# Rotarians Against Malaria Beating back malaria in times of COVID 19



### RAM - working to eliminate malaria



# Malaria The World's most serious Disease 100 times worse than Covid19

### World

- 216 million cases pa cf Polio, Covid19 2.5 million cases incr
- 450,000 deaths pa mothers and children, Covid19 150,000 cases incr, aged

#### **PNG**

• Av 60 - 340 cases/1,000 people - higher in Sepik, ENB, NI (2017)

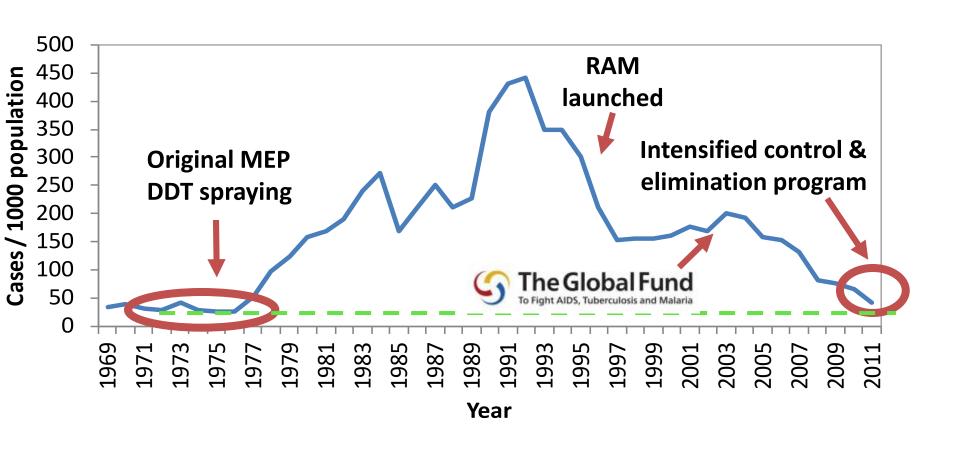
### Solomon Islands

• 100-450 cases/1,000

### **Rotarian Malaria Partners**

Disease	COVID-19	Malaria
Туре	Virus	Parasite
Organism	SARS-CoV-2	Plasmodium
Vector	None	Anopheles mosquitoes
R <sub>0</sub>	$R_0 = 2.0-2.6$	Highly variable, $R_0 = 1 \le 3,000$
IFR	0.9% overall, rising to 9.3% age ≥80	0.2-0.45%, much higher at age <5
Cases	2.4M and increasing rapidly	220M/year
Deaths	165K and doubling rapidly	435K/year
Geography	Worldwide	75% of cases in sub-Saharan Africa
Vaccine	In development	In trials, 30-40% reduction
Acquired immunity	Presumed but uncertain	Complicated dynamics
Prevention	Distancing, isolation, quarantine	Multimodal: healthcare, vector control, many others

### **Recent History of Malaria**



#### Malaria in the Solomon Islands

Incidence of confirmed cases per 1000 population (MHMS, Solomon Islands)

# RAM Strategies

- Distribution of bed nets PNG, SI, Timor, Vanautu
- Healthy Villages SI, drainage and cleanliness vector control
- Lavacide and insecticide sprays vector control
- Chasing Malaria PNG targetted intervention, cf Covid19
- Malaria Education PNG, SI, Timor, Vanautu
- Diagnosis and Treatment PNG, SI, Timor, Vanautu, RDT

# RAM Solomon Islands

- >200,000 Bed nets, Flip charts and brochures, larvacide & IRS.
- 21 Houses for MoH malaria staff
- Microscope diagnosis laboratories.
- 13 LLIN storage sheds.
- 20 boats + several vehicles LLIN distribution.
- Tools for 160 villages (\$250,000).



# **Early days - Bed nets and Chemicals**





### **Diagnostics**

- Fever Symptoms inaccurate, many other causes
- RDT Rapid Diagnostic Tests inaccurate
- Microscopy accurate, slow, limited availability
- Need better tests quicker, more accurate



# **HEALTHY VILLAGES**

Planning / Training / Tools / Work – self help

Better reporting needed





# IRS - Indoor Residual Spraying



# **RAM PNG**



### 13 million bed nets distributed to 2019





3 generations appreciate the protection of RAM bed nets



# **CHASING MALARIA**

RDTs & clinic records

all + ve cases get a new LLIN

volunteer, local student surveillance

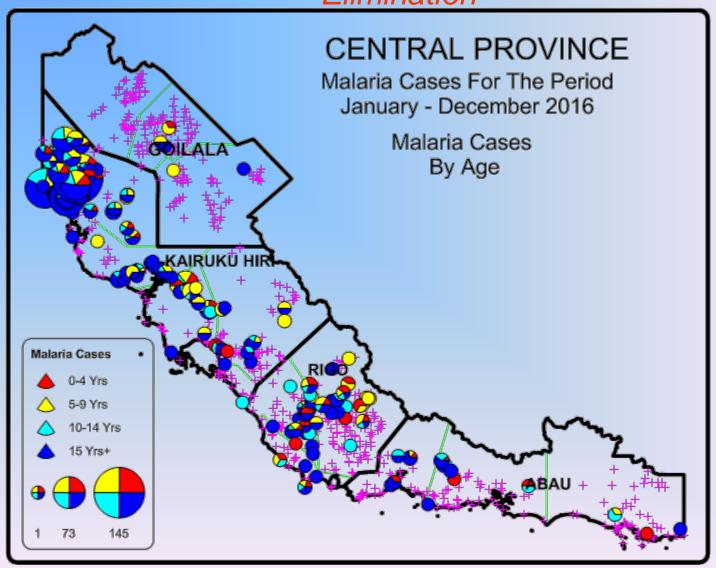




# **RAM PNG Chasing Malaria Results**



#### **Elimination**





### LLIN HOUSEHOLD DISTRIBUTION

Training Volunteers



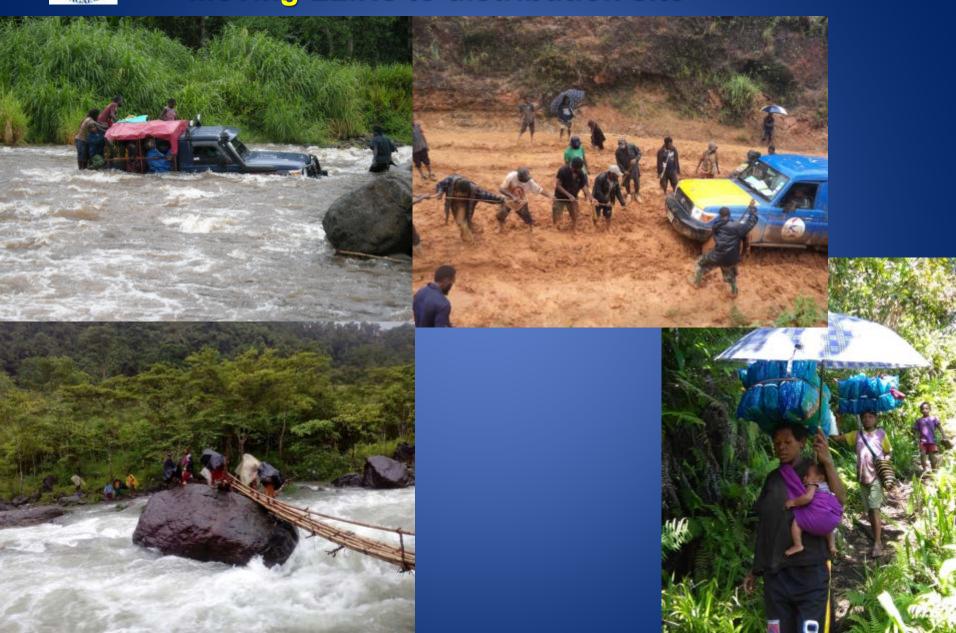


LLIN HOUSEHOLD DISTRIBUTION Unloading and Distributing LLINs



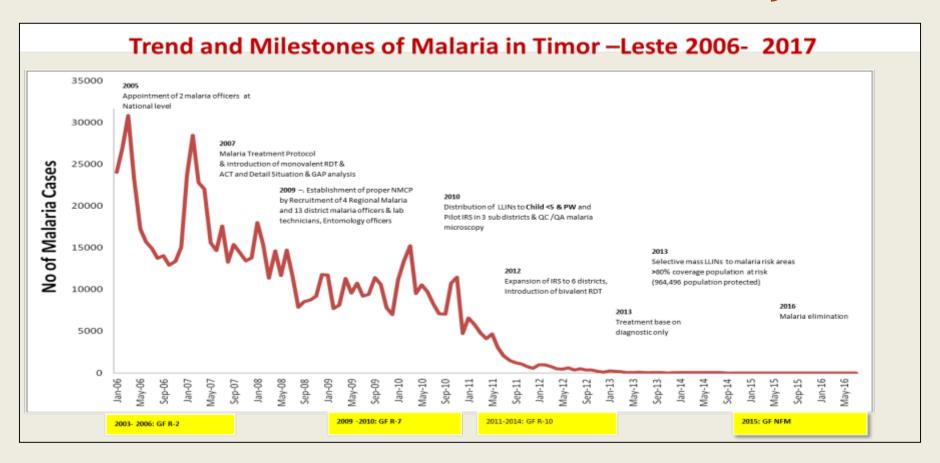


# LLIN HOUSEHOLD DISTRIBUTION Moving LLINs to distribution site



# **Timor Leste 2018**

### National Malaria Programme Success Story: Control to Elimination Phase in 10 years



### Malaria Vaccine Fund raising project









### **Elimination of Malaria**

- Accurate surveillance and mapping
- Maintain control measures
- A reliable field test for asymptomatic carriers
- New affordable drug as a reliable treatment
- Multi valent vaccine



### **Focus and Persistence**

Does all this look familiar?





RAM will do the hard yards!
RAM will be there until the end!
RAM will help eliminate malaria!

BUT

We need financial support from Rotarians to finish the job