

Update on malaria vector surveillance and control



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Roll Back Malaria Vector Control Working Group Meeting

6 February 2023

Global **Malaria** Programme



**World Health
Organization**



Mission	Support optimal resource use for malaria vector control by WHO Member States and by their implementing partners
Key activities	
<p>Support generation and reporting of data related to malaria vectors and interventions</p> <ul style="list-style-type: none">• Track status of insecticide resistance and vector control coverage (and effectiveness), including contribution to WMR and global status updates• Strengthen WHO, Member State and partner reporting and use of vector surveillance/control data, including development of DHIS-2 entomology module• Manage Vector Control Advisory Group (VCAG)• Support generation of economic data to improve resource allocation decision making <p>Develop or revise evidence-based WHO recommendations and programmatic guidance on vector surveillance and control, including for new tools</p> <ul style="list-style-type: none">• Develop vector control implementation guidance, and guidance for evaluation of new vector control tools• Support evaluation of vector surveillance or control tools, including evaluation of new tools, and associated management of VCAG• Integrate economic evidence in WHO vector control guidelines• Develop guidance on prioritization of vector control interventions applying principles of health technology assessment <p>Support timely dissemination of vector surveillance and control guidance and contribute to its implementation through technical support and capacity building activities based on identified priorities</p>	

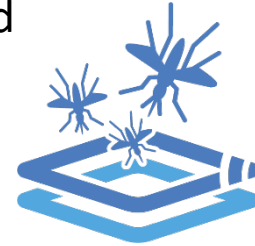
Support generation, reporting and use of data



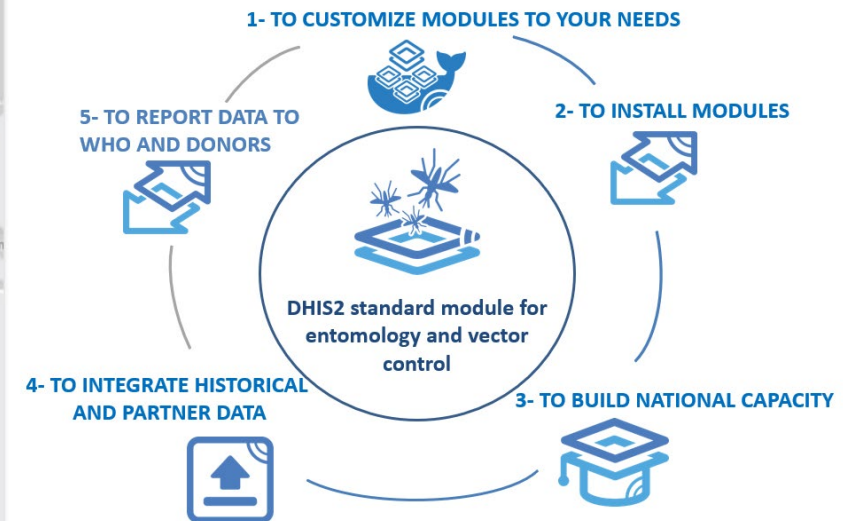
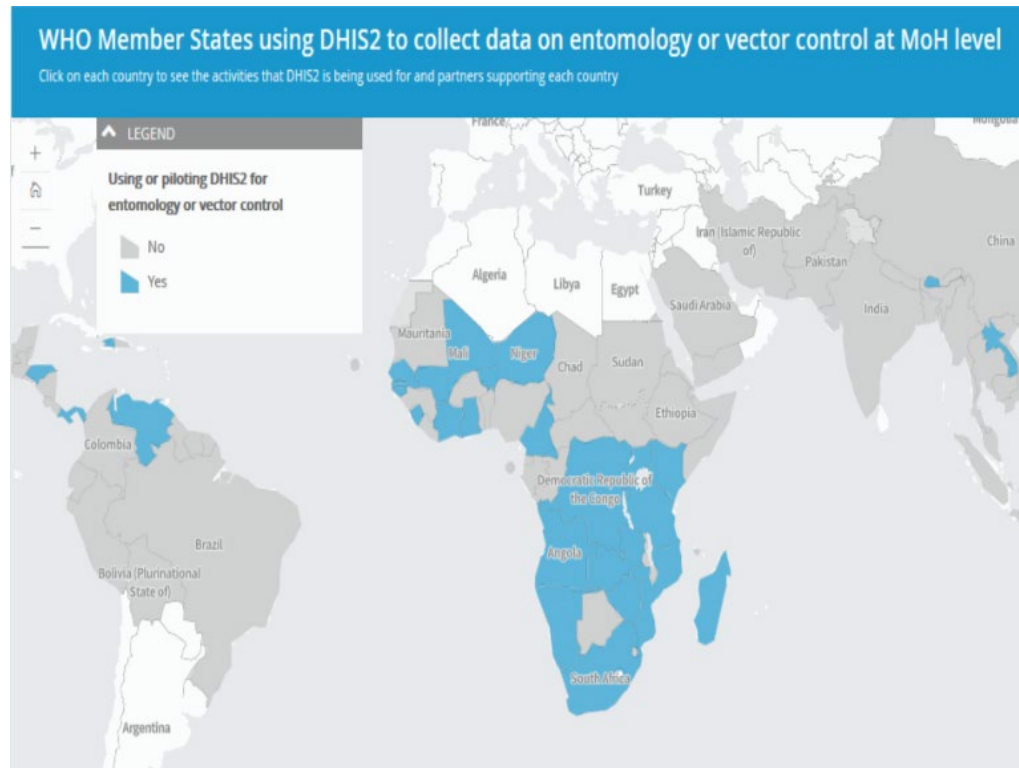
DHIS2 standard entomology & vector control modules



- Supports collection, collation, analysis and interpretation of entomology and vector control data and integration of entomological and epidemiological
- Vector control and entomology modules are being rolled out at the request of WHO Member States in close collaboration with partners (e.g. PMI VectorLink)

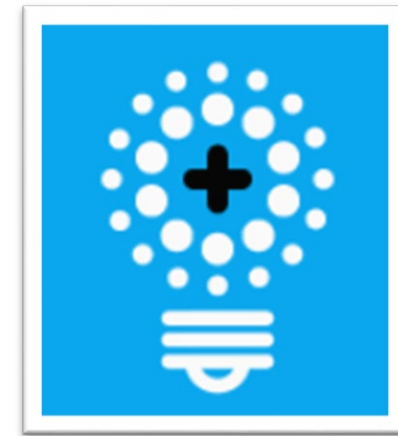


[Intro video](#)
[Information page](#)





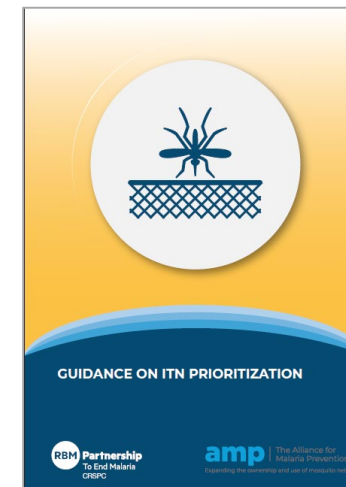
- Advice on generation of high-quality data to inform development of WHO recommendations
 - 4 intervention classes completed VCAG evaluation
 - >15 intervention classes with protocols submitted/trials ongoing
 - Additional classes at earlier stages of evaluation
- Full meeting reports available on VCAG webpage
 - 16th VCAG meeting 28-30 March 2022 (complete)
 - 17th VCAG meeting 3-6 October 2022 (complete)
 - **18th VCAG meeting week of 24th April 2023**



<https://www.who.int/groups/vector-control-advisory-group>

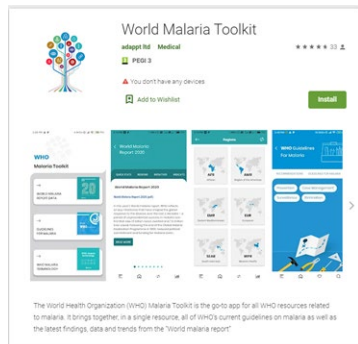
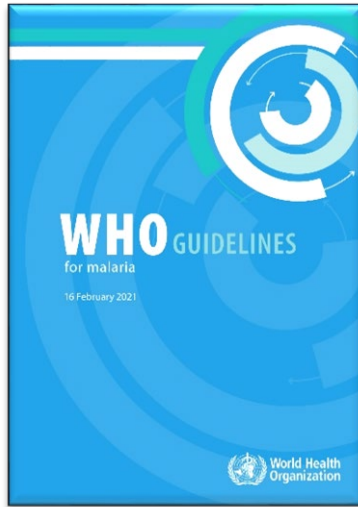


- Pilot decision workshop to aid prioritization of resources for malaria control in Ghana (Sept 2022)
 - Piloted the use of STAR (Socio-technical allocation of resources) and Imperials MINT tool
 - Report available at:
<https://www.who.int/publications/i/item/9789240066922>
- Development of guidance on the prioritization of insecticide-treated nets in situations where resources are limited
 - Joint effort with AMP and RBM
 - 1st edition online: https://allianceformalariaprevention.com/wp-content/uploads/2022/12/AMP_Prioritization-of-Nets_EN_20221212.pdf
 - In process of conversion into WHO guidance to be release alongside new WHO recommendations on ITNs



WHO recommendations & programmatic guidance

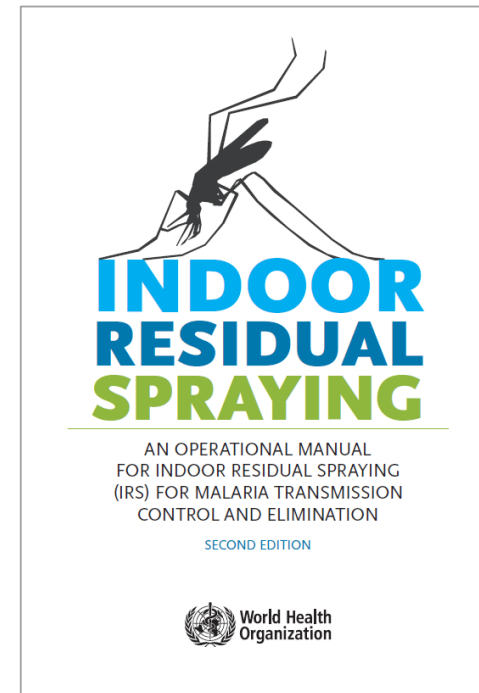




- WHO Guidelines for Malaria
<https://www.who.int/teams/global-malaria-programme/guidelines-for-malaria>
- First released in February 2021
- Updated approximately once every six months so far, depending on new recommendations becoming available
- Available in French, Arabic and Spanish
- Next update anticipated in March 2023 with new recommendations on two types of dual a.i. nets
- Mobile app available for download (WMR, Threats Map and Guidelines)



Revision of IRS manual ongoing. New version to include guidance on IRS for NTD vectors. Publication planned for Q3 2023.

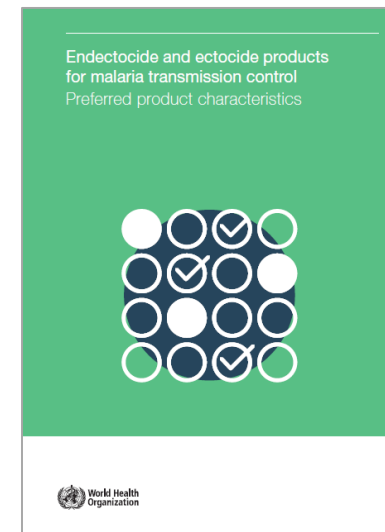
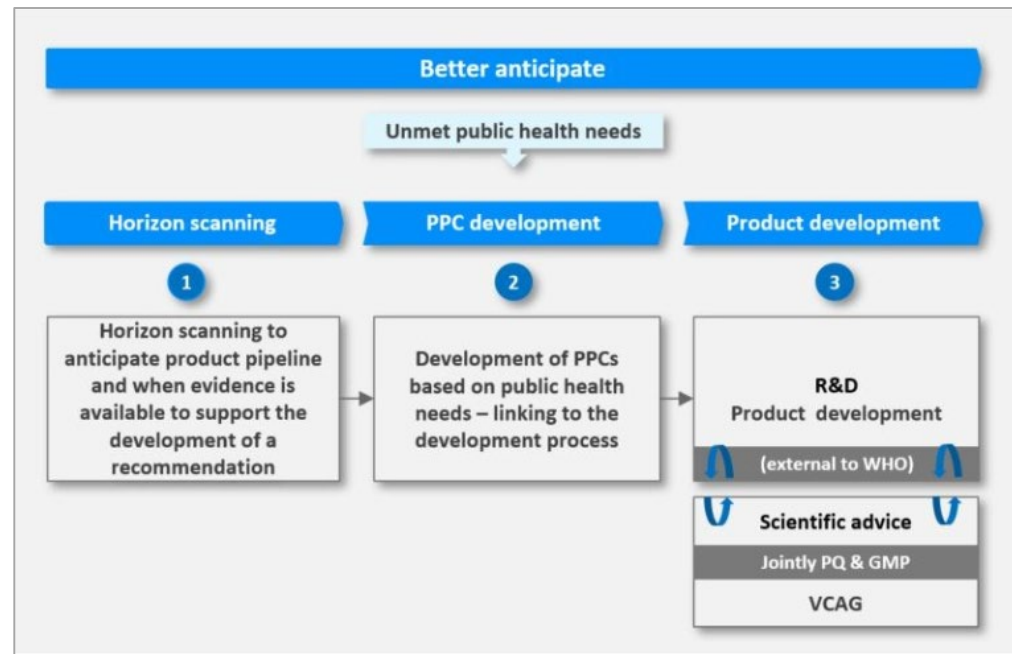




Preferred Product Characteristics

Development of multiple new PPCs:

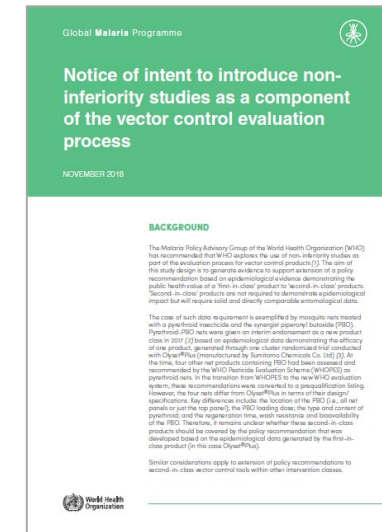
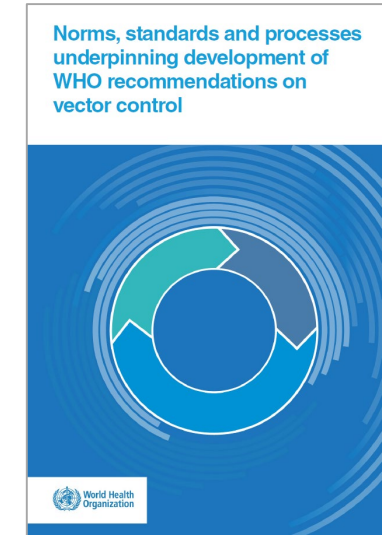
- Indoor residual spraying / indoor wall treatments (2022)
- Endectocides and ectocides (2022)
- Interventions to combat outdoor malaria transmission (being finalized)





Vector control evaluation processes

- High-level video developed, outlining the content of: *Norms, standards and processes underpinning development of WHO recommendations on vector control* (2020)
<https://www.who.int/multi-media/details/vector-control-the-who-evaluation-process-for-new-interventions>
- Translations available: French, Spanish (Chinese soon)
- Two additional videos planned for 2023 to provide more detail on the PQT and New Interventions pathways
- Protocol for studies to generate data allowing non-inferiority assessment being updated (Online mid-2023)
- Non-inferiority data call out for manufacturers of ITNs treated with two chemicals, and for new insecticide classes for IRS under preparation
- Technical consultation(s) to assess latest sets of data on ento-epi correlation and on non-inferiority planned for Q3 2023

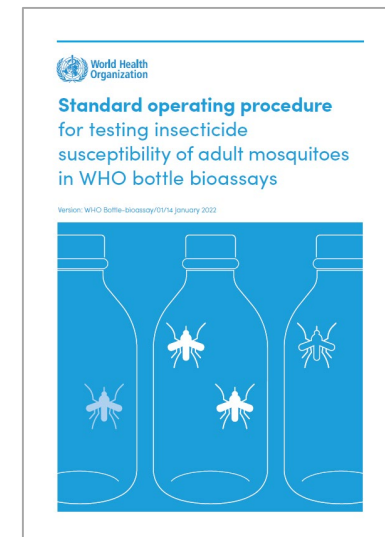
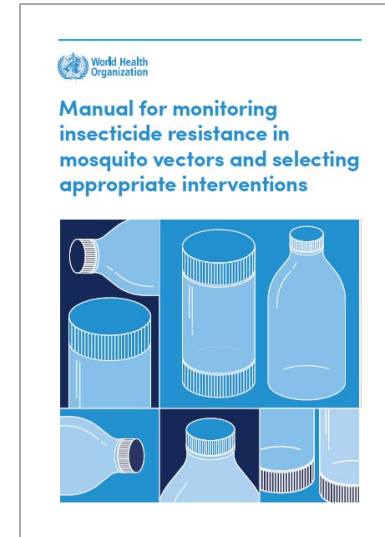


Insecticide resistance monitoring guidance



- Updated test resistance monitoring procedures
 - Integrates *Aedes* and *Culex* into existing *Anopheles* guidance
- WHO bottle bioassay: a new procedure developed to monitor IR for
 - insecticides that cannot be impregnated on filter papers
 - pyriproxyfen resistance
- New DCs developed for *Aedes/Anopheles* and some former DCs validated for *Anopheles*
- SOPs developed for:
 - WHO bottle bioassays
 - WHO bottle bioassay with pyriproxyfen
 - Impregnation of filter papers
 - WHO tube test
 - WHO tube test for synergist-insecticide bioassays
- Translations into French, Spanish and Portuguese ongoing

<https://www.who.int/teams/global-malaria-programme/prevention/vector-control/insecticide-resistance>



Dissemination & implementation



DHIS 2 modules & Malaria Threats Map



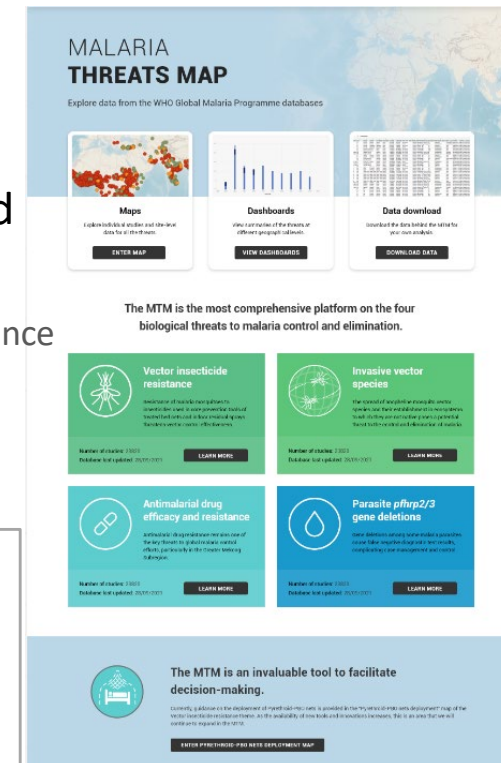
DHIS 2

- Development of module detailed documentation (ongoing)
- Incorporation of DHIS2 modules into the broader WHO module production scheme coordinated by the University of Oslo on behalf of WHO
- [Official information page](#)
- [Promotional video](#) in YouTube and translated into [Spanish](#) and [French](#)
- [Map](#) tracking use of DHIS2 for entomology and vector control

Malaria Threats Map

- User consultation finalized, new prototypes developed & validated
- Improvements under implementation
 - New country and regional summary dashboards for insecticide and drug resistance
 - Improved maps, explanation on map content, tooltips and map download
 - Improved information on data source and simplified data download
- Videos translated into Spanish and French

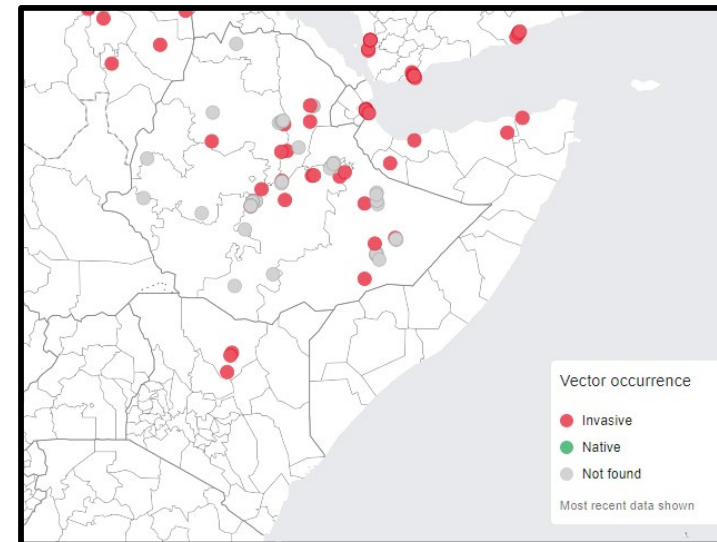
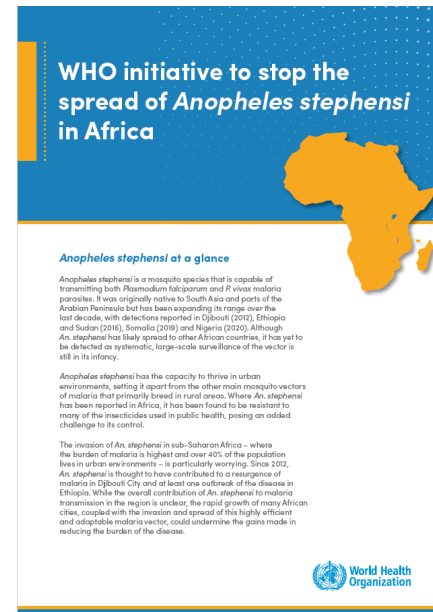
- Malaria Threats Map: tracking biological challenges to malaria control and elimination: https://www.youtube.com/watch?v=dU_xrzbupU (EN), <https://www.youtube.com/watch?v=SAvCA7Hv4wo> (FR) and https://www.youtube.com/watch?v=b_dXrW5Xz44 (ES)
- Malaria Threats Map: helping countries address critical threats for malaria control and elimination: <https://www.youtube.com/watch?v=x5P45TynlgM> (EN) <https://www.youtube.com/watch?v=jwf6gaHwqqM> (FR) and <https://www.youtube.com/watch?v=nSWWX201NYo> (ES)
- Malaria Threats Map: supporting research efforts: https://www.youtube.com/watch?v=diMb_gbUUBM (EN) <https://www.youtube.com/watch?v=PkiH4EBibbI> (FR) and <https://www.youtube.com/watch?v=oOUxm-wblQI> (ES)



Response to *An. stephensi* invasion



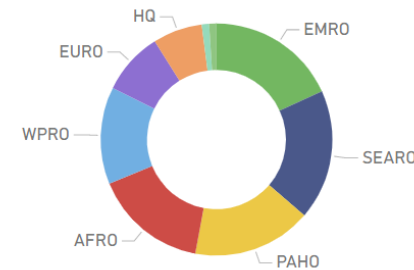
- Initiative to stop the spread of *An. stephensi* in Africa launched September 2022
- Vector alert updated in January 2023
- Face-to-face convening in the Horn of Africa planned for March 2023
- Malaria Threats Map maintained up-to-date. Negative sites now being displayed.
- Quarterly *An. stephensi* calls



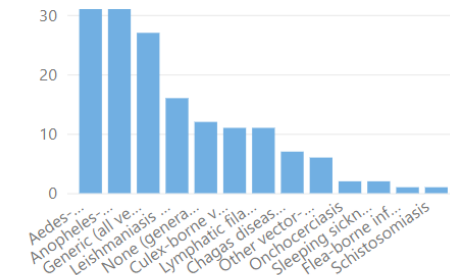


- Joint Action Group (JAG) meets quarterly
- GVCR Progress Report 2017-2020 published late 2020
- WHA 5-year report submitted early 2022
- Online SharePoint hub for GVCR focal points
 - Launched 2020
 - Monitor implementation
 - Interactive PowerBI platform to support reporting outputs / deliverables
 - Tracking of VCNA completion

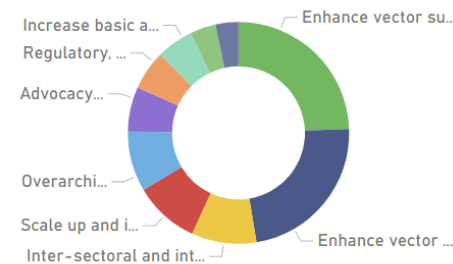
Relative number of activities by region



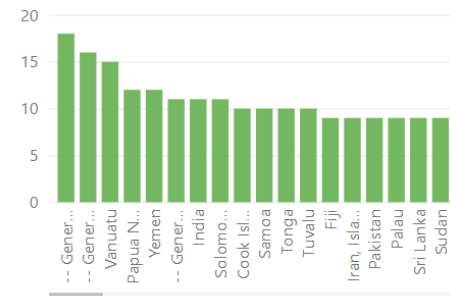
Number of activities specifically targeting different diseases



Relative contributions to each aspect of the GVCR framework



Number of activities targeting specific countries





To receive regular updates on GMP's vector control work:

<https://confirmsubscription.com/h/d/5DDA021E5819E645>

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