

Rotary



**ROTARY AUSTRALIA
WORLD COMMUNITY
SERVICE**



Rotarians Against Malaria

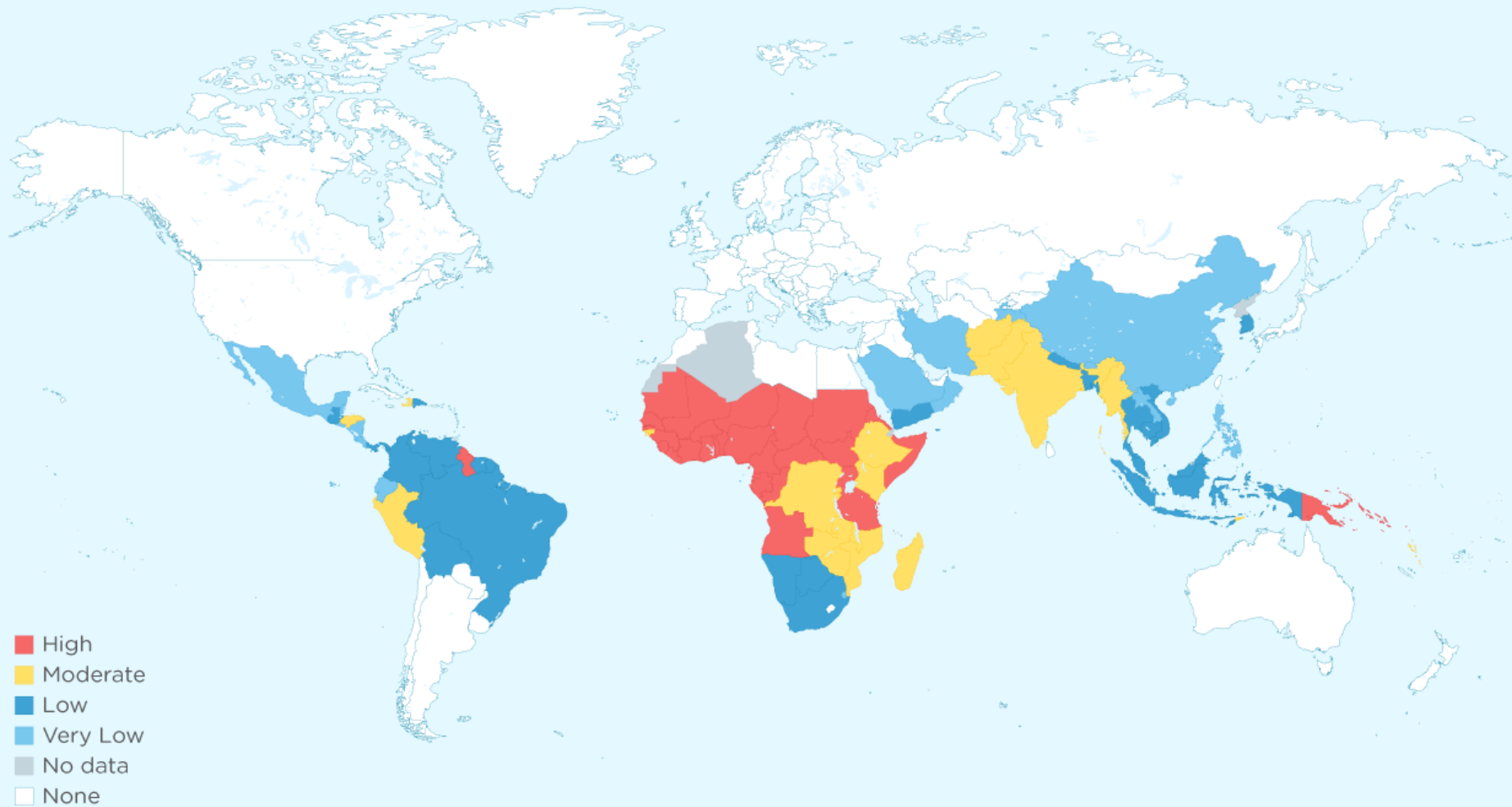
A volunteer-run organisation working to eliminate malaria

Malaria Elimination: A Work in Progress

What is RAM?

**Rotarians Against Malaria is a
volunteer-run organisation working
to eliminate malaria**

RAM is a project of the 21 Australian Rotary
Districts under Rotary Australia World Community
Service (RAWCS) Ltd.



Data sourced from CDC, July 2018: https://www.cdc.gov/malaria/travelers/country_table/a.html

~100 countries affected by Malaria in 2019



The Enemy: **Female** Anopheles Mosquito



The challenge:

Annual global infection rate: 228 million cases

Annual deaths:

405,000

67% of deaths are children under 5

Humans at risk:

3 billion



**Malaria is a major cause
of world poverty
as well as chronic illness
and death**





RAM was initiated in 1995

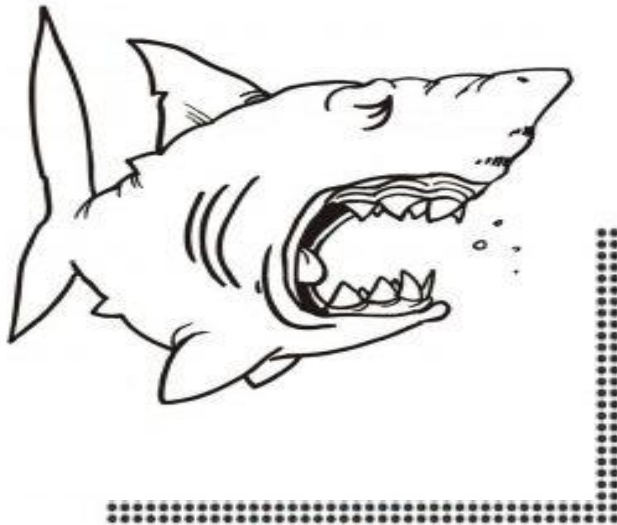
Partners include:

- ✓ W.H.O.
- ✓ Walter & Eliza Hall Institute
- ✓ Burnett Institute
- ✓ Australian Universities' Research Teams
- ✓ Australian Army's Malaria Research Institute
- ✓ RAM Scientific Committee
- ✓ Bill & Melinda Gates Foundation
- ✓ Global Fund (under the auspices of the UN)

Bill Gates Quote

Mosquitoes kill more people in one day than sharks killed over the last 100 years.

gates
notes

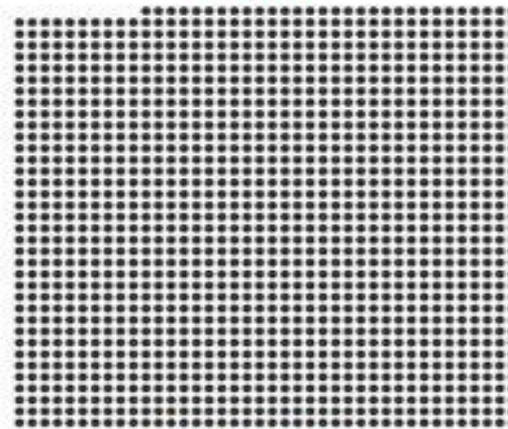


1,035 deaths
(1916-2016)

Source: WHO, Global Shark Attack File (GSAF)



1 day



1,470 deaths
(2016)

Malaria is deadly.

Early treatment prevents the parasite entering the liver resulting in a lifetime of suffering



Search for a Vaccine

- **RTS,S – Mosquirix**
Has had limited success
Why?



RTS,S Mosquirix



- Need 4 doses to be given
- It's short lived
- Only about 30% -40% protection
- Has to be administered in conjunction with the use of treated nets (LLINs)

HOPED FOR OUTCOMES

1. A large drop in reported malaria cases and deaths
2. A drop in the number of premature child births and increase in average birth weight
3. Huge reduction of anaemia in pregnant women and newborn children
4. A reduction in the number of miscarriages
5. Improved economy, employment & education

An Important goal of RAM



**Happy healthy kids eager to
get an education**







Difficulties



RAM Programs: Breaking the cycle of infection

It's a very grass roots approach:

- Collaboration: Other NGOs & Governments
- LLIN bed nets
- Residual insecticidal spraying (IRS)
- Education
- Engineering environments
- Controlling larvicide in breeding grounds
- Rapid accurate diagnosis, surveillance
- Effective treatment (Logistics)
- Research: PhD Scholarship, vaccines?





**Successful first Recipient of the RAM
Scholarship:**

Edgar Pollard MSc

Research Topic:

**Understanding mosquito flight to
maximize malaria and dengue control
by insecticide impregnated barriers.**

RAM Focus Countries

Papua New Guinea, the Solomon Islands and Timor Leste have received active and financial support from RAM for a number of years.

West Timor and **Vanuatu** have also requested support from RAM and this began in the 2019-20 Rotary Year

Distributing nets in Timor Leste



Adopt-A-RAM-Project

- Southern Region has adopted the **‘End Malaria in Vanuatu-for Good’ Program**
- A RAWCS Fundraising Account was set up by D9810 and D9820
- Money raised has been used in an application for a Global Grant led by D9910 NZ.



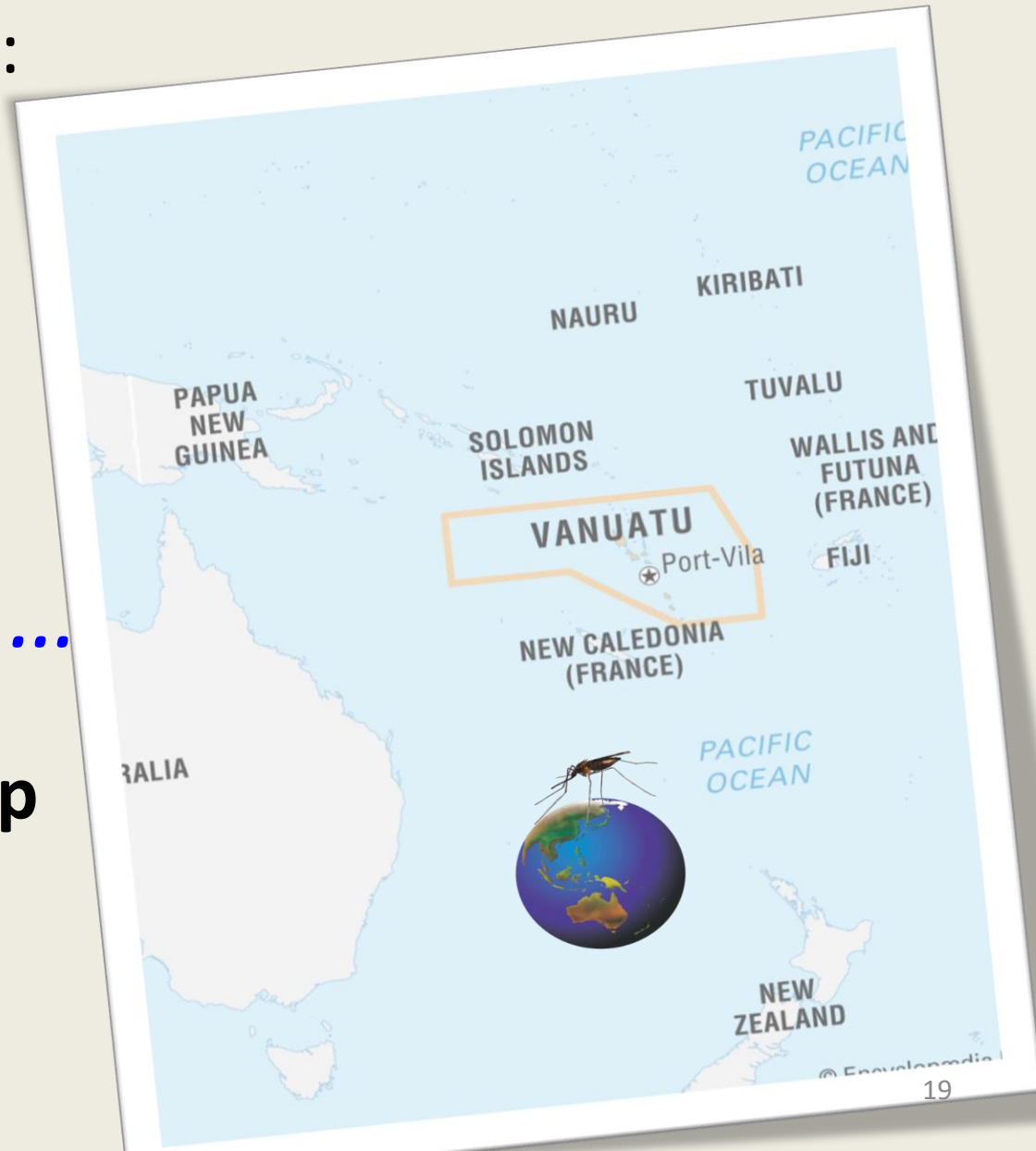
END MALARIA IN VANUATU - FOR GOOD

RAM will help fund:

- bed nets
- medication
- IRS Spraying

Help save lives ...

**Donate now to help
Vanuatu ...**



In Papua New Guinea

- 2004 - The 'Adopt A Village' project was initiated
- 2005, 2009 & 2012 large Global Funds awarded
- By June 2020, more than 12 Million nets were distributed



RAM in Papua New Guinea

Global Fund's funding has decreased, so a new initiative has been implemented:

In Port Moresby and Central Province, RAM has funded a program called “**Chasing Malaria**” to track and investigate case clusters in schools and communities in Central Province.



Resurgence of Malaria in PNG:

- Drug and insecticide resistance
- Diagnostic failure
- Human behaviour
- Mosquitoes biting earlier
- Sub-optimal level of Insecticide on bed nets – lasting only 18 months instead of 3 years
- Drugs and test kits not being available at hospitals and health centres



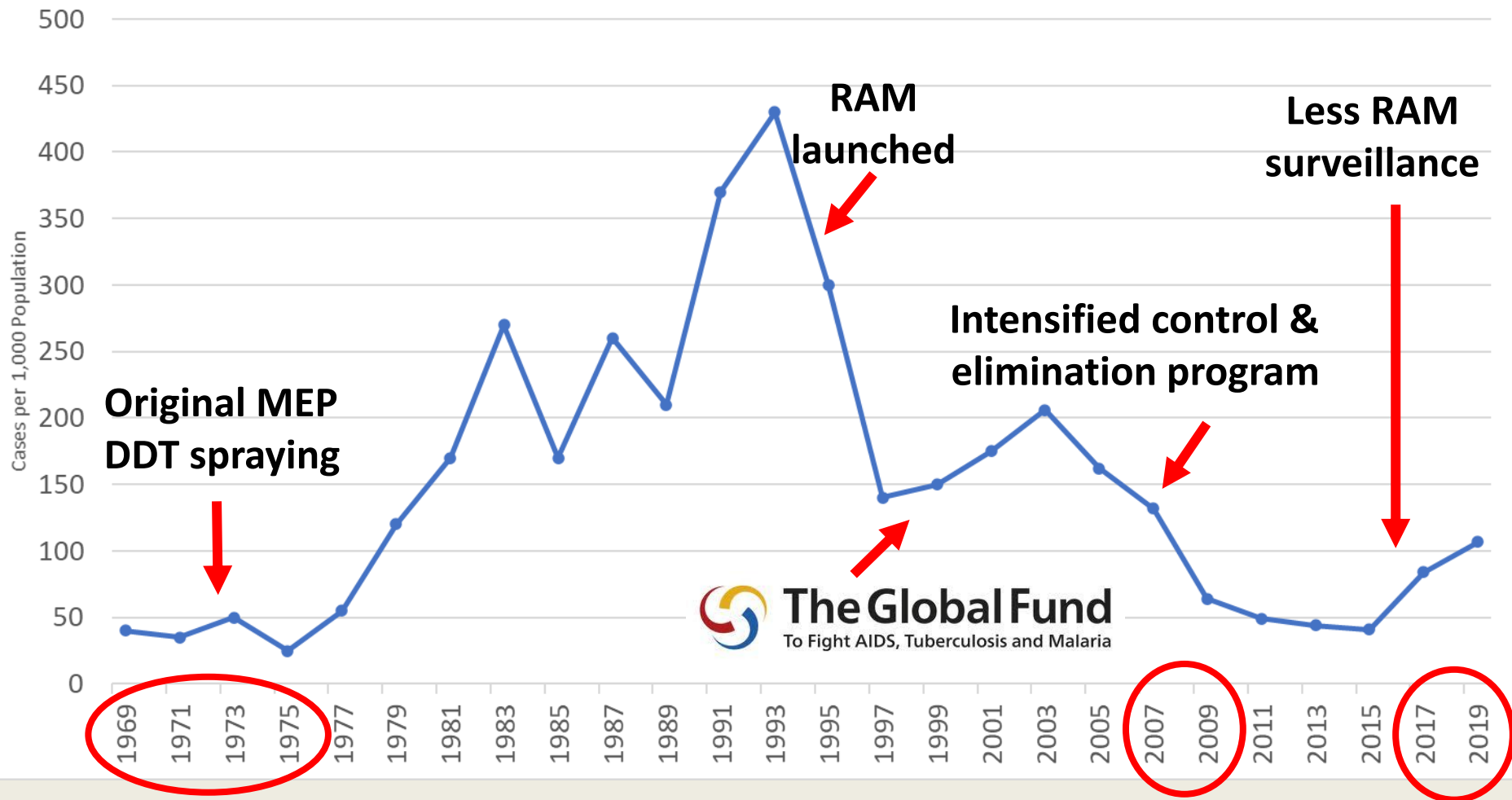
Resurgence of Malaria in PNG:

- The need for *clinics* to test all suspected malaria patients with rapid diagnostic tests (RDTs).
- Maintaining malaria *monitoring* and evaluation systems

PAPUA NEW GUINEA



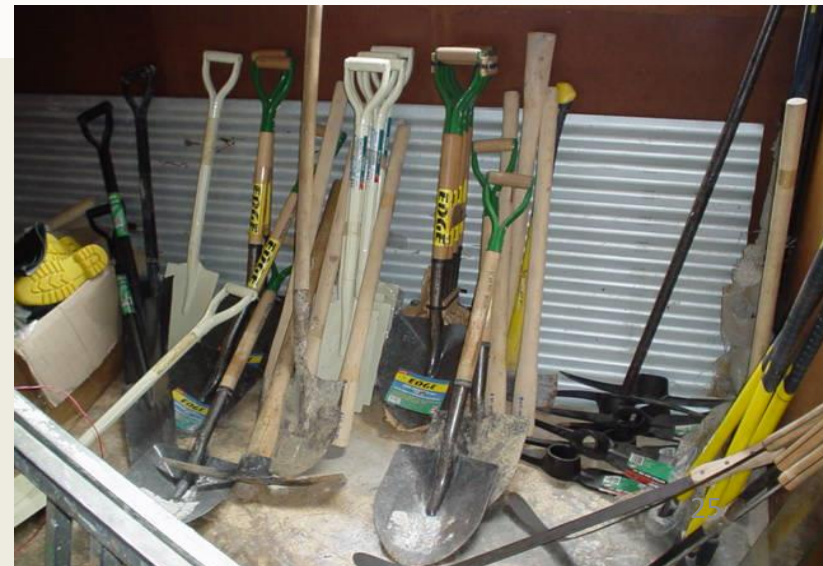
Malaria Cases in the Solomon Islands



RAM in the Solomon Islands

- 2012 - 2017 RAM ran the Basic Tools **Healthy Villages Program**, in conjunction with the Ministry of Health (MOH).
- MOH handled the distribution of nets with funding from DFAT and the Global Fund.
- For \$1,750, a village received bush knives, axes, flat files, spades, mattocks, crow bars, and wheelbarrows.

These tools were used to remove mosquito breeding sites and improve general drainage



RAM in the Solomon Islands

To mid-2017, 160 villages had been supported under this **basic tools** program at a cost to RAM in excess of \$200,000.



TIMOR LESTE

- ❖ RAM has provided 115,000 nets to the Timorese Expectant Mother Program since 2006
- ❖ As a result of control measures, 89% of pregnant women and children under 5 have LLIN's
- ❖ RAM has been asked to fund the distribution of nets provided by the Global Fund

Reduction in malaria incidence

- 220 per 1,000 in 2006
- 0.9 per 1,000 in 2013
- 0.7 per 100,000 in 2019

Planning to be certified malaria free by 2021



Reasons For the Reduction in Cases

- **A well organised NMCP with trained staff that has been accepted by the community.**
- **High level of government commitment and a stable political climate.**
- Diagnostic facilities & treatment available in all health institutions.
- Test kits available in the hard to reach places where there are no microscopy facilities
- Ongoing training for clinicians and nurses to carry out treatment.
- Ongoing visits by teams to villages





Community volunteers collect accurate household census, compile LLIN requirements and prepare entitlement chits for families.



Distribution day - chits are checked against the master list then OK'd for LLIN collection.



25 **CURRENT RAM VISION INCLUDES**

- Strategic provision of nets – maternal, special needs, areas neglected by Global Funding, epidemic preparedness
- Provide more educational resources eg flip charts
- Provide more Rapid Diagnostic Kits
- **Work with West Timor and Vanuatu**
- Expand RAM Healthy Villages to other countries
- Sponsor a second PhD candidate
- Expand PNG's "Chasing Malaria" Program
- Provide more volunteer teams
- Convince R.I. that malaria should be next after Polio is eradicated.

