

## **Roll Back Malaria Vector Control Working Group**

## 8<sup>th</sup> Annual Meeting

## 28 to 30 January 2013, Geneva

Malaria control efforts over the past decade have shown remarkable success. According to the 2012 World Health Organization (WHO) World Malaria Report, between 2000 and 2010, malaria mortality rates fell by 26% globably and by 33% in the WHO Africa region; an estimated 1.1 million malaria deaths were averted, in large part due to the scale up of vector control, especially the deployment of insecticide treated mosquito nets (ITNs) and indoor residual spraying (IRS). These fragile gains are now seriously threatened by insecticide resistance in the mosquito vector, by diminishing financial support, by our inability to prevent transmission beyond the reach of our traditional treated mosquito nets and indoor spraying (especially in areas of the Mekong Region were there is emerging drug resistance), and by the capacity needs of national programs to implement entomological monitoring and optimize their scant resources for vector control. This is a critical time for global malaria control efforts and for communities that are now at greater risk for a resurgance of malaria illness and death.

Complementing the normative and policy-setting functions of the WHO Global Malaria Programme (GMP), the Vector Control Working Group (VCWG) is an essential forum where the diverse partners of the vector control community, from ministries of health, academia, industry and the private sector, foundations, bi-lateral, international and non-government organizations can come together, reach a common understanding and develop the necessary networks and activities to overcome these challenges. The working group should continue to make its expertise available both for general support to GMP and for specific tasks requested by GMP.

Three structural changes in 2013 will enhance the contributions of the working group. First, there will be closer and more formal links between the VCWG and the Alliance for Malaria Prevention (AMP) <u>http://www.allianceformalariaprevention.com/</u> who have done so much over the past years for advocacy and implemetation of mass campaigns for Long Lasting Insecticidal Nets (LLINs). AMP's strengths in communicaitons and country support will help the VCWG workstreams engage better with national programs and implementing partners. The second structural change that will strengthen the voice and contributions of entomology and vector control is the consitution of the WHO Vector Control Technical Expert Group (VCTEG), that will provide input on vector control strategy to the Malaria Policy Advisory Committee (MPAC); and a second committee, the Vector Control Advisory Group (VCAG), that will facilitate the development of new vector control tools. The third change regards funding; financially, 2012, was a lean year for the VCWG, which relies heavily on partner support. In 2013, the VCWG will develp a mechanism, through Swiss Tropical and Public Health Institute (Swiss TPH) in Basel, to

make it easier and more transparent for partners to provide financial support to the overall working group. With these three changes: links to the AMP and increased focus on country capacities; the creation of two vector control advisory groups within WHO; and a mechanism for improved funding of workstream activities, the VCWG has a better opportunity to respond to insecticide resistance; optimize resources for vector control; and help build a new generation of public health entomologists and vector control professionals.

The Vector Control Working Group is structured around eight complementary work streams:

- Insecticide Resistance. 2012 saw the launch of the Global Plan for Insecticide Resistance Management (GPIRM), where members of the work stream were core contributors for its development and roll-out. The work stream is completing a Cochrane review on impact of insecticide resistance to be published soon; in 2013, through separate funding from WHO GMP, the work stream will finalize primiphos-methyl discriminating doses for bioassay resistance monitoring. With a focus on implementation, the work stream will work closely with the Africa Network for Vector Resistance, and other regional networks in the Americas, Eastern Mediterranean, Asia and the Western Pacific to support country capacity for monitoring and development of resistance management strategies.
- *Outdoor Malaria Transmission*. The work stream has expanded its geographical focus beyond the Mekong to include partners in Africa working on entomological studies of vector species shifts and behavior, and the development of protective clothing, topical and spatial repellents. In 2013, work stream efforts will include standard designs to evaluate entomological parameters of biting time and place; designs for evaluation of repellents; risk assessments for treated clothing; and formative research to improve adherence to personal protective methods.
- *Continuous LLIN Distribution Systems.* A critical work stream to help countries develop strategies to maintain coverage with constrained financial resources. The focus is on documenting best practices and updating strategic decision making documents to prioritize distribution avenues and targets, to build capacity and diversify funding support.
- Durability of LLINs in the Field. LLIN physical net survival, both attrition and durability, is emerging as one of the key issues in maintaining coverage. The work stream works closely with WHO and industry to coordinate and compile laboratory and field data on LLIN durability that will inform procurements based on "value for money", product quality improvement, and replenishment strategies to maintain coverage.
- Capacity Building for Indoor Residual Spraying. This work stream has built strong ties to the private sector, who are in many countries a core partner of the national IRS program. The work stream has been strong in advocacy, training materials and reporting systems. Looking to the future, there will be production of training modules for all phases of IRS planning, implementation and evaluation, and close collaboration with the Insecticide Resistance and IVM/Entomological Monitoring work streams.

- Larval Source Management (LSM). The LSM work stream has completed case studies and supported the development of the WHO LSM Operational Manual, which will soon be published. LSM is being implemented across a large number of countries, but sometimes without a strong, quality control, monitoring and impact evaluation component. The LSM work stream is working to improve the evidence base for rational investments in larval control, to support country discussion making processes, as well as, facilitating collaborations with agriculture, urban planning, housing and civil engineering sectors that impact surface water management and potential vector breeding sites.
- Optimizing Evidence for Vector Control Interventions. This work stream focuses on three main areas: reviews, identification of gaps and testing guidelines for new vector control paradigms (in collaboration with the Innovative Vector Control Consortium (IVCC)); review of interactions of more than one vector control intervention (e.g. ITNs and IRS); and updating on developments in new vector control technologies. Clear protocols and efficient monitoring strategies are essential to rationalize and optimize our vector control investments.
- Entomological Monitoring and Integrated Vector Management (IVM). The IVM work stream had a very active year with the publication of the IVM Handbook and other guides from WHO, as well as, training materials and other support in Latin America and Africa from the USAID-funded IVM Project. The work stream is focusing on more efficient vector control delivery systems and guides to countries to develop functional national entomological surveillance systems.

2013 will be a pivotal year for malaria control and the VCWG. The challenges are growing and gains seen over the past decade fragile. At the same time there are new opportunities, the linkage to the operationally-focused AMP, the new WHO advisory groups and the growing networks of public health entomologists and vector control professionals. The VCWG can work as an advocate and as a facilitator of communication and information both from the policy level to the field, and as important, from the field to the policy level. The VCWG is truly a partnership organization, with the diversity, creativity and commitment needed to address these complex challenges and to achieve our common vision.

The detailed meeting report and presentations are being made available on the website, http://www.rbm.who.int/mechanisms/vcwg.html