

Update on recent and ongoing GMP initiatives on malaria entomology and vector control



13th Annual Meeting of the RBM Vector Control Working Group
Geneva, Switzerland
7 – 9 February 2018

Global **Malaria** Programme



**World Health
Organization**



1. Global Vector Control Response 2017-2030
2. Malaria Vector Surveillance
3. Evaluation of Vector Control Tools
4. Implementation Guidance
5. Advocacy

1. Global Vector Control Response 2017-2030



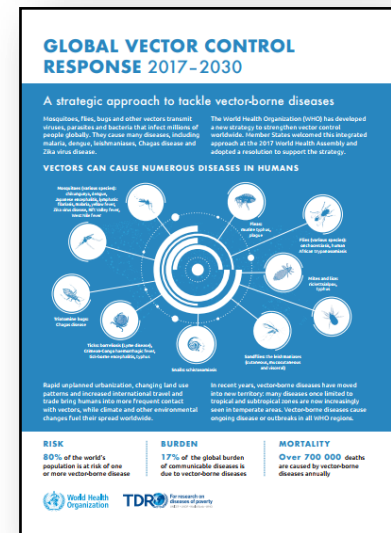
- Draft document and draft resolution discussed at 70th WHA: 31 May 2017
 - Positive interventions made by countries from across all WHO regions, including:
 - 3 regional statements (Africa, Eastern Mediterranean & South-East Asia)
 - 36 country statements
 - Adopted without amendment:
 - *Resolution WHA70.16: an integrated approach for the control of vector-borne diseases*



1. Global Vector Control Response 2017-2030



- Final GVCR document released:
 - English: October 2017
 - Arabic, Chinese, French, Spanish, Russian: pending (draft only)
- Other supporting documents:
 - Lancet commentary: June 2017
 - Advocacy brochure: September 2017
 - Online Q&As: September 2017



1. Global Vector Control Response 2017-2030



www.who.int/vector-control

- Thematic webpage that consolidates all links and resources across vector-borne diseases
- Includes disease outbreak notifications

The screenshot shows the WHO Vector Control Response 2017-2030 webpage. At the top, there's a navigation bar with the WHO logo and language options (English, Français, Pусский, Español). Below this is a search bar and a menu with links to Health topics, Data, Media centre, Publications, Countries, Programmes, Governance, and About WHO. The main heading is 'Vector control'. Below it, a section titled 'Research as a foundation of the new strategy' includes text about research being a core component of the response and a link to a multi-sectoral approach. A large image shows a community health worker sitting on a bench, talking to a group of people in a village setting. Below this, three key statistics are highlighted: 12 major vector-borne diseases, 700 000 deaths annually, and 80% of the world's population at risk. Each statistic has a corresponding link to a fact sheet or map. The bottom section is divided into three columns: 'Diseases' (listing various diseases like Chikungunya, Dengue, etc.), 'Global vector control response' (describing the response strategy), and 'News and events' (including a news feature about a malaria campaign in Nigeria).

World Health Organization

English Français Pусский Español

Health topics Data Media centre Publications Countries Programmes Governance About WHO

Vector control

Research as a foundation of the new strategy

Research is a core component of the Global vector control response 2017-2030. This includes developing new and improved vector control tools, technologies and approaches, and working out how to integrate and tailor these to local contexts.

Developing multi-sectoral approaches to prevent and control vector-borne diseases

WHO/C. Cagge

Vector-borne diseases

12

major diseases are caused by vectors globally. Vectors transmit many other disease pathogens to humans.

Global burden of major vector-borne diseases pdf, 470kb

Global toll

700 000

deaths are caused by vector-borne diseases annually.

Fact sheet: vector-borne diseases

At risk

80%

of the world's population is at risk of one or more vector-borne disease.

Map: Distribution of vector-borne diseases pdf, 695kb

Diseases

Global vector control response

News and events

Fact sheets

Chagas disease | Chikungunya | Crimean-Congo haemorrhagic fever | Dengue and severe dengue | Human African Trypanosomiasis | Japanese encephalitis | Leishmaniasis | Lymphatic filariasis | Malaria | Onchocerciasis

The Global vector control response 2017-2030 was welcomed by the Seventieth World Health Assembly and a resolution was adopted. It provides strategic guidance to countries and development partners for urgent strengthening of vector control to prevent disease and respond to outbreaks.

Global vector control response 2017-2030

Framework for a national vector control needs

News and features

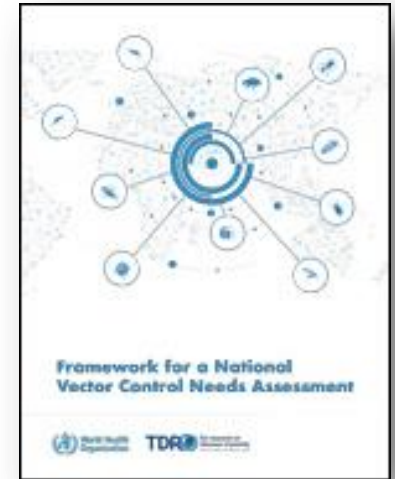
New interactive mapping tool 7 November 2017

Malaria campaign saving young lives in Nigeria Interview with Dr Pedro Alonso, Director of the WHO Global Malaria Programme 20 October 2017

1. Global Vector Control Response 2017-2030



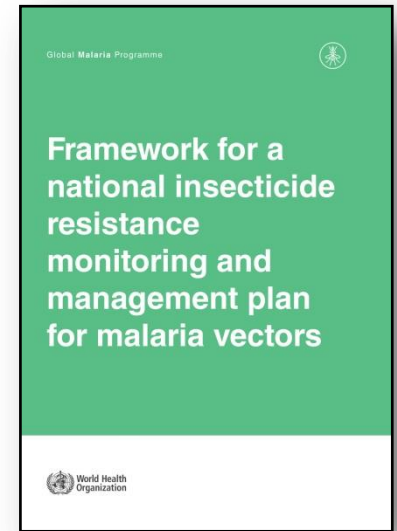
- Framework for a National Vector Control Needs Assessment
English version published November 2017
- Updates anticipated
 - To be revised based on experience from operational use and from GVCR implementation and progress
- Translations to be considered following revision



2. Malaria Vector Surveillance



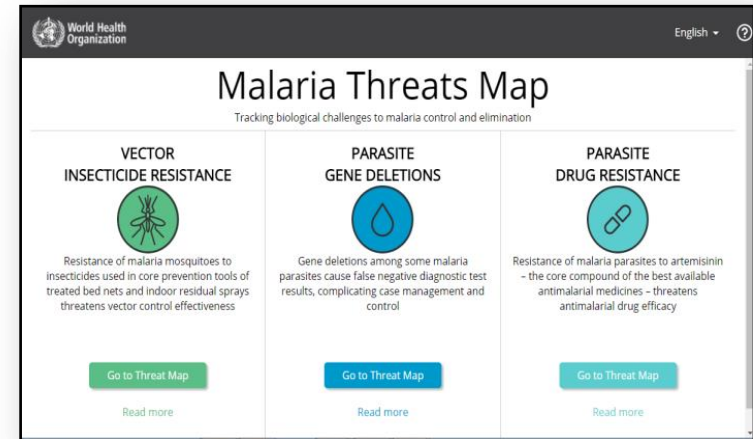
- National IR monitoring & management framework released:
 - English: March 2017
 - Spanish: June 2017
 - French: July 2017
- Webinars held:
 - English: July 2017
 - Spanish: July 2017
- Other supporting documents released:
 - Key points (English, French, Spanish): July 2017
 - Q&As (English, French, Spanish): July 2017
 - Presentation (English, French, Spanish): July 2017



2. Malaria Vector Surveillance



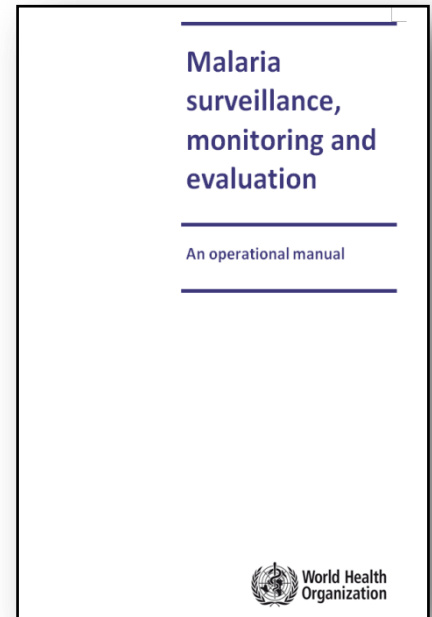
- Malaria Threats Map Application:
 - *Vector* insecticide resistance
 - *hrp2/3* gene deletions
 - Drug efficacy and resistance
- Beta application online live:
 - English, French, Spanish: October 2017
 - who.int/malaria/maps/threats
- Feedback requested:
 - Online form to capture functionality/data issues and suggestions for improvement
- Consultations ongoing:
 - To define specifications for Phase II development



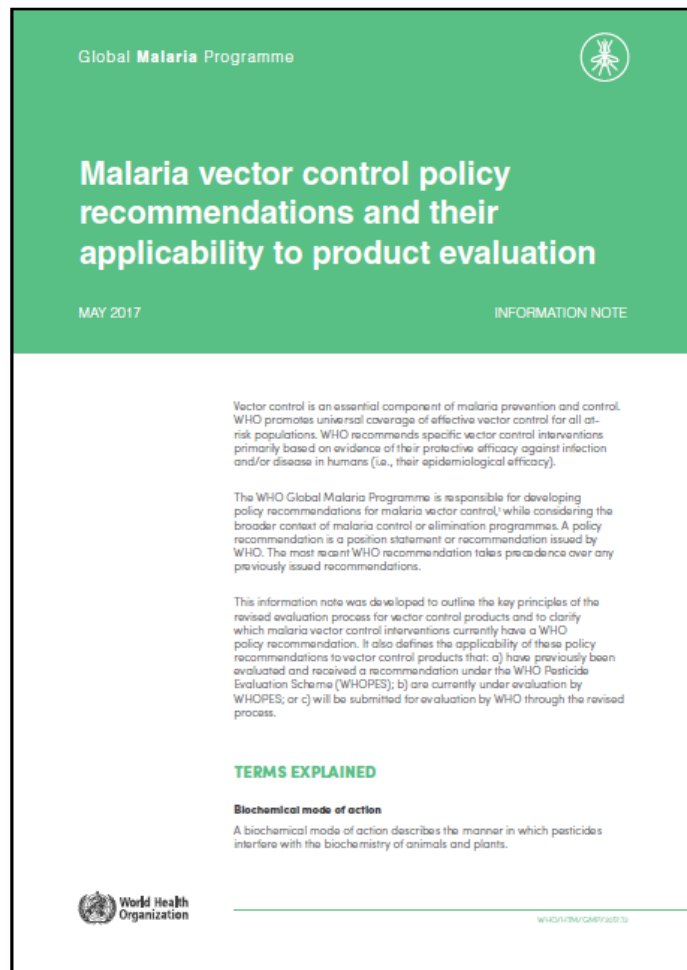
2. Malaria Vector Surveillance



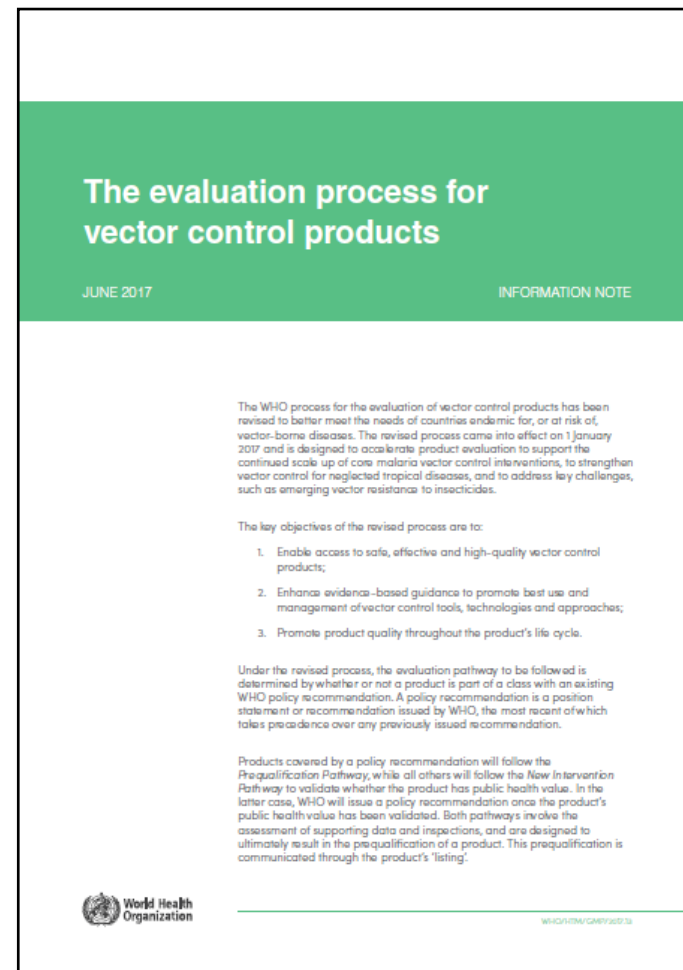
- Malaria surveillance, monitoring and evaluation: An operational manual
- Chapter 5 – Entomological surveillance and response
 - Describe entomological indicators for monitoring and evaluation of vector control interventions.
 - Consideration for entomological surveillance by transmission settings – burden reduction, elimination and prevention of re-establishment.
 - Emphasis on evidence based decision in vector control



3. Evaluation of Vector Control Tools



<http://www.who.int/malaria/publications/atoz/vector-control-recommendations/en/>

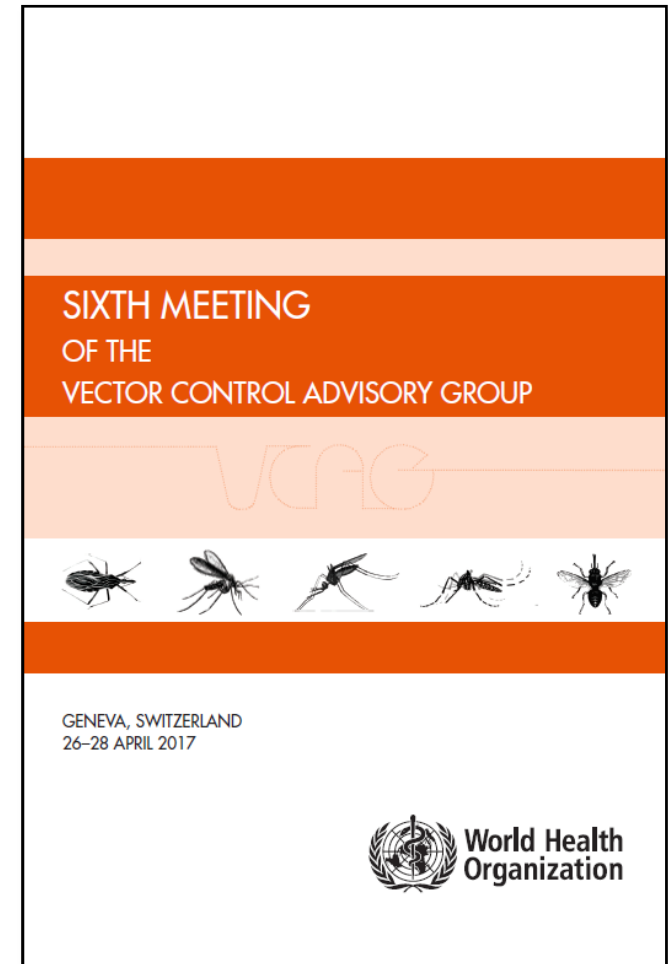


<http://www.who.int/malaria/publications/atoz/evaluation-process-vector-control-products/en/>

3. Evaluation of Vector Control Tools



- Vector Control Advisory Group (VCAG) advise WHO on public health value of new tools, technologies and approaches for vector
- 6th VCAG convened 26-28 April 2017
- 7th VCAG convened 24-26 Oct 2017
- Evidence Review Groups under VCAG
 - Trial Design - 24-25 April 2017



3. Evaluation of Vector Control Tools

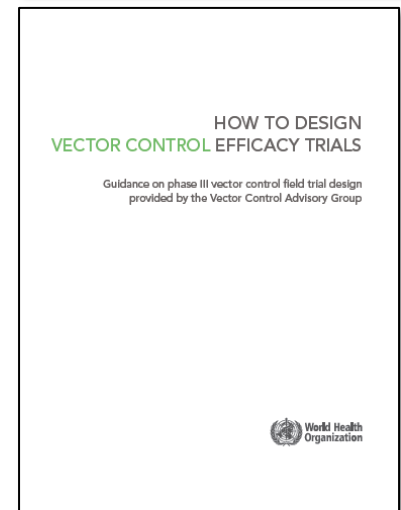
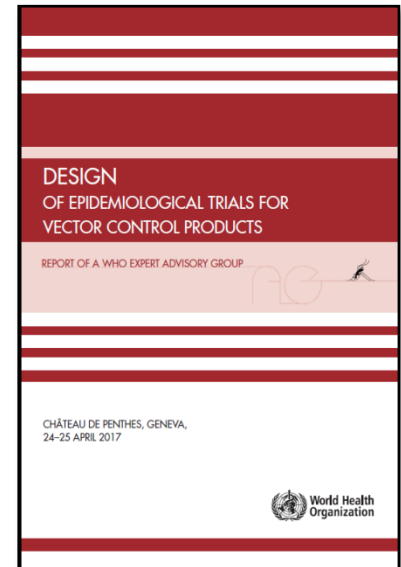


- ERG on epidemiological trials for vector control products: recommendations on hierarchy of trial designs, consideration for randomisation, endpoints, and measurement of cost effectiveness.

Report published July 2017

- WHO manual on Design Vector Control Efficacy Trials: Guidance on Phase III vector control field trial design provided by VCAG

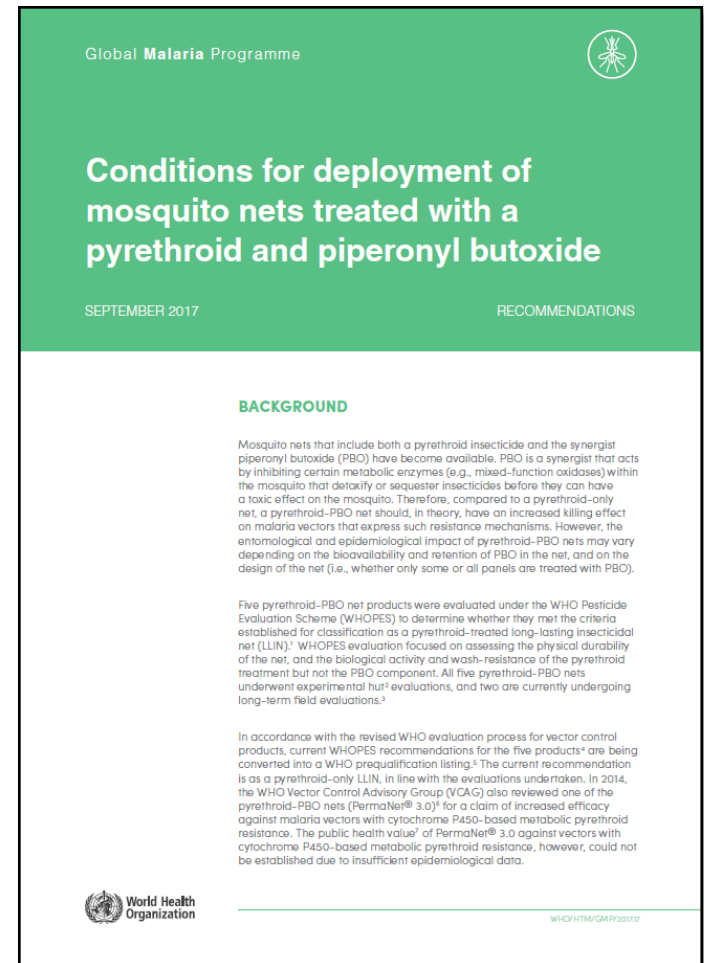
Manual published December 2017



3. Evaluation of Vector Control Tools



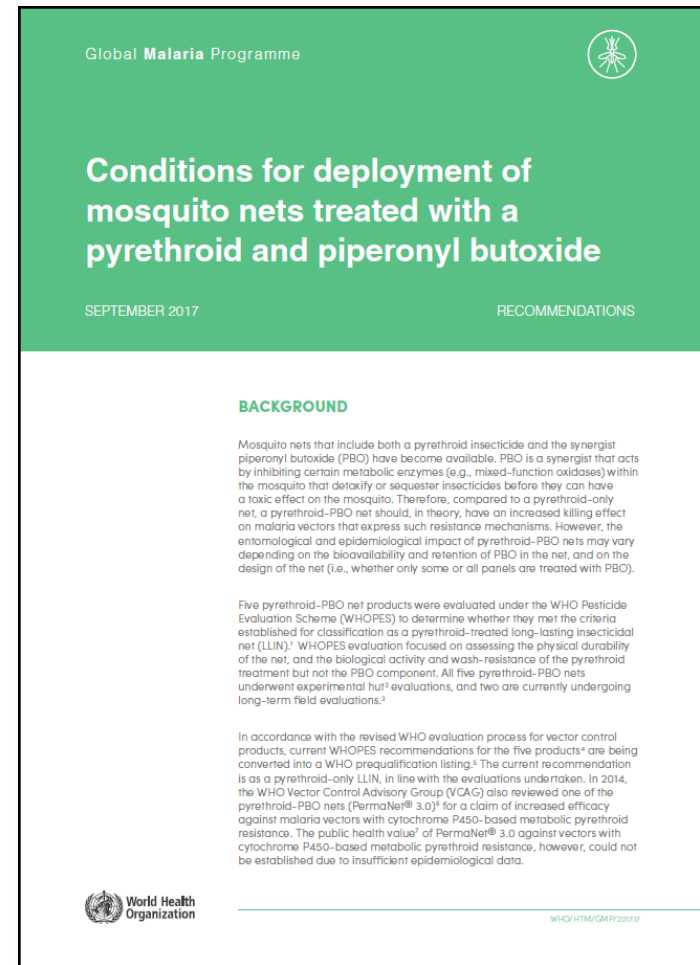
- ERG on pyrethroid-PBO nets reconvened in June 2017 to review new evidence from a cluster randomized controlled trial in Muleba, Tanzania, on the comparative impact of a pyrethroid-PBO net when compared to a pyrethroid-only LLIN
- Revised recommendations published September 2017 / December 2017



3. Evaluation of Vector Control Tools



- WHO recommends that NMCPs consider deployment of pyrethroid-PBO nets in areas where the main malaria vector(s) have:
 - confirmed pyrethroid resistance of intermediate level (10-80% mortality) conferred (at least in part) by monooxygenase-based resistance mechanism
- WHO endorsed pyrethroid-PBO nets as a new class of vector control product



3. Evaluation of Vector Control Tools



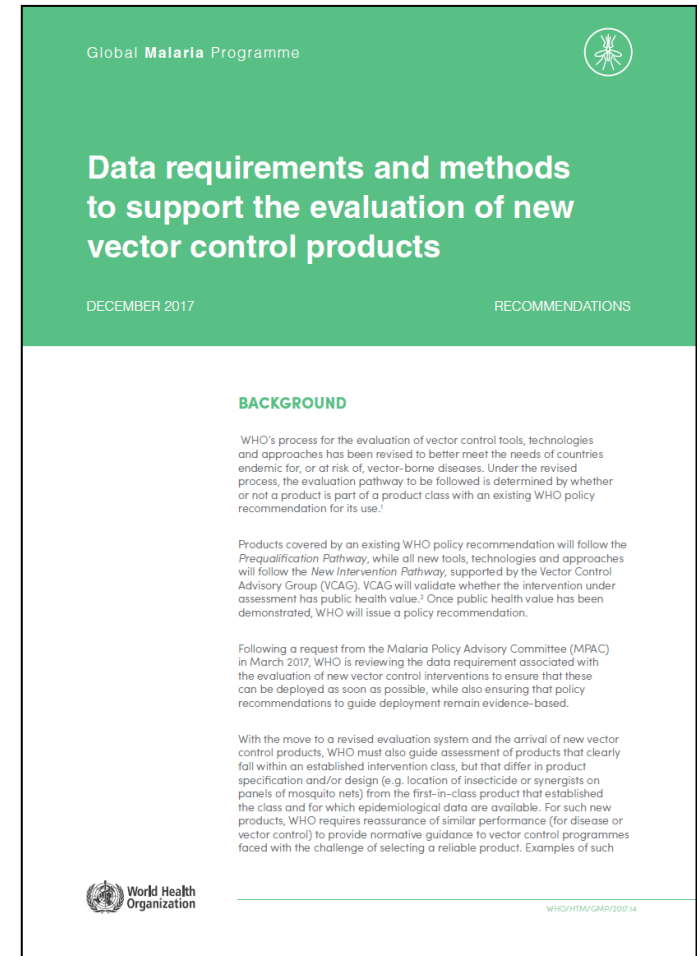
ERG held September 2017 to:

Part 1

- To advise WHO on data requirements and methodology to determine whether existing WHO policy for a class of products can be extended to recommend deployment of a new vector control intervention that is not part of the class
- To apply criteria formulated under objective 1 to the assessment of SumiShield® 50 WG

Part 2

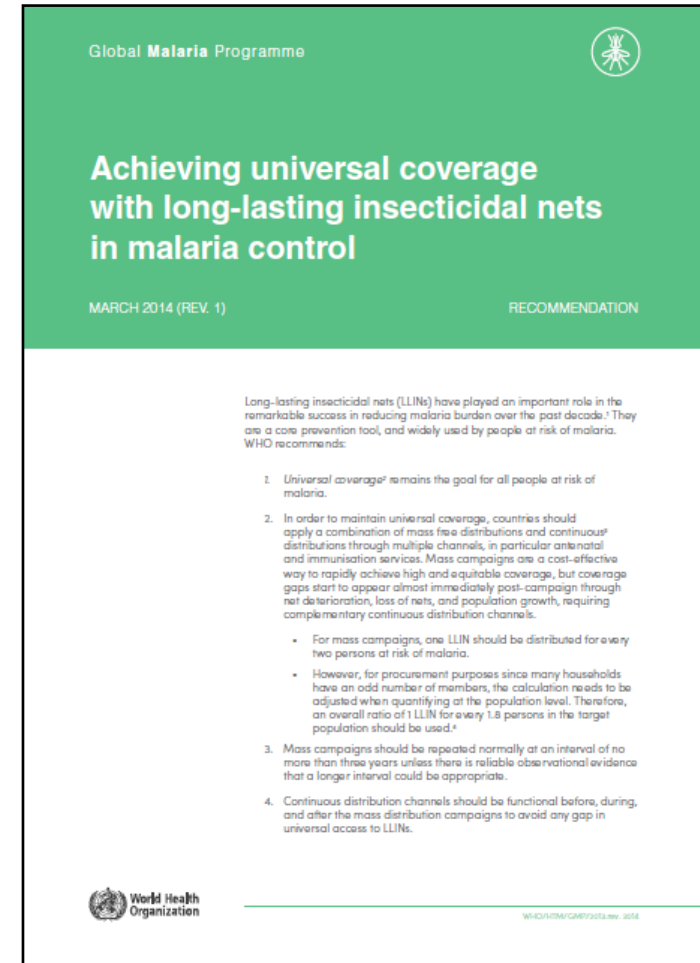
- To advise WHO on data requirements and methodology to determine whether new vector control products that enter an established class should be assessed for similar or better performance than the first-in-class product.
- To advise WHO on the data requirements and methodology to assess products with two active ingredients and process to establish a new product class
- ERG presented to MPAC in October 2017
- SumiShield® 50 WG prequalified in November 2017
- Recommendations published December 2017



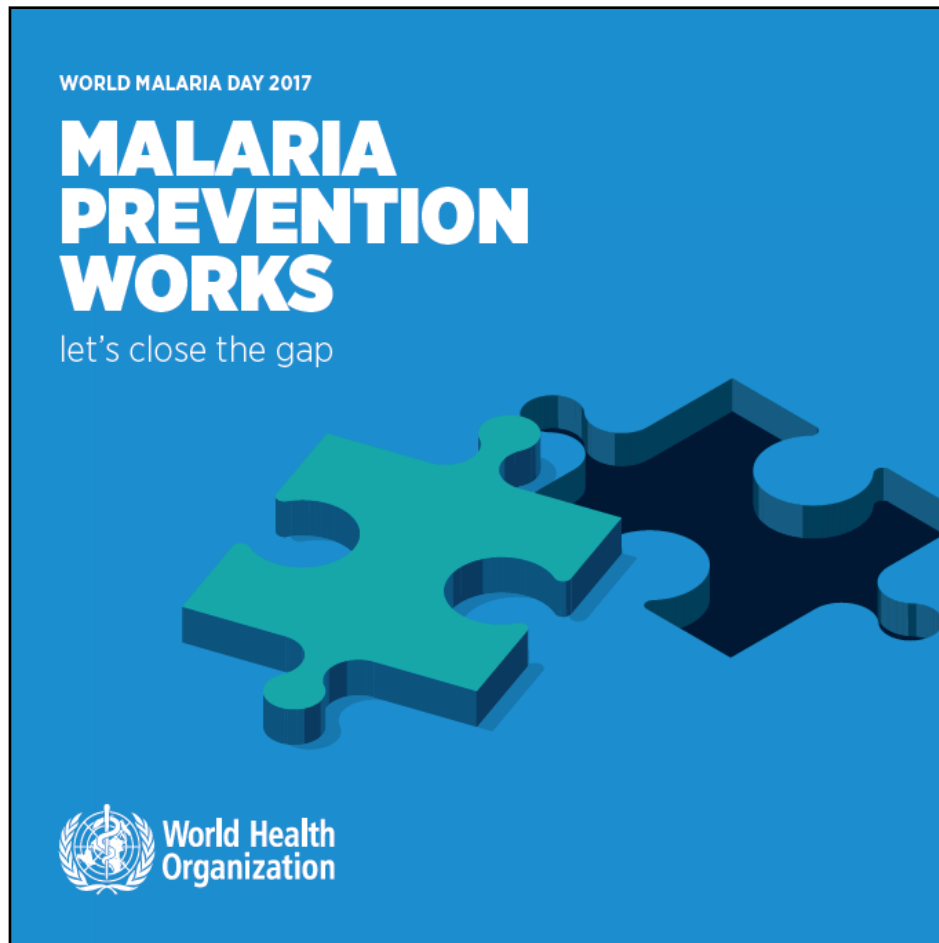
4. Implementation Guidance



- Universal Coverage Recommendations:
 - Revision initiated after March 2017 VCTEG meeting to include new finding on user preferences and ITN use.
 - Presented to MPAC in October 2017.
- Published December 2017*



5. Advocacy



<http://who.int/malaria/publications/atoz/malaria-prevention-works/en/>



World Malaria Report 2017


- After an unprecedented period of success in global malaria control, progress has stalled.

Mobile app



The content of the *World malaria report* is available through a mobile application.

Download the app for iOS devices 

Download the app for Android devices 

<http://www.who.int/malaria/publications/world-malaria-report-2017/en/>

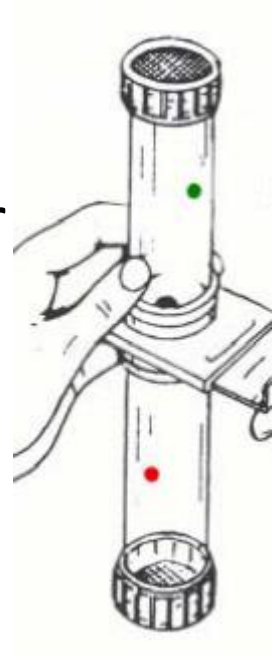


Ongoing & Planned Work, 2018/19

1. Global Vector Control Response 2017-2030



- Support to development of regional action plans:
 - South-East Asia Region
 - Eastern Mediterranean Region
 - African Region
- Support to development of country Vector Control Needs Assessments
 - Work ongoing in Greater Mekong Subregion (6 countries)
- Insecticide impregnated papers and WHO test kits for insecticide resistance monitoring
 - Comprehensive assessment of impediments to timely production, supply and quality
 - Development of prioritized and costed solutions to overcome these impediments



2. Malaria Vector Surveillance



- Malaria Threats Map Application
 - Phase II development, incl mobile app
 - Data update
- Malaria surveillance, monitoring & evaluation manual
 - 1st edition to be published March 2018
- Development of DHIS 2 entomological surveillance module
- Global status report on insecticide resistance
 - Undergoing editing. Publication May 2018
- Expanding on guidance for elimination settings
 - ERG on assessing and using receptivity (Q3 2018)
- Manual on practical entomology in malaria (1975)
 - Comprehensive revision to be undertaken during 2018

3. Evaluation of Vector Control Tools

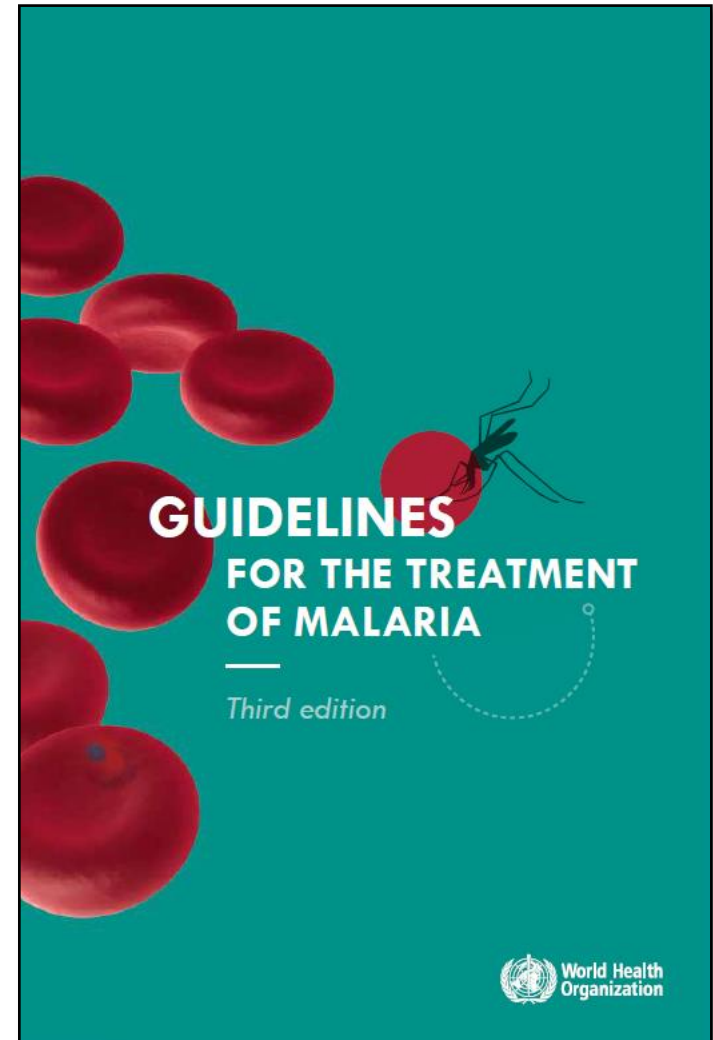


- **Vector Control Advisory Group (VCAG)**
 - Manager recruited: Likely start date April 2018
 - WHO PQT now part of the VCAG secretariat
 - Communication and process to be enhanced during 2018
 - Membership composition evolving: Gene drive and regulatory expert to join as of next meeting. Product development expert not yet identified.
 - Next meeting 14-16 May 2018
- **Evaluation process**
 - Update documentation to reflect implementation experience to date
- **Evidence Review Group**
 - ERG to determination of non-inferiority planned for 2018. Background work on methodology started.
- **Prioritization**
 - Background work on economics initiated
 - Guidance on collection of cost data alongside trials to be developed & included in trial design manual

4. Implementation Guidance



- Guidelines for prevention of malaria through vector control:
 - Modelled on guidelines for the treatment of malaria
 - Development following WHO Handbook for Guideline Development
 - 1st edition undergoing editing in preparation for MPAC and GRC
 - Likely publication mid-2018
 - Work on 2nd edition to be initiated including:
 - Systematic review of non-RCT evidence on IRS
 - Detailed review and update of economics literature and preparation of GRADE table sections on resource use





- WHO technical consultation on universal access to core malaria interventions
 - 12-15th February 2018
- World Malaria Report 2018

Thank you!



To receive regular updated from WHO GMP subscribe to:

- 1) Newsletter: http://www.who.int/malaria/news/sign_up_form/en/
- 2) Malarianews listserv by writing to: gmpnews@who.int

Global **Malaria** Programme



**World Health
Organization**