



Rotary and RAM Briefing Notes: July 2018

Did you know that Rotarians completed over 30,000 Rotary service projects and dedicated 24.3 million hours to volunteering in the communities that need us most during this past year alone?

In Australia, Rotary Australia World Community Service (RAWCS) has 477 current projects including two national projects; Rotarians Against Malaria (RAM) and Donations In Kind (DIK). During the immediate past year 154 Volunteer teams including 735 Rotary Volunteers travelled abroad to work on Rotary Overseas Aid projects.

PolioPlus

In 1985, Rotary launched its PolioPlus program, the first initiative to tackle global polio eradication through the mass vaccination of children. Rotary has contributed more than \$1.7 billion and countless volunteer hours to immunize more than 2.5 billion children in 122 countries. In addition, Rotary's advocacy efforts have played a role in decisions by donor governments to contribute more than \$7.2 billion to the effort.

Today, there are only three countries that have never stopped transmission of the wild poliovirus: Afghanistan, Nigeria and Pakistan. Just 22 polio cases were confirmed worldwide in 2017, which is a reduction of more than 99.9 percent since the 1980s, when the world saw about 1,000 cases per day.

Latest Polio Reports from Endemic Countries

- 22 Wild Polio Virus cases reported in 2017.
- Just 11 to date in 2018 - EIGHT in Afghanistan and THREE in Pakistan. NONE since 2016 in the only other endemic country, Nigeria.
- Important to note 96 cases of cVDPV2 (acute flaccid paralysis) to date in 2018. Such cases are not recognised in the office case count as they result from areas where vaccination programs have been interrupted. As soon as reports are received, increased surveillance takes place – along with increased rounds of mOPV2 vaccinations – in affected areas.

Surveillance in Polio free countries

Whilst the vast majority of countries around the World remain Polio free, intensive surveillance and testing continues. In November, 2016, Rotary International was represented at the 22nd meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific – conducted by the WHO. More than 20 countries - from South Korea, Japan, China and the Philippines down through Hong Kong, Vietnam and Malaysia to nations of the South Pacific – were required to report on current polio surveillance and testing at water supplies, sewage systems, hospitals, laboratories and challenging geographic areas.

The ongoing challenge for Rotary's END POLIO NOW campaign is the war torn areas along the border of Afghanistan and Pakistan. Until peace takes charge in such areas, our campaign can never be sure of reaching all areas to conduct intensive vaccination campaigns.

Rotarians Against Malaria

The idea for RAM was first discussed in 1992 at the behest of Dr Brian Handley of RC Brookvale in Sydney. The project started as a Club project as a reaction to the high incidence of malaria in the SW Pacific which was at the peak of the epidemic which developed following the breakdown of the WHO MEP. The project rapidly became a District project of D9680 and then a multi-District project with D9600 (D9600 includes Clubs in Solomon Islands and PNG). RAM was officially launched in the Solomon Islands in 1995 and became a National Activity of Rotary Australia World Community Service (RAWCS) in 1998. RAM's programs were extended to Timor Leste in 2004 which is included in Australian District D9550.

RAM has been the grateful recipient of several large scale TRF Matching and more recently Global Grants and has active fund raising programs through Australian Rotary and Rotaract Clubs supporting our ongoing work. Under the drive and vision of Ron Seddon of the RC Port Moresby, RAM in PNG has developed a close collaboration with the Global Fund to fight AIDS, TB and Malaria (GF) which has generated USD\$100 Million in funding since 2007 and more recently RAM PNG has developed a substantial collaboration with the Against Malaria Foundation (AMF).

RAM has always been a regional project supporting the health authorities in our target countries; PNG, Solomon Islands and Timor Leste. RAM also conducted some early programs in Vanuatu and has contributed to Clinic construction projects there and we are currently working to assist Rotarians in Indonesia to set-up a 'RAM like' project in that country which we could support and collaborate with to secure the gains made in Timor Leste with comparable programs on the other side of the border. RAM has lodged a current TRF Global Grant Application seeking matching funds for a total budget of USD\$250,000 to support the Timor Leste National Malaria Program to achieve WHO Malaria Free Certification by 2022.

As an organisation RAM does not have any aspirations of expanding our programs beyond that discussed above but one of our long standing goals is to have RI adopt the global eradication of malaria as a fitting successor to the Polio Eradication Campaign. We do not see that as a duplication or expansion of our programs but rather a separate RI centred project contributing on a global scale, through international partnerships, to achieve mass immunisation and/or mass treatment programs.

RAM Timor Leste

Over the years Rotary programs to support the Timor Leste National Malaria Program have included projects of individual Australian Rotary Clubs, Rotary Districts and the Rotary Foundation, coordinated by RAM. Also, RAM Volunteer teams have travelled to Timor Leste in 2012, 2014 and 2017. Significant contributions to the National Malaria Program have included:-

- 2004 30,000 LLINs from the Rotary Club of Warringah and The Rotary Foundation.
- 2012 20,000 LLINs for Manatuto and Balibo from RAM.
- 2013 20,000 LLINs for expectant mothers and 1000 conical LLINs from RAM.
- 2014 7,500 LLINs for Maubara from RAM.
- 2015 22,700 LLINs for expectant mothers from RAM and The Rotary Foundation.
- 2016 \$20,000 logistics support for the Oecusse LLIN distribution from RAM.

The current Global Grant application is a partnership between the Rotary Club of Hobart North (President Jenny Kerrison), the Rotary Club of Dili Lafaek (President 'Aku' Amaral) and the National Malaria Program. The program to be supported by this Grant includes 40,000 LLINs and replacement IRS equipment as well as Community engagement activities with a total budget of USD\$250,000.

RAM PNG

Since 2007 RAM PNG has distributed 12 million LLINs with Global Fund support and is now working on the forth replacement cycle. In 2018 RAM PNG has become the sole Global Fund Principal Recipient for malaria in PNG. Preparations have included moving into a larger office, taking over the salaries and work of the National Malaria Control staff and preparing for distributions of Rapid Diagnostic Tests (RDTs) and ACTs (malaria treatment drugs) which will be procured by the Global Fund to supplement government stocks which have been in short supply. RAM PNG has also recently signed a new agreement with Against Malaria Foundation who will supply all the LLINs for the 2018 to 2020 household distribution.

Chasing Malaria PNG

The Chasing Malaria project is trialling strategies and approaches that will be required to drive down malaria to elimination in areas of low disease incidence. The program is funded by RAM and works in the National Capital District (NCD) and Central Province where malaria rates are already low.

The first component is Surveillance. RAM has designed and printed standard record books for all of the health clinics which record details of all malaria diagnostic tests including the home address and recent travel for all positive cases. These sheets also feed information

into the monthly reports to the National Health Information data base. The positive cases are mapped across the regions and malaria clusters are identified for follow-up.

RAM works closely with the National Department of Health (NDoH) and regularly visits all the clinics to check that the record keeping is complete and accurate, to audit the Rapid Diagnostic Test kits (RDTs) that have been used and to check that all the RDTs and treatment drugs are in date. Where required, RAM supplies RDTs and Drugs to the clinics as well as bed nets. All positive cases are given a family size net and all expectant mothers also receive a new net under this program.

Where malaria case clusters are identified, Ross Baibuni (RAM's Manager of Community Based Malaria Control) and his team recruit local volunteers and work with the local schools to teach the students about malaria and mosquito life cycles and to search out all the mosquito breeding sites around the cluster location. Breeding sites are mapped by GPS and regularly checked, when they are active (i.e. contain mosquito larvae) specific strategies are developed to destroy the larvae. These include draining or filling, introducing fish to eat the larvae or spraying larvacide. Local households are informed of the risk and the presence and use of bed nets is checked.

The pilot project is a work in progress with new and refined approaches being developed and assessed but it is already having an impact on malaria rates and the local people are very supportive, understand the aspects of malaria transmission and value their bed nets.

Retail Project PNG

The Retail Project which is designed to put affordable LLINs into retail outlets around the country so that families can buy more nets or replace damaged ones as required, has been halted for the past six months whilst the GST arrangements were clarified. This has now been resolved and new sales representatives have been recruited to get the project back on track.

RAM Solomon Islands

RAM Was launched in 1995 in Talaghi since then RAM programs have included:-

- Distribution of >200,000 Bed nets, Flip charts and brochures, larvacide & IRS.
- LLIN procurement for the Global fund.
- 21 Houses constructed for MoH malaria staff and microscope diagnosis.
- 13 Storage sheds for LLINs.
- 20 boats and several vehicles to assist LLIN distribution.
- 160 villages provided with tools.

The tools program is called "Healthy Villages". Under this scheme villages develop a plan of work to be undertaken and then apply to the Health Promotion Director (Solomon Islands Ministry of Health) and are required to sign an agreement that they will look after the tools. Once approved and tools purchased they are then collected by a representative of the village and transported to the village.

The first tools were provided to 30 villages in 2013 and the program has now reached 160 villages. There are currently another 65 qualified villages and funding has recently been provided by RAM to service half of these.

Each village is provided with the following tools at an average cost of AUD\$1,750:- Bush knives, brush knives, axes, flat files, spades, mattocks, metal rakes, crow bars and wheelbarrows.

Although further monitoring and evaluation needs to be done on the success of the program the feedback from the villages has been good with comments that they do not need to use bed nets as there are no mosquitos. We also know the program has been very successful in Isabel province where the incidence of malaria is now very low and malaria elimination programs are currently underway. This truly is a sustainable self-help program. Healthy Villages is supervised by PDG Wayne Morris OBE of the Rotary Club of Honiara.

Malaria Vaccine Development Project

RAM has endorsed RABS Project 16 / 2016-2017 which has been registered by RCs Southport and Broadbeach D9640, to cover a Rotary Zone wide fund raiser to support the Clinical trials of a promising malaria vaccine being developed by the Institute for Glycomics at Griffith University by a team led by Professor Michael Good . The vaccine PlasProtect[®], is a novel malaria vaccine candidate. It comprises whole malaria parasites that are grown in the laboratory and are then treated so they can no longer replicate or cause infection. As a result, when the vaccine is administered, the immune system is raised without causing disease.

The vaccine development has already included several trials which tested it's safety in humans and apparent efficacy in inducing immunity. The next stage involves clinical trials with a larger human sample from a non-endemic country (Australia) with a control group. This will assess whether the vaccine actually works; that is, will PlasProtect[®] protect people from malaria infection? The Malaria Vaccine Project has now raised more than **AUD\$400,000** out of its target of \$500,000.

Currently, the Institute is recruiting the first of three groups of 12 subjects to take part in the critical Phase one clinical trials of PlasProtect[®]. These trials are expected to commence at the end of June and continue through 2018 and most of 2019. The subjects will receive three doses of the vaccine followed by an injection of malaria parasites to test the efficacy of the vaccine in a non-endemic country. As Dr Danielle Stanistic, Senior Research Fellow and a member of the Satellite Rotary Club of Southport, remarked: "This stage of clinical trials is critical. Positive results will facilitate further testing in endemic countries like Africa, Indonesia or Papua New Guinea."

Other Rotary Malaria Programs

Rotary Club projects in many parts of the world have included provision of LLINs and other malaria interventions as part of targeted International aid programs to specific locations in endemic countries. Club and District programs in the USA and in Europe have provided assistance to African and South American regions.

Larger, longer term programs include:-

REMaRAG: (Rotarians Eliminating Malaria a Rotary Action Group) with representatives in the USA and UK this group seeks to disseminate information on Rotary malaria projects as well as lobbying RI for malaria to be the focus of the next Global Health project following completion of PolioPlus.

REMIT: Rotarians Eliminating Malaria in Tanzania, UK based.

RMP: Rotarian Malaria Partners. Five years ago, RMP was formed as an outgrowth of RC Seattle and D5030's Steering Committee for multiple anti-malaria projects in Africa. While our focus continues to be in Zambia, Uganda and Tanzania, we expect to be launching an initiative in Ethiopia later this year, led by PDG Ezra Teshome. In addition, we established a small grants (\$5,000 ea) programme to support Rotary Club efforts in other parts of the world, and the first grant was made to RC Key Biscayne for their most recent LLIN project in Venezuela.

CRAM: Canadian RAM, a loose affiliation of Rotary Districts working on malaria projects in various locations.

Collaborations

As well as working in support of the national Health Authorities in the countries where we work RAM has also successfully collaborated with other NGOs and CSOs including the Global Fund to fight AIDS, TB and malaria (GF), the Against Malaria Foundation (AMF), Population Services International (PSI) and completed complimentary work to Japan International Cooperation Agency (JICA) which also supports the Healthy Village Settings program in the Solomon Islands.

RAM is interested in exploring future collaborations with other organisations with similar goals and we hope that our presence and stand at the World Malaria Congress will provide the opportunity to commence discussions with a range of delegates that might lead to such future collaboration.

Rotary's role in Global Health

The following philosophical thoughts are from Drake Zimmerman (US based REMaRAG Vice Chair and passionate malaria program advocate since the early 1990's) and I think that they are important as an overview of what Rotary can bring to Global Health programs:-

Rotarians are **CATALYSTS**.

Rotarians **INSTIGATED** Polio mass vaccination efforts.

Rotary/Rotarians' MONEY sparked the efforts on Polio – Our money was essential to go after Polio and to keep the effort going.

YET EVEN THEN: Rotarians' donations, OUR MONEY ended up being ONLY 13% of the total.

More important is: **OUR POLITICAL WILL, DRIVE and INSISTENCE on Eradication.**

For Polio, Rotarians were **THE DECIDING FACTOR**, we bring the drive to get this far and to finish the effort.

This is what we can bring to malaria eradication also.