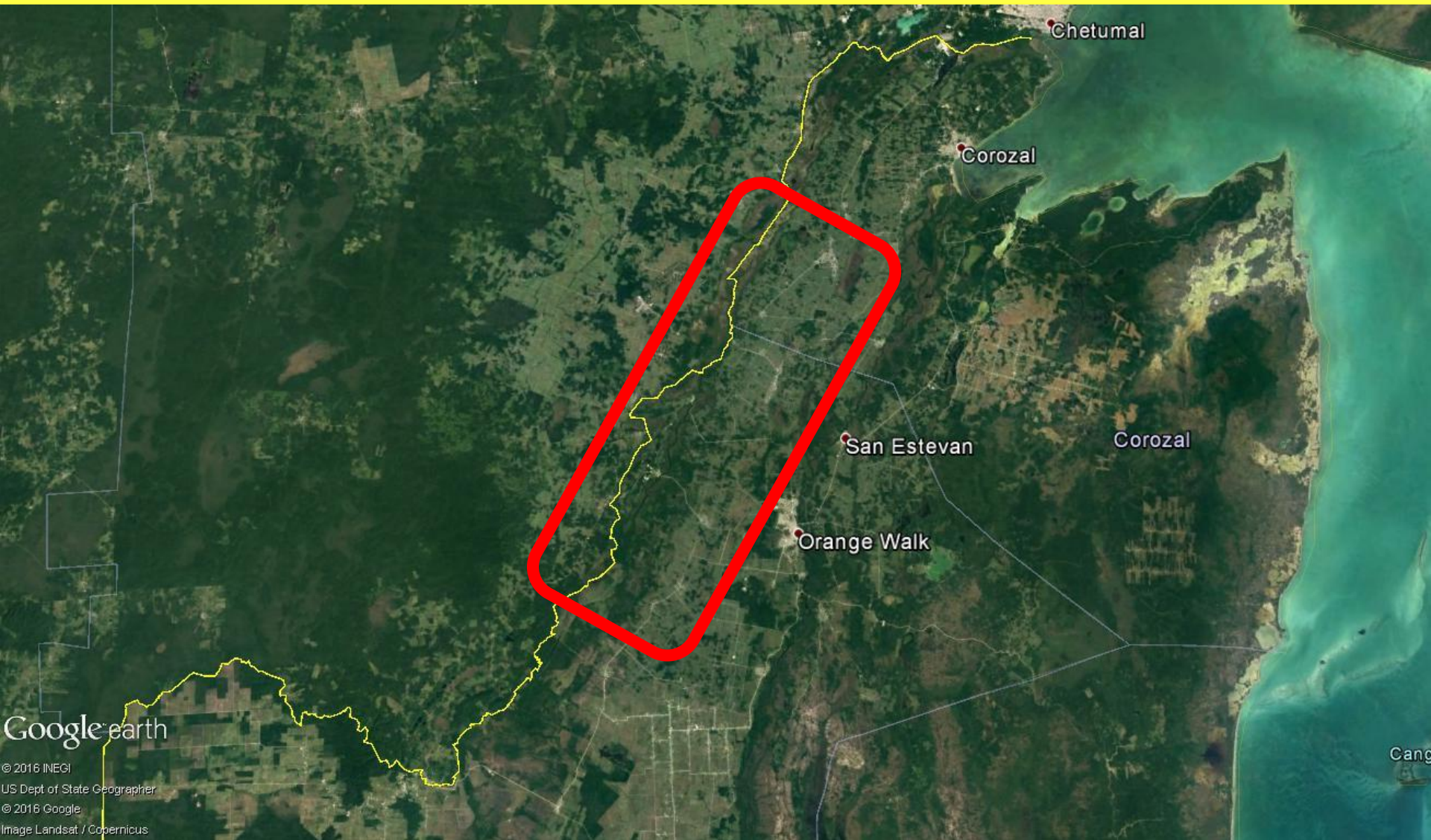
# Current Malaria Situation

- The primary target area have shifted from the south to the North along the border with Mexico
- Target area with highly mobile populations crossing at several illegal points for commerce, and work (mainly sugar cane farming)
- In the South great results were produced using:
  - 14 day supervised treatment
  - Bi-annual IRS
  - Distribution of LLIN's (bed nets)
  - Active surveillance
- Communities in the North are larger and interventions have to be very strategic due to limited budget and is limited to bi-annual IRS and Active Surveillance





## Areas of Concern Along Belize – Mexico Border

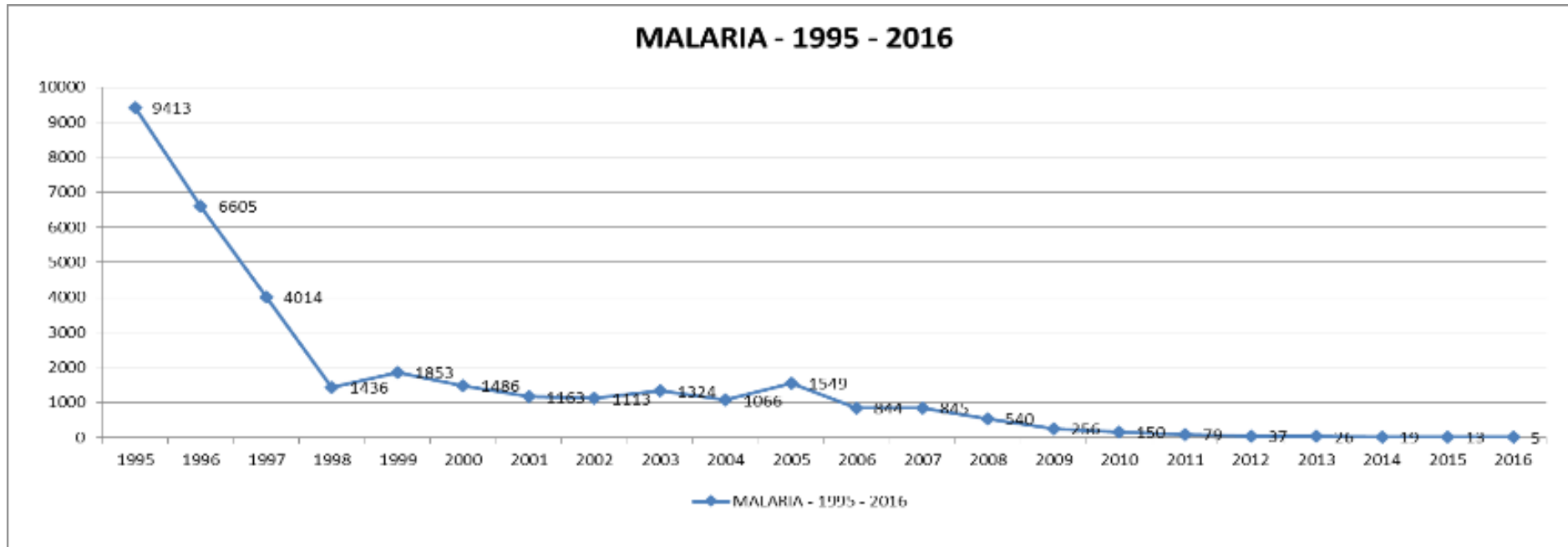


Google earth

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# Malaria Trend –20 years



Classification  
of Focus  
● Active foci



## Major deficiencies affecting elimination by 2020

- Greater networking and sharing of information with neighbouring countries
- Lack of technology in testing low parasite densities/sub microscopic levels
- Limited human resources in programs with staff responsible for multiple vector borne diseases
- Succession planning – ensuring new/young staff trained in various competencies – eg. entomology, basic field epidemiology etc.





# 2017 Operational Plan Target

**Achieve a 20% reduction in Malaria cases vs 2016 baseline**

Country	Baseline	Proposed Targets						
Year	2013	2014	2015	2016	2017	2018	2019	2020
Belize	26	<70	15%	25%	20%	15%	15%	10%



## 2017 – 2020 Plans

- Program being guided by recommendations made by Global Fund/PAHO validation team:
  - Increase active surveillance in border communities in the north
  - Ensure complete supervision of treatment for all cases
  - Classification and monitoring of foci
  - Strengthening of network of Community Health Workers and Malaria Voluntary Collaborators - over 300 persons responsible for 80 – 90% of cases detected – network is getting weak
  - Improve efforts to re-orient healthcare workers on malaria elimination efforts
  - Reduce delay between **blood collection** ➡ **diagnosis** ➡ **treatment**



## 2017 – 2020 Plans

- Evaluate current strategies to ensure efficient spending – do we continue to use LLIN's & IRS in current foci under surveillance
- Seek support on the area of study or testing sub-microscopic levels of parasite
- Encourage better participation of private sector in malaria surveillance system
- Improve the lines of communication between neighbouring countries for better surveillance and coordination of simultaneous activities in communities along the border
- Closely monitor expanding sugar cane industry in the West (stratum 1) employing high number of labourers from high risk areas in Guatemala



**THANK YOU**

