

Report from the Global Malaria Programme

Malaria Policy Advisory Committee
Geneva, Switzerland



Pedro L. Alonso
17 October 2018

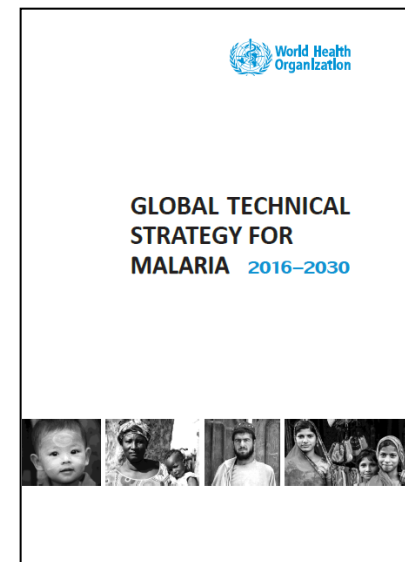
Global **Malaria** Programme



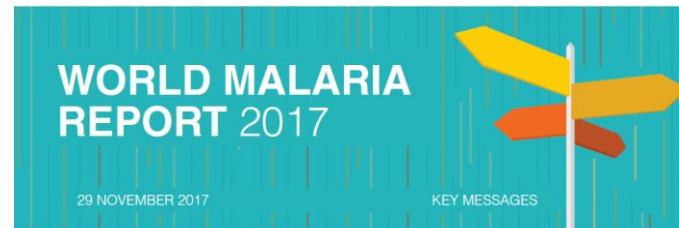
**World Health
Organization**

The global targets

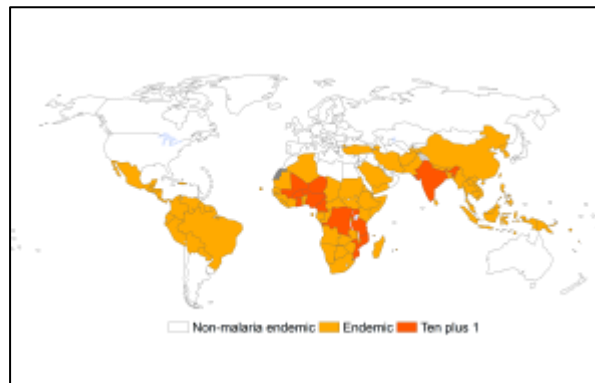
| Vision: A world free of malaria | | | |
|---|----------------------------|----------------------------|----------------------------|
| Goals | Milestones | | Targets |
| | 2020 | 2025 | 2030 |
| 1. Reduce malaria mortality rates globally compared with 2015 | ≥40% | ≥75% | ≥90% |
| 2. Reduce malaria case incidence globally compared with 2015 | ≥40% | ≥75% | ≥90% |
| 3. Eliminate malaria from countries in which malaria was transmitted in 2015 | At least 10 countries | At least 20 countries | At least 35 countries |
| 4. Prevent re-establishment of malaria in all countries that are malaria-free | Re-establishment prevented | Re-establishment prevented | Re-establishment prevented |



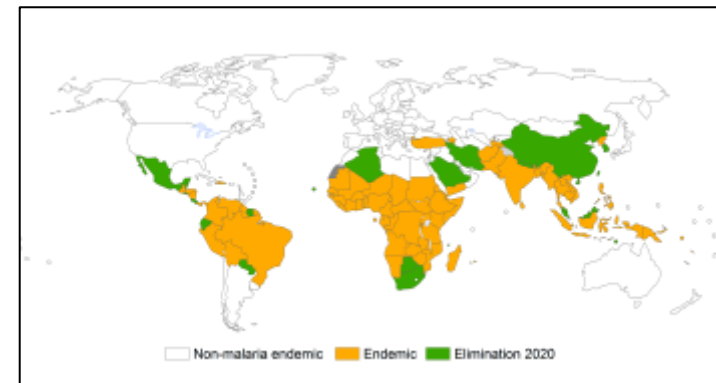
The world increasingly divided into 2 distinct groups



High burden countries

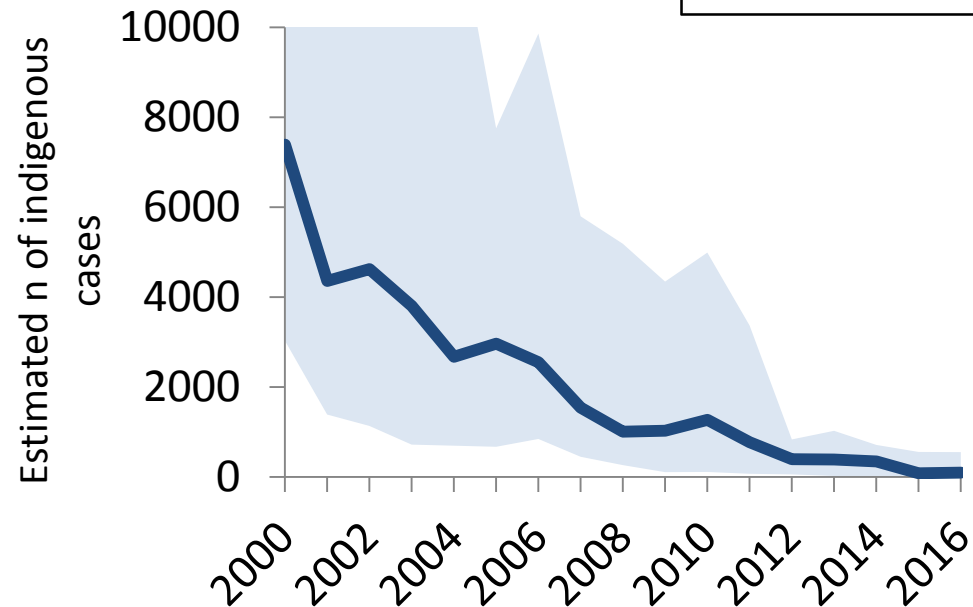
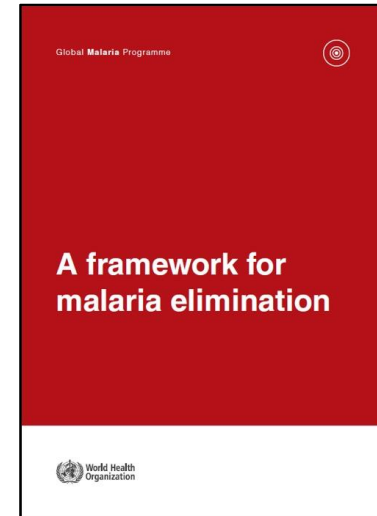
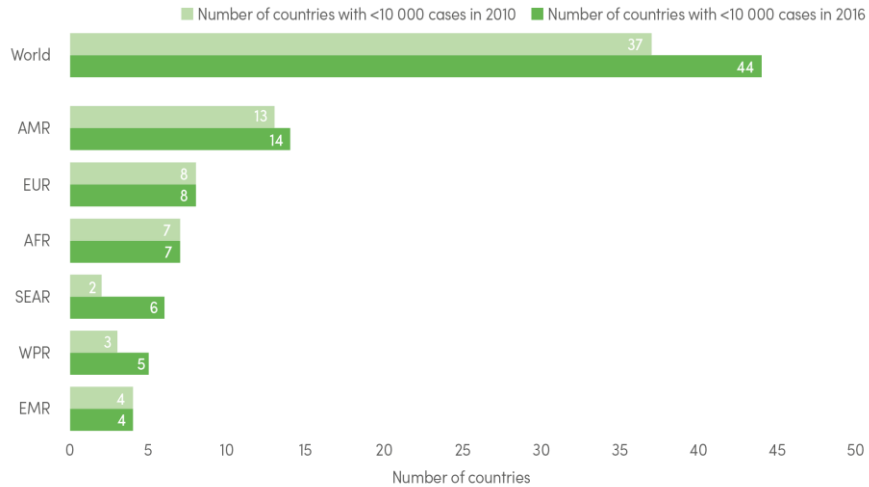


Countries close to elimination



We are likely to meet the GTS 2020 elimination targets but **not** the morbidity and mortality targets

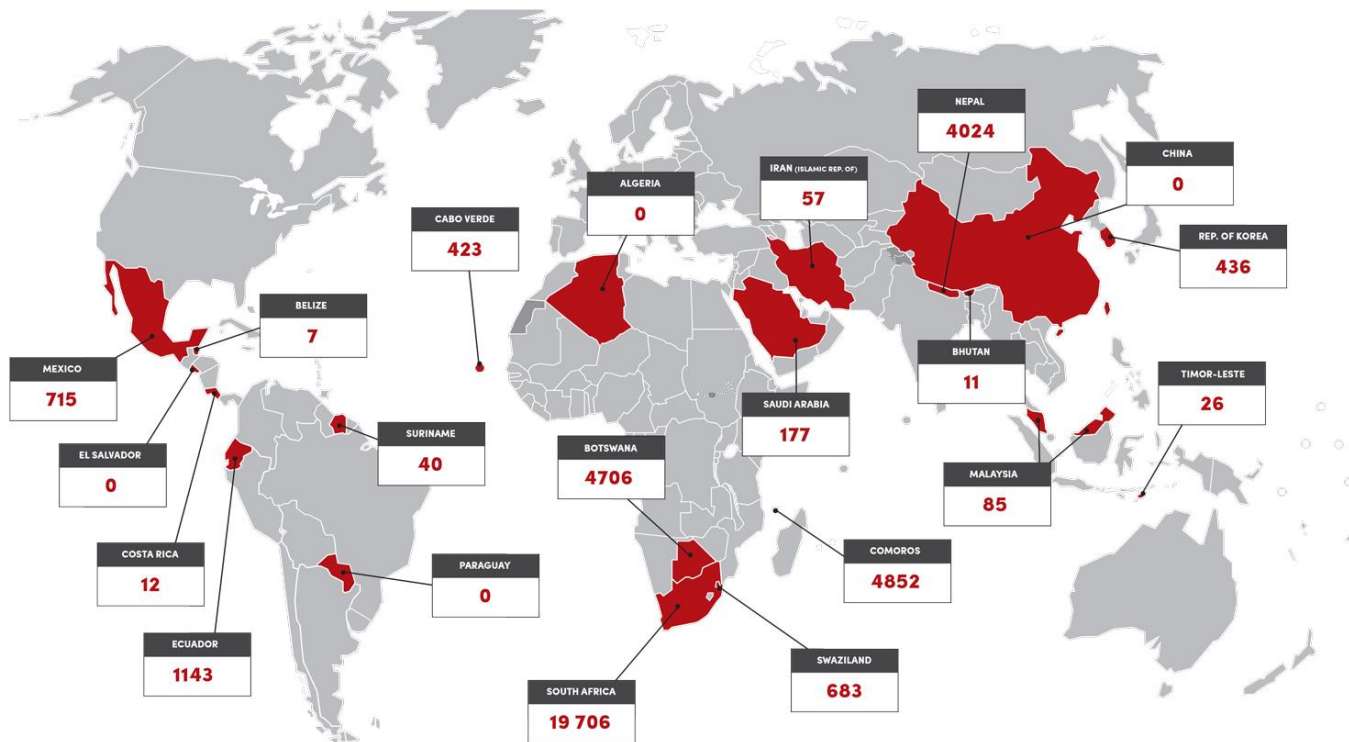
Countries approaching elimination



Getting to zero by 2020

E-2020 countries

Snapshot of indigenous malaria cases in 2017*



* Preliminary figures

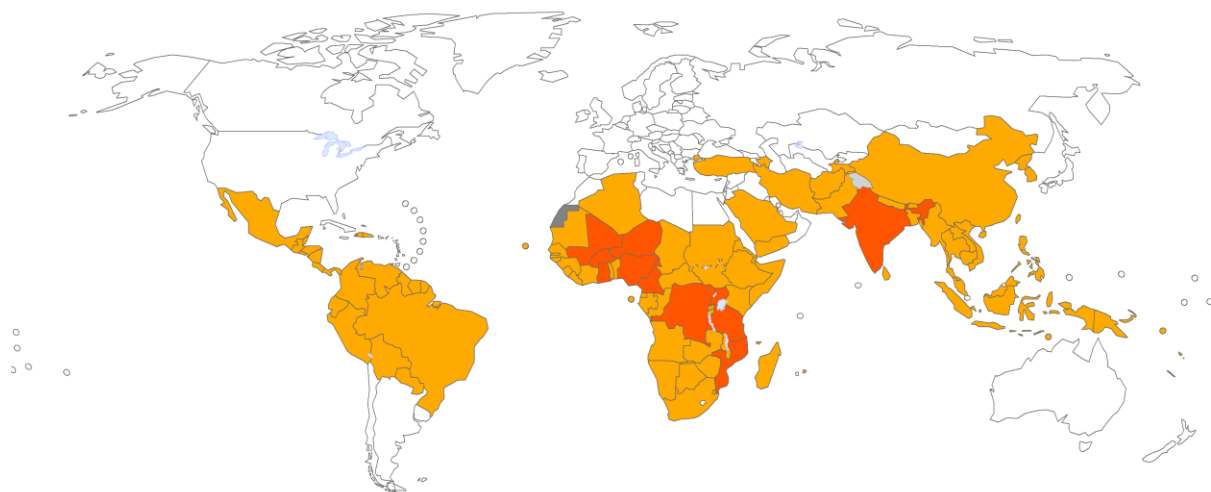
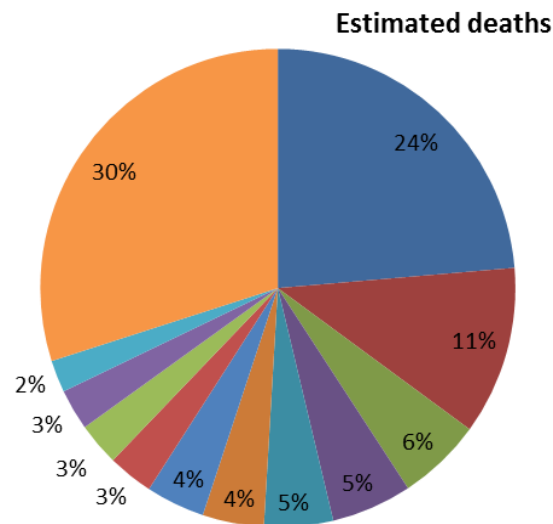
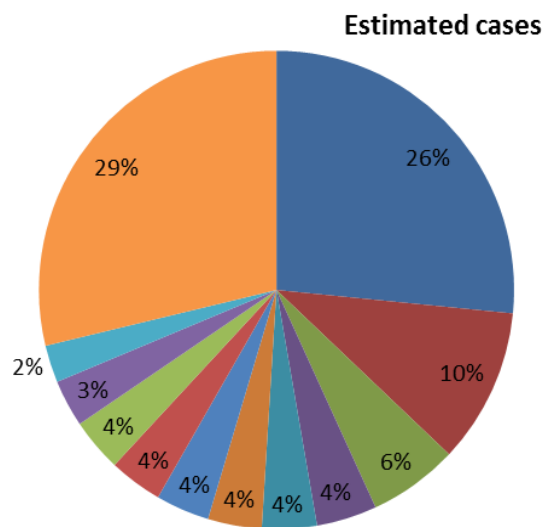
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Malaria Elimination Certification Panel
Malaria Elimination Oversight Committee

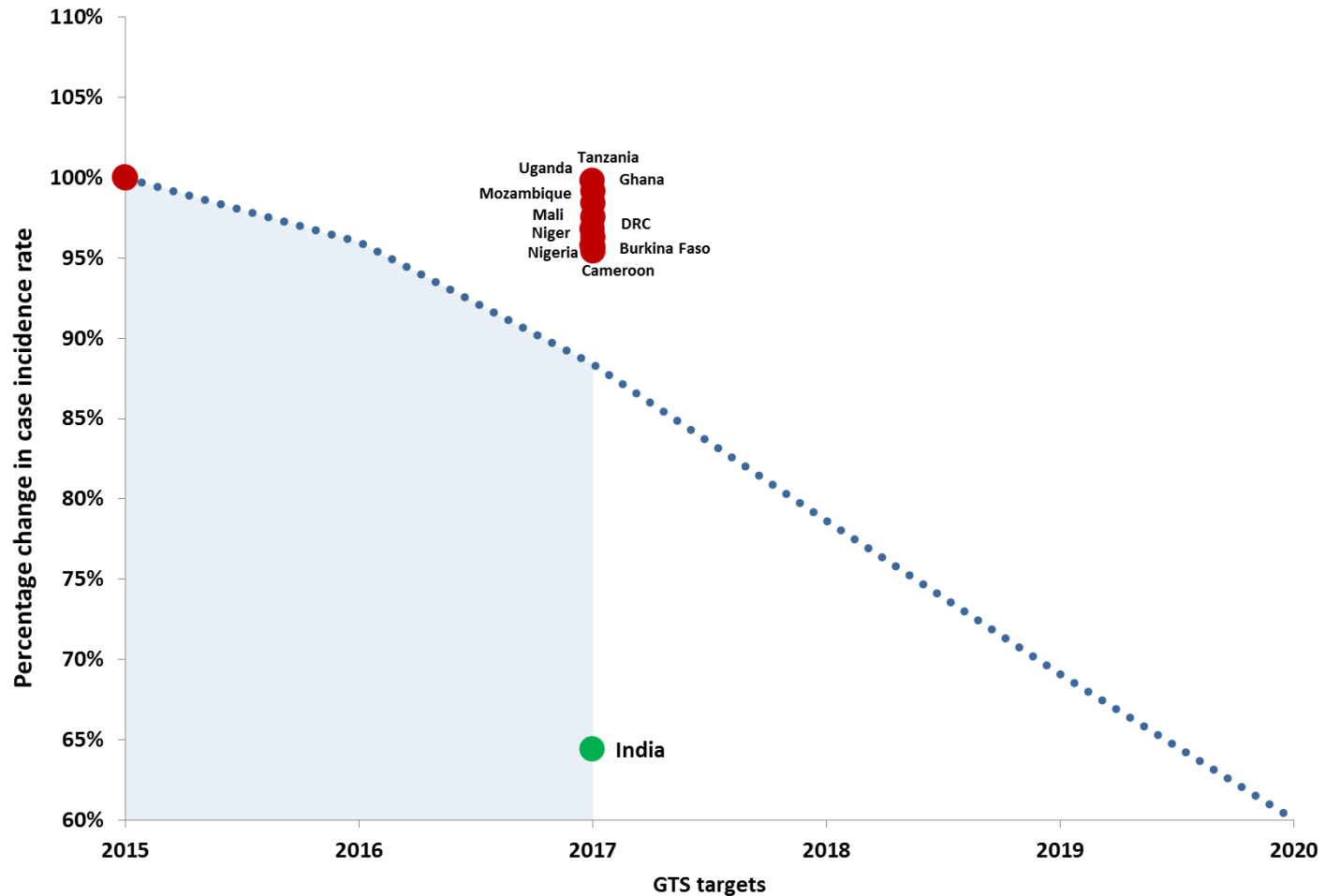
Paraguay certified malaria free



11 countries contribute to 71% of cases and 70% of deaths globally

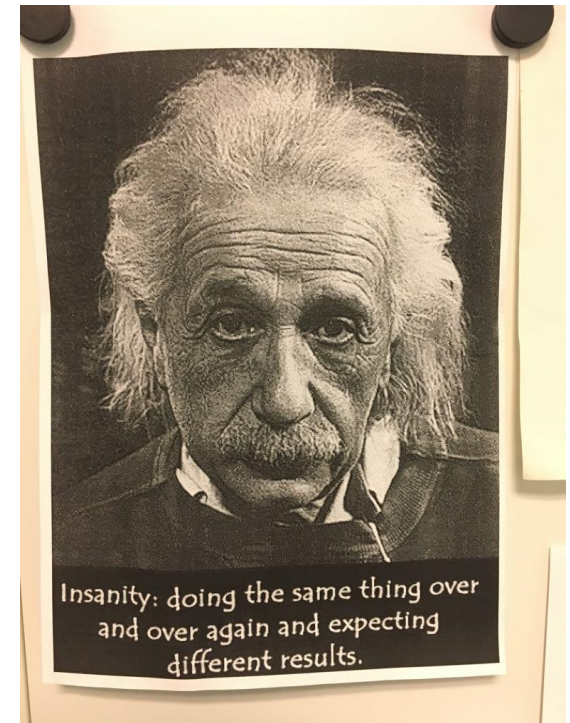


Not on track to meet the 2020 targets



How to respond to the challenge ?

- No new transformative tools to reach the field in the next 5 years
- Population growth
- Likely worsening of biological threats
- *Status quo* is not an option

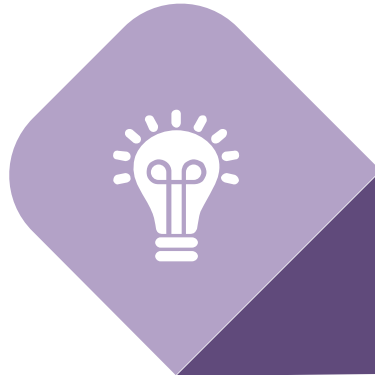


A problem to be solved, not simply a task to be performed

An urgent and credible response

Four key mutually reinforcing response elements

**Best global
guidance**



**Political
commitment**



Impact

**Strategic
use of
information**

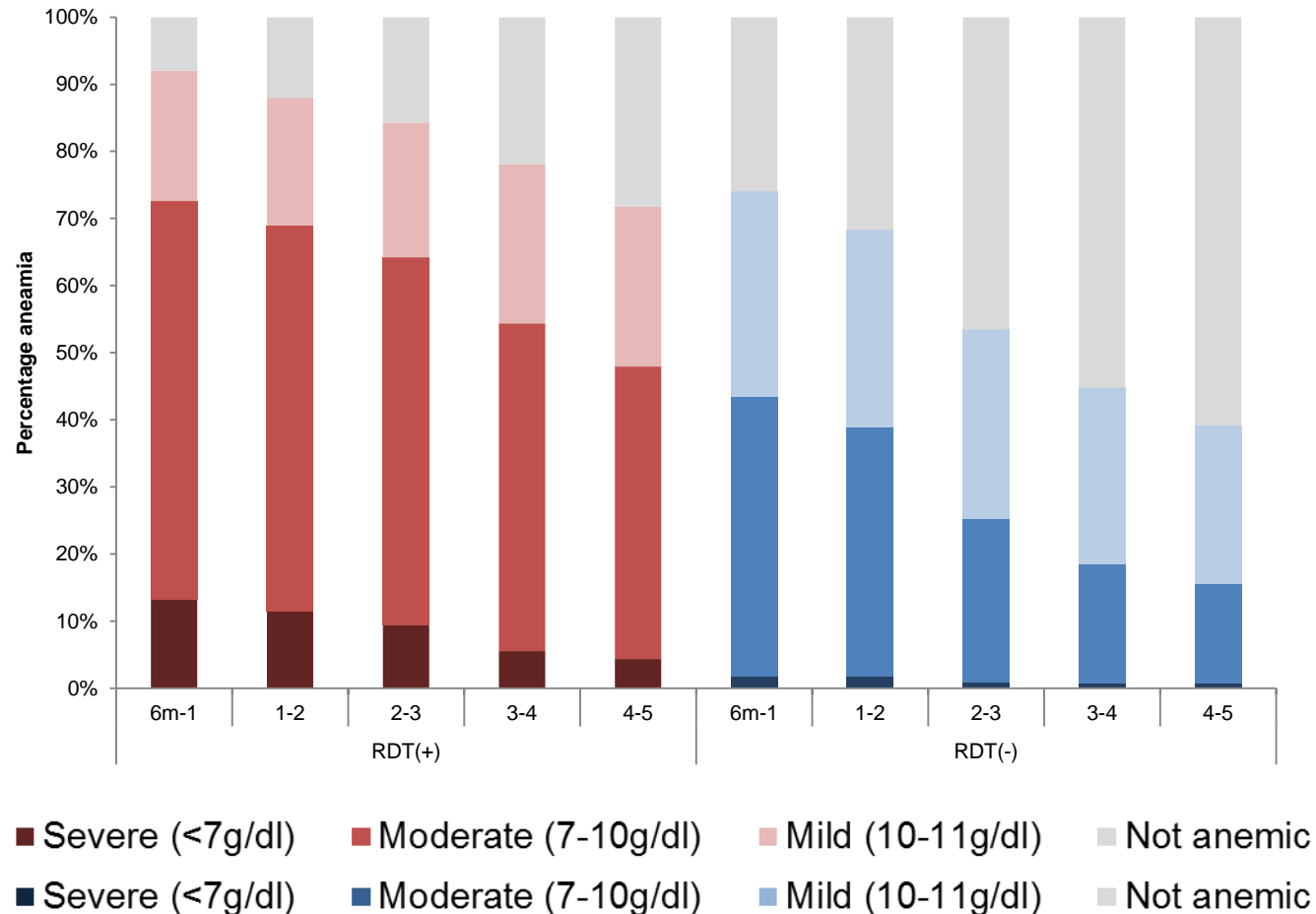


**Coordinated
response**



Data to guide action: prevalence of anaemia

The forgotten consequence of malaria infection, and a likely cause of significant mortality



World Health Organization
English
?

Malaria Threats Map

Tracking biological challenges to malaria control and elimination

VECTOR INSECTICIDE RESISTANCE

Resistance of malaria mosquitoes to insecticides used in core prevention tools of treated bed nets and indoor residual sprays threatens vector control effectiveness

[Go to Threat Map](#)

[Read more](#)

PARASITE GENE DELETIONS

Gene deletions among some malaria parasites cause false negative diagnostic test results, complicating case management and control

[Go to Threat Map](#)

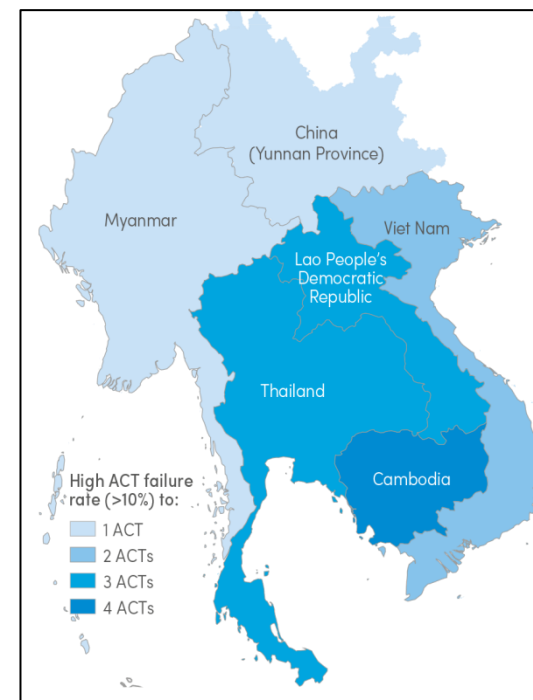
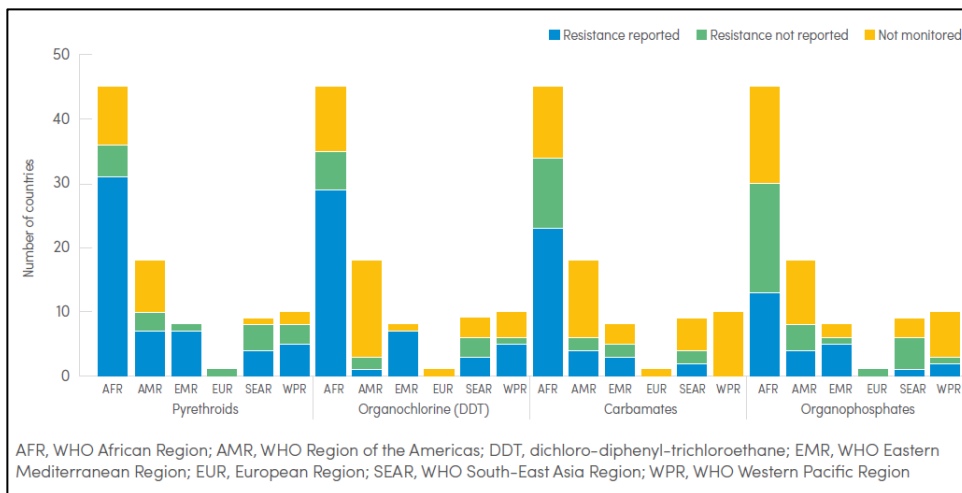
[Read more](#)

PARASITE DRUG RESISTANCE

Resistance of malaria parasites to artemisinin – the core compound of the best available antimalarial medicines – threatens antimalarial drug efficacy

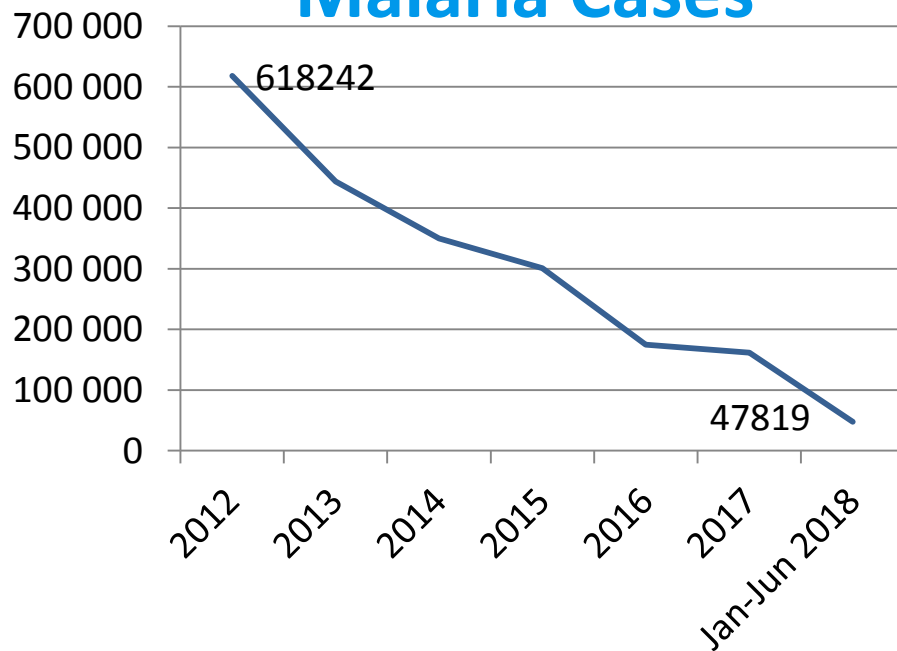
[Go to Threat Map](#)

[Read more](#)

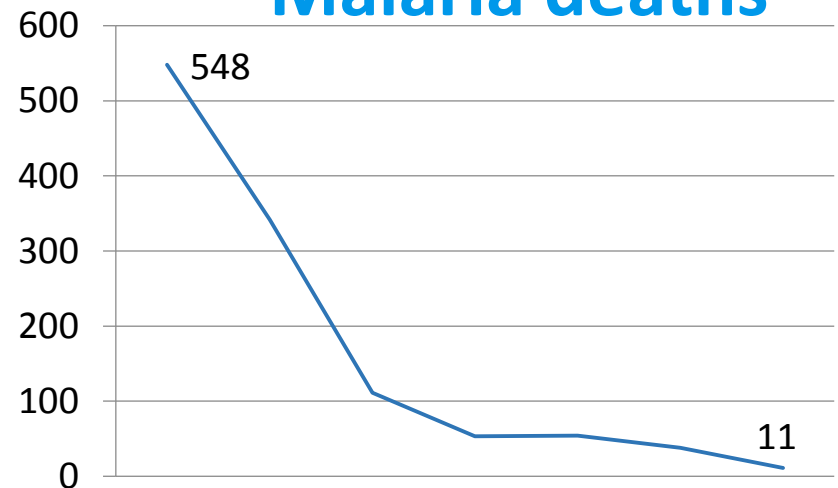


Progress: Significant case reduction in GMS

Malaria Cases

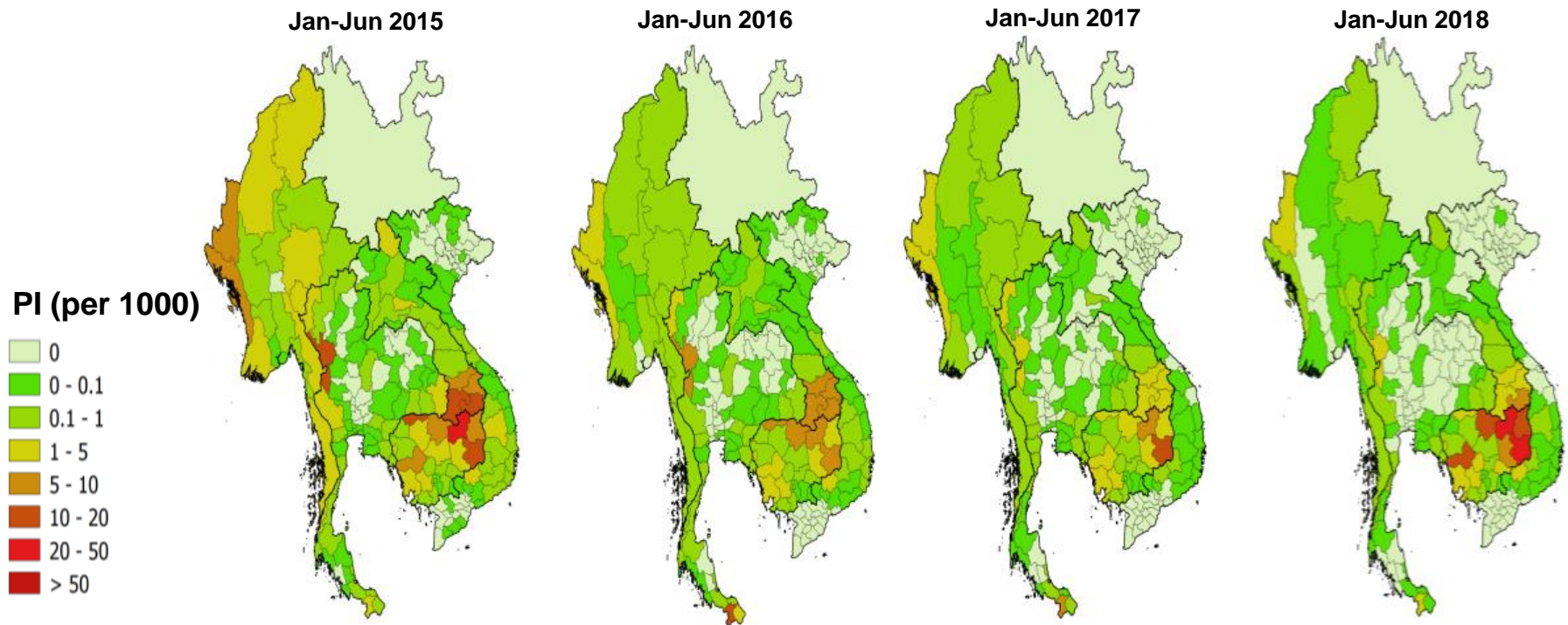


Malaria deaths



Progress: Cases are concentrated in a few provinces

Parasite Incidence (PI) by province



An. stephensi in Africa

- *An. stephensi* reported from Djibouti in 2014 and Ethiopia 2018
- Also reported in Sri Lanka in 2017
- ERG planned in early 2019 to:
 - Facilitate an exchange between researchers, national programme staff and other experts in the field
 - Assess current evidence base and potential threat to malaria control in Africa
 - Discuss additional research needs
 - Discuss routine surveillance approaches
 - Discuss appropriate control activities
 - Provide recommendations on these areas to WHO



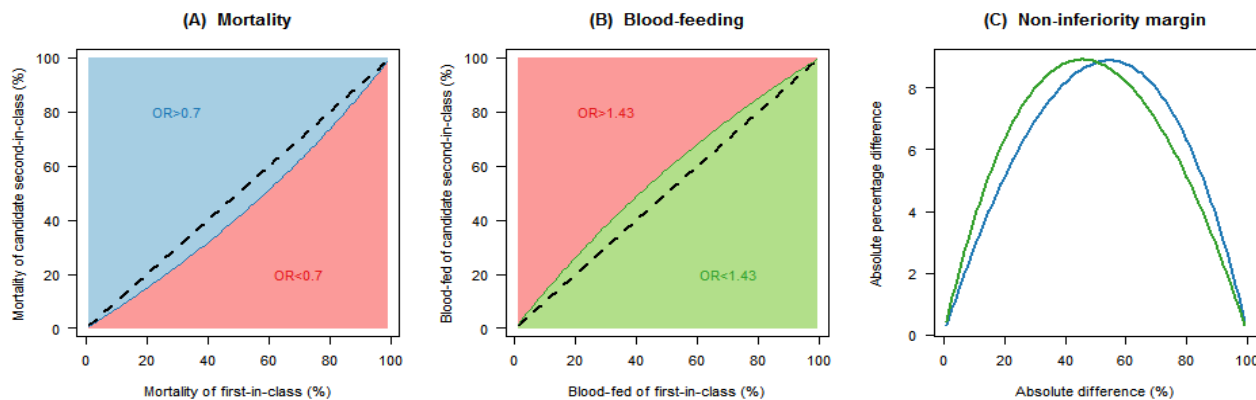
Collection of larvae from water reservoirs. Kebri Dehar, Ethiopia. From Carter et al. 2018, Acta Tropica 188, 180-186

Key activities since last MPAC

- ERGs and meetings
- Documents published

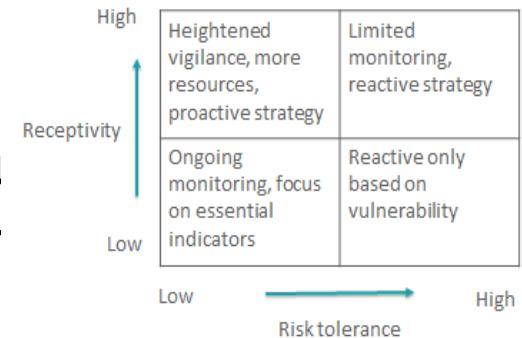
ERG on determining non-inferiority of 2nd in class products

- Meeting held 5-6 July
- Advanced draft study protocol to be posted for consultation in October 2018
- GMP to send notice of intent to all mosquito net manufacturers
- BMGF plans to fund non-inferiority studies on currently listed pyrethroid-PBO nets
- Studies likely to take place in 2019
- GMP will reconvene ERG when study data available to determine suitability of non-inferiority to assess second-in-class products for extension of policy recommendation



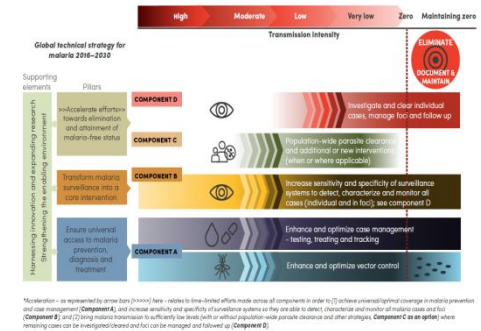
ERG on Assessment of Malariogenic Potential

- Meeting held 2-4 October
- Reviewed empirical data, model output approach taken in Bhutan, Malaysia and
- Group indicated need for:
 - Revision of definition of 'receptivity' to include vectorial capacity, susceptibility of human population and strength of health system (including interventions)
 - Shift from use of 'vulnerability' to 'importation risk'
 - Clear definition of 'malariogenic potential' as: receptivity x importation risk
 - Comparison of methods for quantifying receptivity (historical data; entomological indicators; R0/R methods) using country data in order to validate

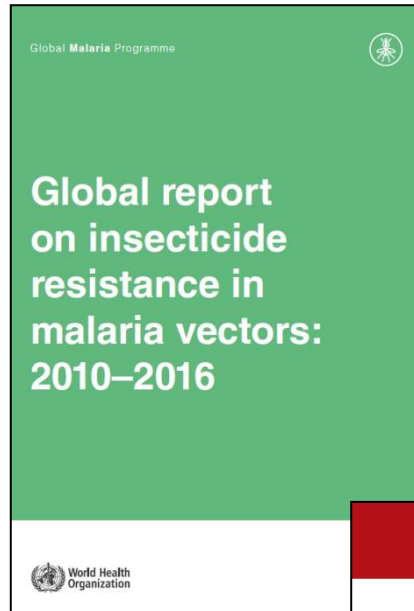


ERG on mass drug administration for malaria

- Meeting held on 11-13 September 2018, jointly supported by PDT, ELI and DER units
- Objectives of the ERG :
 - To determine the **effectiveness of MDA combined with other core interventions** in reducing malaria incidence and prevalence of falciparum and vivax malaria in areas of **low, moderate and high transmission**, with particular attention to the effects of vector control, case management and intensified surveillance on the effectiveness of MDA, and **determinants of sustained post-MDA reduction in malaria transmission**;
 - To review new evidence on MDA impact in areas of low to very low transmission in relation to current WHO recommendations on MDA for **interrupting falciparum malaria transmission in areas** approaching elimination and reducing the spread **of multi-drug resistance in the Greater Mekong Subregion**.



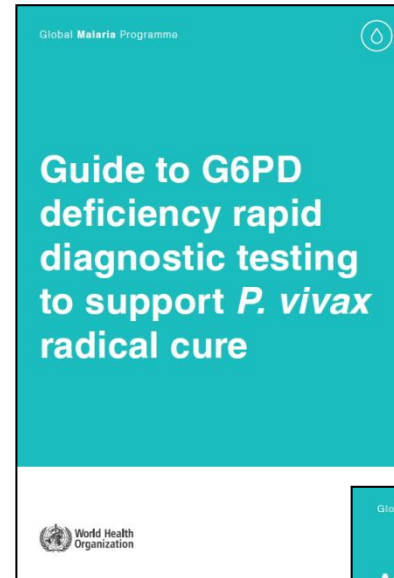
Key activities since last MPAC – Documents



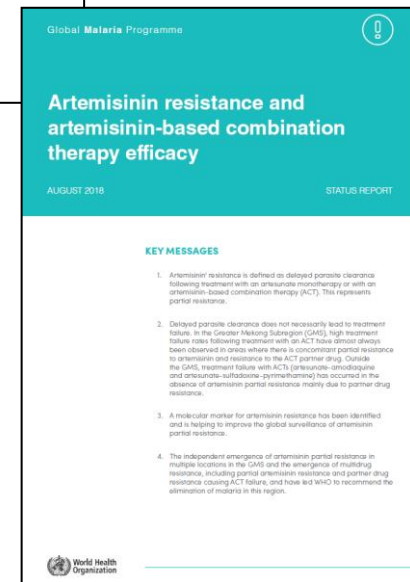
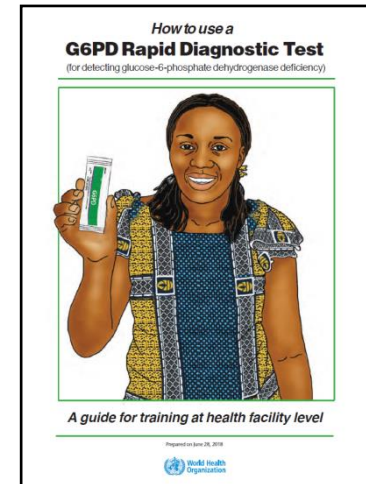
May 2018



June 2018

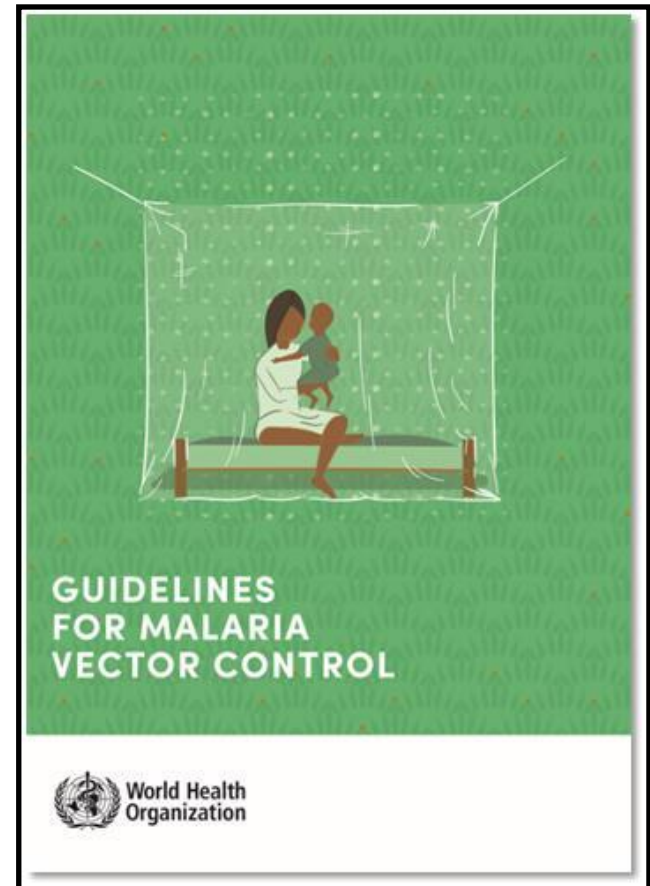
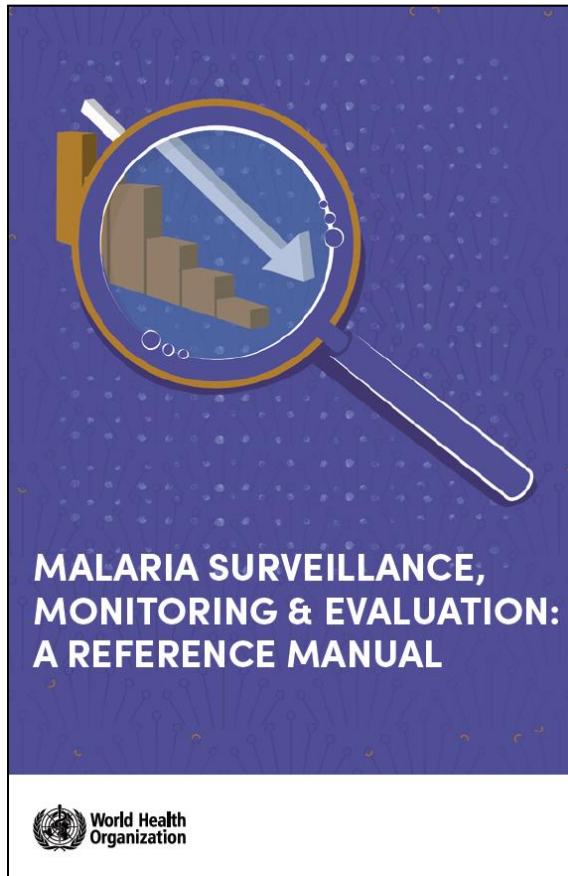


July 2018



Aug 2018

New Guidance



Surveillance data standards, modules and curriculum

A WHO cross department collaboration

Products include standards, curricula, exercises and DHIS2 modules and dashboards

GMP targeting roll out in 20 countries

Standards for measurement/analysis



- General principles
- Data Quality Review (DQR) Toolkit

Integrated health services analysis



under development

Programme-specific analysis

HIV



- Facility analysis guide
- Configuration package

Immunization



- Facility analysis guide
- Configuration package

Malaria



- Facility analysis guide
- Exercise book: Learner's Guide
- Exercise book: Tutor's Guide
- Configuration package

Tuberculosis



- Facility analysis guide
- Exercise book
- Configuration package

Malaria



- Facility analysis guide
- Exercise book: Learner's Guide
- Exercise book: Tutor's Guide
- Configuration package

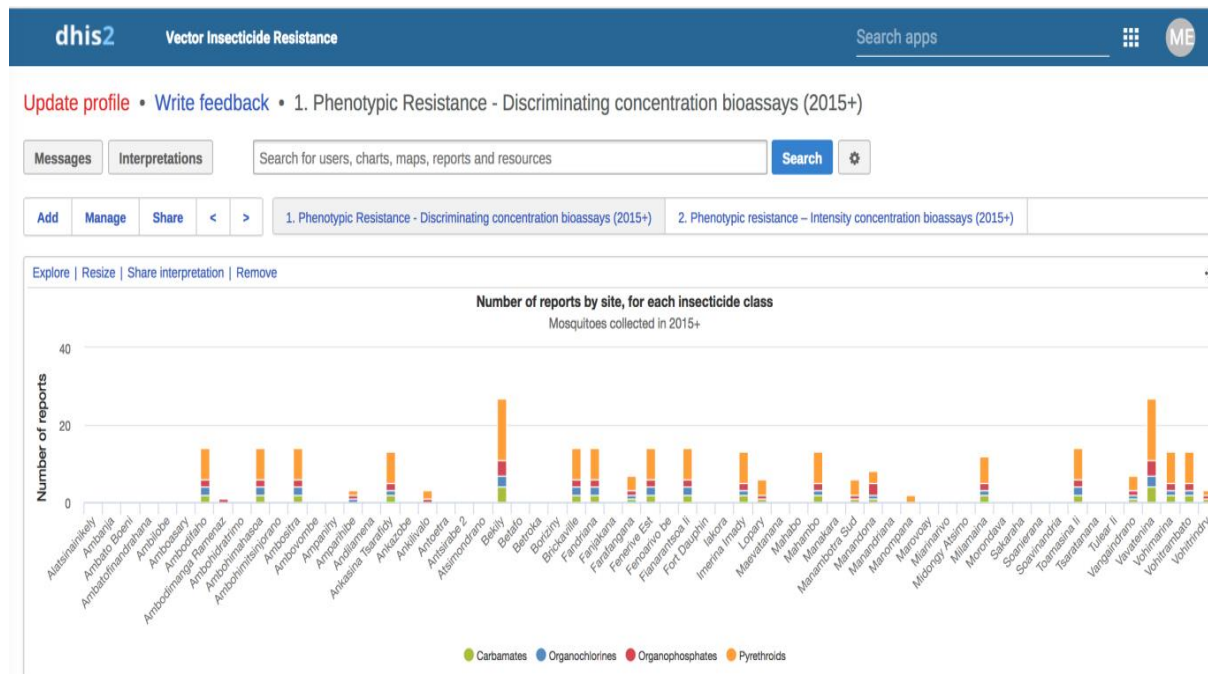
http://www.who.int/healthinfo/tools_data_analysis_routine_facility/en/

DHIS 2 Entomological Module

AIM: improve the collection and use of entomological data at national and global levels.

- Insecticide Resistance Module finalised.
- Pilot in 2-3 countries scheduled for 2018 Q4
- Transition to online collection of IR data for WMR 2018
- Modules for other entomological indicators under development

Dashboards



Data entry forms

Test details

| | |
|--|--------------------------------|
| Type of test* | Select or search from the list |
| Insecticide class tested | Select or search from the list |
| Insecticide and concentration tested* | Select or search from the list |
| Other insecticide/concentration – Add only if not in the above dropdown list | |
| Time at which mortality observed* | Select or search from the list |

Vector species

| | |
|---|--------------------------------|
| Species tested* | Select or search from the list |
| Other species tested – Add only if not in the above dropdown list | |
| Year when mosquitoes collected* (year start, e.g. 2012) | |
| Stage tested (and origin) | Select or search from the list |
| Species used in controls | Select or search from the list |
| Other control species test – Add only if not in the above dropdown list | |

Test results (discriminating concentration bioassays)

| | Exposed (insecticide) | Control (neither insecticide nor synergist) |
|---|-----------------------|---|
| Total number of mosquitoes tested (n) | | |
| Total number of mosquitoes dead (n) | | |
| Average mortality (%) | | |
| Average mortality adjusted for control* (%) | 0 | |
| Resistance frequency* (%) | 100 | |

Test outcome

| | |
|--------------------|-----------|
| Resistance status* | Confirmed |
|--------------------|-----------|

Key activities since last MPAC – GMP Policy making

Three key actions to improve the upstream process

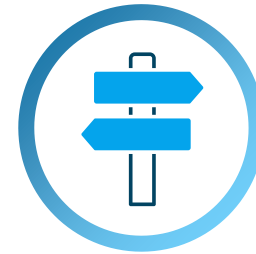
Key actions



Formalise
policy
pathways



Shorten time
to policy



Standardise
key internal
processes

Areas of work

- 1 Process Steps (incl. evaluation)
- 2 Review Standards
- 3 TPPs/PPCs

Within GMP's remit in
coordination with
overall transformation
work

- 4 Parallel Process
- 5 Update Cycle / Quality Assurance

Requiring broader
alignment within
WHO

- 6 Review of Evidence
- 7 Assessment of Safety Signals

Outside of
GMP's remit

Thank you

