



Recent WHO guidance relevant to entomology and vector control

Published in 2017

Malaria vector control policy recommendations and their applicability to product evaluation

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



This information note was developed to outline the key principles of the revised evaluation process for vector control products and to clarify which malaria vector control interventions currently have a WHO policy recommendation. It also defines the applicability of these policy recommendations to vector control products that: a) have previously been evaluated and received a recommendation under the WHO Pesticide Evaluation Scheme (WHOPES); b) are currently under evaluation by WHOPES; or c) will be submitted for evaluation by WHO through the revised process.

The evaluation process for vector control products

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



The purpose of this information note is to describe the revised evaluation process following the transition from the WHO Pesticide Evaluation Scheme to the WHO Prequalification Team, including a description of the role of the Vector Control Advisory Group as part of this process. It outlines the two pathways and their associated components, and is meant to guide interactions between product developers/manufacturers and WHO.

Data requirements and methods to support the evaluation of new vector control products

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



To support the implementation of the revised process, WHO is reviewing data requirements associated with the evaluation of new vector control interventions. The aim is to ensure that these can be deployed as soon as possible, while also ensuring that policy recommendations to guide deployment remain evidence-based. As a first step, an evidence review group (ERG) was convened to review summarized laboratory and field trial data for selected new vector control products. The reviews were used as case-studies to develop both general and product-specific policy recommendations to support implementation of the revised evaluation process.

Achieving and maintaining universal coverage with long-lasting insecticidal nets for malaria control

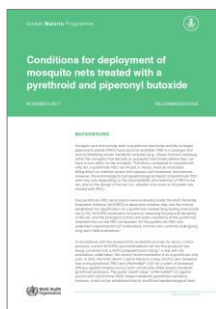
http://www.who.int/malaria/publications/atoz/who_recommendation_coverage_llin/



Long-lasting insecticidal nets (LLINs) have played an important role in reducing the global malaria burden since 2000. They are a core prevention tool used widely by people at risk of malaria. This document provides recommendations on how to achieve and maintain universal coverage with LLINs, in line with the Global Technical Strategy for Malaria 2016-2030. Universal coverage for malaria vector control is defined as universal access to and use of appropriate interventions by populations at risk of malaria. It supersedes the WHO recommendations for achieving universal coverage with long-lasting insecticidal nets in malaria control published in September 2013.

Conditions for deployment of mosquito nets treated with a pyrethroid and piperonyl butoxide (latest revision: November 2017)

<http://www.who.int/malaria/publications/atoz/use-of-pbo-treated-llins/>



In the ongoing transition of the WHO evaluation process for vector control products from WHOPEs to the Prequalification Team, WHO has updated its policy recommendations on the deployment of pyrethroid plus piperonyl butoxide (PBO) nets. This update is an attempt to further clarify the available evidence base for these types of nets, their categorization under the revised evaluation system, and the additional data required to support WHO's policy-making process. These recommendations replace the 2015 WHO recommendations on pyrethroid-PBO nets and may be subject to further revision as required.

Framework for a national plan for monitoring and management of insecticide resistance in malaria vectors

<http://www.who.int/malaria/publications/atoz/9789241512138/>



Effective malaria prevention is threatened by widespread and increasing vector insecticide resistance. Failure to mitigate this threat will likely result in an increased burden of disease, with significant cost implications. This new framework provides support for the development of a national insecticide resistance monitoring and management plan as part of a national malaria strategic plan. The document outlines the content to be included and the key considerations to be taken into account when developing a national insecticide resistance monitoring and management plan. The guidance given is not intended to be rigid and prescriptive; rather, it is designed to offer countries a framework that ensures adherence to the objectives and recommendations of the 2012 WHO *Global plan for insecticide resistance management in malaria vectors*. The framework document is available in English, French and Spanish.

Malaria Threats Map

<http://www.who.int/malaria/maps/threats/>



A new WHO interactive map showing *Anopheles* malaria vector insecticide resistance, *P. falciparum* *hrp2/3* gene deletions, and *P. falciparum* and *P. vivax* antimalarial efficacy and resistance is now available online. The Malaria Threats Map provides a visual overview of recent data, with the option to display by geographical area and year, as well as by other criteria including study type, insecticide/drug,

vector/parasite species and indicator. Mapped data are from reports to WHO by national malaria control programmes and their partners, and from scientific publications. Such information is critical to inform appropriate malaria prevention, diagnosis and treatment strategies and to guide the development of new tools. The application is available in English, French and Spanish.

Global vector control response 2017–2030

<http://www.who.int/vector-control/publications/global-control-response/>

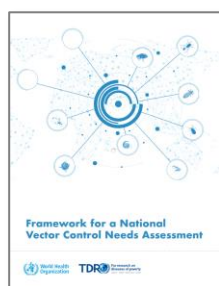


The *Global vector control response 2017–2030* (GVCR) provides a new strategy to strengthen vector control worldwide through increased capacity, improved surveillance, better coordination and integrated action across sectors and diseases. In May 2017, the World Health Assembly adopted resolution WHA 70.16, which calls on Member States to develop or adapt national vector control strategies and operational plans to align with this strategy. A brochure has also been produced that provides a high-level summary of the rationale and elements of the GVCR. The document is available in draft form in Arabic, Chinese, French, Russian and Spanish. These and other related documents can

be accessed via the new website: www.who.int/vector-control

Framework for a national vector control needs assessment

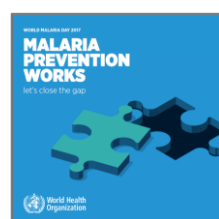
<http://www.who.int/vector-control/publications/framework-VCNA/>



One of the priority activities outlined in the GVCR is for countries to conduct or update their vector control needs assessment. This information can then be utilized to develop or update countries' vector control strategies and to plan necessary activities. This Framework for a National Vector Control Needs Assessment sets the standards for baseline assessment and progress tracking in line with the goals, targets, milestones and priorities of the GVCR.

Malaria prevention works: let's close the gap

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



On World Malaria Day 2017, WHO placed a special focus on prevention, a critical strategy for reducing the burden of a disease that continues to kill more than 400 000 people annually. This report offers a brief summary of WHO-recommended tools in the malaria prevention arsenal. It is divided into 2 parts: the first chapter focuses on core vector control measures, and the second on preventive treatment strategies for the most vulnerable groups in Africa. It addresses a key biological threat – mosquito resistance to insecticides – and highlights the need for new anti-malaria tools.

Fifth meeting of the vector control advisory group (VCAG)

http://who.int/neglected_diseases/vector_ecology/resources/WHO_HTM_NTD_VEM_2017.02/en/



The WHO Vector Control Advisory Group (VCAG) supports national and global efforts to control and eliminate vector-borne diseases worldwide by strengthening WHO's capacity to assess the public health efficacy of new vector control innovations and to develop appropriate technical recommendations. This report details the proceedings and outcomes of its fifth meeting, held in November 2016.

Sixth meeting of the vector control advisory group (VCAG)

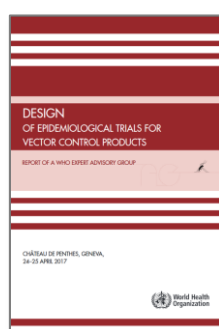
http://www.who.int/neglected_diseases/vector_ecology/resources/WHO_HTM_NTD_VEM_2017.05/



This report details the proceedings and outcomes of its sixth meeting, held in April 2017, which reviewed new evidence on several products within the VCAG pathway (Interceptor G2, Spatial Repellents, wMel *Wolbachia*, *Aedes aegypti*, and OX513A *Aedes aegypti*).

Design of epidemiological trials for vector control products, Report of a WHO Expert Advisory Group

http://www.who.int/neglected_diseases/vector_ecology/resources/WHO_HTM_NTD_VEM_2017.04/



WHO convened an Expert Advisory Group to review trial methodologies for evaluating data on the impact of new tools to prevent and control vector-borne diseases. The recommendations developed by the Group emphasize the importance of randomized trials with robust study designs. Specific recommendations are provided on end-points, design considerations, and generation of evidence on the efficacy of long-lasting insecticidal nets that incorporate a non-pyrethroid class of insecticide and on products that use indoor residual spraying of insecticides with a novel entomological mode of action, which differ from the insecticides currently used for public health.

How to design vector control efficacy trials. Guidance on phase III vector control field trial design.

http://www.who.int/neglected_diseases/vector_ecology/resources/WHO_HTM_NTD_VEM_2017.03/



This manual sets out a framework of steps to take and concerns to be considered when designing and conducting an epidemiological trial to assess the public health value of a new vector control intervention. The guidance has been formulated to aid innovators and researchers, both from academic institutions and country programmes. It is hoped that this guidance will lead to more carefully considered and rigorously designed vector control studies, so that the results from these studies can be used to recommend new interventions for vector control deployed at the country level.

WHO preferred product characteristics: endectocide for malaria transmission control

<http://www.who.int/malaria/publications/atoz/endectocide-transmission-control/>



This document defines the key questions that an endectocide (using ivermectin as a prototype) research agenda should address to generate the appropriate evidence required to define a WHO policy position on the role of an endectocide in the reduction of malaria transmission.

Malaria Policy Advisory Committee meeting report (October 2017)

<http://www.who.int/malaria/publications/atoz/mpac-report-october-2017/>



On 17-19 October 2017, the WHO Malaria Policy Advisory Committee (MPAC) convened to review updates and progress, and provide guidance with respect to specific thematic areas of work carried out by the Global Malaria Programme. The meeting included 10 sessions focused on 18 topics, which for malaria vector control and entomology included: (1) the outcomes from an ERG on the deployment of piperonyl butoxide plus pyrethroids nets; (2) an update on the vector control advisory group; (3) the outcomes of the ERG on comparative effectiveness of vector control tools; (4) a presentation on universal access to malaria core interventions; (5) a demonstration of the online mapping tool for insecticide resistance, antimalarial resistance and *hrp2/3* gene deletion data; and, (6) a review of the revised recommendations for achieving and maintaining universal coverage with long-lasting insecticidal nets in malaria control. Other MPAC meeting reports, including from the March 2017 convening can be found on the website: http://www.who.int/malaria/mpac/meeting_reports/

Other WHO guidance on malaria entomology and vector control is available at:

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

2015

- Indoor residual spraying: An operational manual for IRS for malaria transmission, control and elimination (Second edition)
- Information note on the risks associated with the scale back of vector control in areas where transmission has been reduced
- Global Technical Strategy for Malaria 2016–2030

2016

- Implications of insecticide resistance for malaria vector control
- Test procedures for insecticide resistance monitoring in malaria vector mosquitoes. (Second edition)
- WHO malaria terminology
- Global Fund – funding proposal development – WHO policy brief 2016