APMEN VCWG: AN UPDATE

13th Annual RBM VCWG Meeting, 07 – 09 Feb 2018, Moevenpick Hotel, Geneva
Background

- 18 countries
- 40 partner institutions: public health, academic, public and private sector institutions
- Two main objectives:
  (a) contribute to improved evidence, facilitate and support work and action in areas that are unique, and that impact on malaria elimination in the region; and
  (b) human resource capacity development

APMEN VCWG

- Co-coordinated by the University of California San Francisco (UCSF) Global Health Group in San Francisco, USA, Faculty of Tropical Medicine, Mahidol, Bangkok, Thailand and Malaria Consortium Office, Bangkok.
- Supported by Sumitomo Chemicals and UCSF through its BMGF grant.
- Co-Chairs: Ministry of Health, Malaysia & Ministry of Health and Family Welfare, India.
Translate strong political commitment into action

- 22 countries in WPRO, SEARO and EMRO
- Commodities, finance and governance, regulatory collaboration

Integrate and complement regional elimination efforts

APMEN members
- 18 Countries
- 34 Partner Institutions
- Working groups
Improved National Malaria Program management and capacity building

Knowledge management and exchange

Vector control
(New tools for outdoor transmission; integrated vector management)

Surveillance and Response
(Strategy approach based on malaria burden; cross-border issues)

Vivax and case management
(Radical cure; point-of-care G6PDd-testing; drug-resistance)

Asia Pacific Free of Malaria by 2030
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Frequency/Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technical and coordination support for APMEN Vector Control Working Group</td>
<td>Secured until Q1 2019</td>
</tr>
<tr>
<td>2</td>
<td>APMEN Vector Control Programme Assistant</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vector Control WG Annual Meeting</td>
<td>Once a year</td>
</tr>
<tr>
<td>4</td>
<td>APMEN AGM</td>
<td>Once a year</td>
</tr>
<tr>
<td>5</td>
<td>APMEN Fellowship</td>
<td>Two per year (2017 &amp; 2018)</td>
</tr>
<tr>
<td>6</td>
<td>Capacity building training</td>
<td>Two (2017 &amp; 2018)</td>
</tr>
<tr>
<td>7</td>
<td>Resource Exchange for Entomology-Vector Control Technical Assistance and regional resources</td>
<td>On going</td>
</tr>
<tr>
<td>8</td>
<td>Plan to stimulate vector ecology research and vector control tool development especially on outdoor and residual transmission</td>
<td>On going</td>
</tr>
<tr>
<td>9</td>
<td>Improve linkages with VXWG and SRWG</td>
<td>On going</td>
</tr>
</tbody>
</table>
**VCWG WORKPLAN**

<table>
<thead>
<tr>
<th>Activity description</th>
<th>Output</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical and coordination support for APMEN Vector Control Working Group</td>
<td>Technical and coordination support secured and sustained through Q1 2019.</td>
<td>▪ Technical support boosts the rigor of national and regional vector control and entomology strategy, programming, and research;</td>
</tr>
<tr>
<td>APMEN Vector Control Programme Assistant appointed: Arada Mahasawin Technical &amp; Coordination support: Dr Jeffery Hii Latifeh Dahmash</td>
<td>APMEN Vector Control Programme Assistant appointed: Arada Mahasawin Technical &amp; Coordination support: Dr Jeffery Hii Latifeh Dahmash</td>
<td>▪ VCWG meeting successfully convened; and ▪ capacity building activities successfully implemented</td>
</tr>
</tbody>
</table>
## VCWG WORKPLAN

<table>
<thead>
<tr>
<th>Activity description</th>
<th>Output</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| Vector Control WG Meeting         | ▪  Vector Control WG Meeting: 12 – 14 July 2017, Sukosol Hotel, Bangkok, Thailand.  
▪  Vector Control WG Meeting 2018 | Vector Control WG (VCWG) contributes to the evidence base for malaria elimination.                   |
| APMEN AGM                         | ▪  AGM (APLMA): 4–8 Dec, 2017, Kempinski Hotel, Naypyidaw, Myanmar      | Vector Control WG (VCWG) contributes to the evidence base for malaria elimination.                   |
|                                   | ▪  AGM (APLMA): 2018                                                   |                                                                                                    |
APMEN Annual General Meeting, 4 December 2017, Myanmar

Summary of 2017 July APMEN Vector Control Working Group (VCWG) meeting, Bangkok
The objective of the annual VCWG meeting is to provide a forum for collaboration, knowledge exchange, showcasing lessons learned, and sharing of ideas for future activities.

Key Topics covered

A) CAPACITY STRENGTHENING

- WHO position in VC activities across APMEN countries
- Network-to-network info sharing & increasing capacity for VC in APMEN countries
Key Topics covered

B) TECHNICAL ISSUES AND CURRENT RESEARCH

• Insecticide resistance, VC and entomology control in elimination and burden settings
• Current research and APMEN VCWG research agenda
• Industry, new tools, and innovation

C) VCWG ORGANISATION

• Update/ review of Mekong Outdoor Malaria Transmission Network
• APMEN VCWG concept proposals
Recommendations for APMEN & APMLA

A) ENCOURAGE POLITICAL COMMITMENT FOR INVESTMENT IN ENTOMOLOGY AND EFFECTIVE VC FOR MALARIA ELIMINATION ACROSS THE ASIA PACIFIC REGION

• Showcase ‘success stories’ of government supported VC programmes in the region
• Promote and invest in strategies that target high risk groups, where transmission is high and coverage low
• Advocate for increased investment in entomological surveillance activities relevant to each country setting
Recommendations for APMLA

B) PROMOTE GREATER DIALOGUE RE. GLOBAL HEALTH SECURITY IN THE REGION

• Advocate for a sustained IVM approach to support regional health security against emerging/re-emerging vector borne diseases
• Engage in intersectoral collaborations (eg. Ministry of Defence) through ‘global security’ lens to promote and extend VC activities
Enhancing Civilian-Military Cooperation to Accelerate Malaria Elimination in Southeast Asia
June 26–28, 2017

A Meeting Convened by the Armed Forces Research Institute of Medical Sciences (AFRIMS)
Recommendations for APMEN & APMLA

C) ADVOCATE FOR IMPROVING ACCESS TO RELEVANT VECTOR CONTROL TOOLS IN THE REGION

i) REGISTRATION
   • address bottlenecks for product registration
   • support harmonisation of national regulatory processes
   • support key partners

ii) INNOVATION
    • advocate for better adapted VC tools
    • advocate for R&D of adapted VC tools
Statement by APMEN Vector Control Working Group regarding

Vector Control in the Asia Pacific region
(21 July 2017)

Recommendations:

APLMA may reach out to the following ministries in relation to vector control:

- Ministries of Health e.g. statement to promote public health entomology as a career pathway for sustainable integrated vector management.
- Ministries of Agriculture e.g. on aggregating mapping data of plantations/transmission zones and to facilitate streamlined pesticide registration.
- Ministries of Education e.g. to promote entomology as a training pathway.
- Ministries of Public Works e.g. to encourage collaboration with private sector, companies hiring temporary workers, for infrastructure projects in areas of high transmission.
- Ministries of Finance e.g. to advocate for the reduction of taxes and tariffs for vector control products and for the “positive return on investment” for vector control for both malaria and for Aedes-borne diseases.

Malaria Week and the Ministerial Meeting in December 2018 is one platform at which to raise the importance of vector control.
AGENDA

(draft)

Innovation and Access for Vector Control tools in Asia Pacific

Wednesday 31st January 2018

8.30-14.00

Novotel Siam

Bangkok, Thailand
Objectives:

1. Highlight the importance of vector control and surveillance for malaria elimination and health security;
2. Identify the need for new and/or better adapted Asia-specific vector surveillance and control tools;
3. Develop a collective understanding of the challenges of accessing new vector control tools in the Asia Pacific region and opportunities for addressing these challenges;

Expected outcome:

A coordinated and cross-sectoral approach to improving access and innovation of vector control tools to support malaria elimination and regional health security for the Asia Pacific region is achieved.
Participants identified some of the key challenges to innovation and access including the specificities of vector behaviour in the Asia Pacific region and the time-consuming registration processes for new tools. They also discussed the possibility of joint registration processes for WHO pre-qualified products as well as opportunities to generate interest around innovative products among national regulatory agencies.

Dr Kesete Admasu, CEO of the RBM Partnership to End Malaria highlighted the importance of an enabling policy environment for the adoption of new tools and exchange of knowledge among countries, which can be enhanced through a regional mechanism. This approach is an integral part of the RBM Partnership’s strategy, he noted.
Participants identified some of the key challenges to innovation and access including the specificities of vector behaviour in the Asia Pacific region and the time-consuming registration processes for new tools. They also discussed the possibility of joint registration processes for WHO pre-qualified products as well as opportunities to generate interest around innovative products among national regulatory agencies.

Targeted innovation and better access to vector control tools essential in Asia Pacific

7th International Integrated Vector Management Course 2017

29th OCTOBER TO 4th NOVEMBER 2017
KUALA LUMPUR, MALAYSIA

OBJECTIVE

This course aims to develop in-country team equipped with necessary knowledge and skills to support capacity building and application of IVM approach. Upon completion of this course, we hope that the participants could be able to recognize the important locally-prevailing vectors of human disease, perform and train others regarding in IVM strategies, and develop an action plan for implementing pilot activity on IVM.

CANDIDATE

Candidates should be directors and/or officials who are currently responsible or involved in dengue vector control review development, training, implementation, monitoring and evaluation at either national/provincial or municipal/district level. They are expected to have adequate reading, writing, and verbal skills in English. They should be able to communicate effectively in English and interact constructively with colleagues from different social, political, and cultural backgrounds.

OPERATING DETAILS

Number of Participants: 36 (20 local participants & 16 international participants)
Venue : Kuala Lumpur, Malaysia
Duration : Seven (7) days

ORGANIZED BY MINISTRY OF HEALTH MALAYSIA
COURSE DESCRIPTION

The course would cover the six (6) modules (as below). There will be pre and post-test as a tool to evaluate participants' knowledge and the effectiveness of the course.

1. The Basics
   a. The Patho Physiology of Vector Borne Diseases
   b. The Vector of Dengue and Malaria
2. Methods of Dengue & Malaria Vector Control
   a. Environmental Management
   b. Personal and Household Protection
   c. Larvaciding
   d. Chemical Control - Adulticiding
   e. Novel Methods and Tools for Vector Control
3. Surveillance and Monitoring Tools
   a. Vector Surveillance
   b. Insecticide Resistance Monitoring
   c. Disease Surveillance
   d. Indicators for Monitoring and Evaluation
4. Organization and Management
   a. Principles of Integrated Vector Management
   b. Planning of Vector Control
   c. Response to Disease Outbreaks
   d. Sound Practices of Pesticides Use, Transport, Storage and Disposal
5. Collaboration and Participation
   a. Intra and Inter Sector Collaboration
   b. Community Participation
6. Field Work
   a. Field trip visit (vector control intervention)

---

DENGUE PREVENTION AND CONTROL IN PETALING DISTRICT, SELANGOR, MALAYSIA

Petaling District Health Office
2 November 2017

- Background on Petaling district
- Dengue situation in Petaling district
- Dengue prevention and control activities:
  - Case-based Dengue Surveillance
  - Integrated vector management
IMR to use Wolbachia strain that is heat tolerant

A study by Ross et al. on heat tolerance of three strains of Wolbachia, namely wMel, wMelPop and wMelPop-CL control found that only the wMel strain was heat tolerant and able to transmit from mother to offspring with high reliability at 26°C to 37°C.

Malaysia (IMR) will be using the wMelB strain, and it was reported that Singapore is using a similar strain. The IMR is collaborating with Prof Amy Hoffman who is affiliated with the University of Melbourne.

The Health Ministry's approach is to target both the vector species, Aedes aegypti and Aedes albopictus. We plan to release Aedes aegypti first and subsequently Aedes albopictus.

DATUK DR FAIZILAH KAMALUDIN
Director
Institute for Medical Research
<table>
<thead>
<tr>
<th>4. Four APMEN Fellowships in Entomology/Vector Control</th>
<th>Fellowship program successfully completed as per agreed program. <em>Two fellowships in 2018.</em></th>
<th>Entomology and vector control capacity increased in the National Malaria Control program in the country of the fellowship recipient.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Two capacity building trainings connected in Entomology/Vector Control</td>
<td>Trainings successfully completed as per agreed program. <em>One training completed in 2017, one scheduled in 2018.</em></td>
<td>Entomology and vector control capacity increased in participating National Malaria Control and sub-national programs.</td>
</tr>
<tr>
<td>8. Develop a plan to stimulate vector ecology research and vector control tool development in the Asia Pacific region, particularly with regard to residual and outdoor transmission, and protecting mobile and migrant populations.</td>
<td>Workplan developed including identification of implementers.</td>
<td>Increased output of vector ecology research undertaken resulting in reduced malaria infections in mobile and migrant populations in the Asia Pacific Region.</td>
</tr>
</tbody>
</table>
BURDEN AND CAUSES OF RESIDUAL MALARIA

- Residual malaria hotspots in Peru and Brazil: setting the stage for testing improved: PI Dionicia Gamboa Vilela, study sites in Brazil and Peru.
- Understanding residual transmission for sustainable malaria control and enhancement of elimination efforts in Africa: PI Joseph Mwangangi, study sites in Kenya, Cameroon and Ethiopia.
- Residual Malaria Transmission in the Greater Mekong Subregion (GMS) - Studies to examine its magnitude and identify its causes: PI Jeffrey Hii, study sites in Thailand and Vietnam.
- Understanding human, parasite, vector and environmental interactions driving residual malaria transmission in Papua New Guinea: PI Moses Laman, study sites are in Papua New Guinea.
- Where and when is residual malaria transmission taking place? Investigating magnitude and drivers of persistent Plasmodium infections in East and West Africa: PI Fredros Okumu, study sites in Burkina Faso and Tanzania.