

Roll Back Malaria Vector Control Working Group

7th Annual Meeting

6 to 8 February 2012, Geneva

There was continued progress in malaria vector control over the past year, but the gains are fragile, threatened by increasing insecticide resistance and remaining residual transmission beyond the reach of our traditional control measures of Indoor Residual Spraying (IRS) and Long Lasting Insecticidal Nets (LLINs). One of the most critical challenges is financial. Just at the time when pyrethroid resistance is increasing the immediate costs of control, and when the LLINs deployed by mass campaign over recent years are needing to be replaced, many programs face severe funding constraints and asked to do more with less. The vector control community must adapt its work to address these threats. It is through the diversity and reach of the partnership that solutions will be found.

The 7th annual RBM Vector Control Working Group meeting brought together more than 150 participants from national programs, commercial partners, academia, NGOs, foundations, multi-lateral and bi-lateral organizations to address these technical and programmatic challenges. The VCWG aims to complement the normative and policy-setting role of the WHO Global Malaria Programme (GMP) to build consensus, establish and strengthen partnerships and work towards solutions. The detailed meeting report and presentations are being made available on the website, http://www.rbm.who.int/mechanisms/vcwg.html.

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

- Insecticide Resistance. Addressing the most urgent technical challenge to malaria vector control, the work stream supported WHO GMP in the development of the Global Plan for Insecticide Resistance Management and has commissioned a Cochrane Review of the impact of insecticide resistance and LLIN effectiveness. In the coming months this work stream, in coordination with WHO/GMP, will be instrumental in helping countries expand and improve susceptibility monitoring and data-sharing and to adapt and implement resistance management strategies.
- Outdoor Malaria Transmission. Progress has been made, particularly in the Greater Mekong Subregion in facilitating exchange of information, study designs and out comes amongst programs and partners addressing outdoor transmission and personal protection through topical and spatial repellents, treated hammock nets and other materials. The report of the inaugural meeting held November 2012 in Phnom Penh is available on the webpage. While the most urgent needs relate to strengthening personal protection and vector control as part of a comprehensive effort to contain and eliminate artemisinin resistant falciparum malaria in Asia, the work stream will is expanding to include researchers and programs involved with outdoor and 'residual' transmission in Africa and Amazonia.
- Continuous LLIN Distribution Systems. A highly productive work stream, their work focuses on helping national programs and partners optimize resources for maintaining high coverage of LLINs through toolboxes and case studies for continuous distribution. Complementing the Alliance for Malaria Prevention work on mass campaign distributions, the current funding crisis makes it ever more urgent that countries be able to diversify their strategies and systems to maintain high LLIN coverage and use.

- Durability of LLINs in the Field. Closely linked to the "Continuous Distribution" work stream, and also responding to the constricted financial resources, work focuses on determining and maximizing the effective field life of LLINs. The work stream works with WHO GMP, WHOPES, manufacturers and programs to improve durability testing in the laboratory and the field, and to support the work of WHO to provide guidelines and strategies for partners and national programs to document and mitigate LLIN deterioration and loss.
- Capacity Building for Indoor Residual Spraying. IRS has been revitalized across many countries, particularly in Africa. Over the past year, there has been significantly improved collaboration between the public and private sectors to develop "the business case" for malaria control, including an IRS private sector workshop convened in Johannesburg in October 2011. In addition to facilitating private sector collaboration, the work stream supports the implementation of standardized approaches for reporting and evaluation, training, management and supervision of IRS programs. This diverse work stream presents a model of peer-to-peer, program-to-program and country-to-country technical support and collaboration.
- *Larval Source Management*. Many national programs and partners struggle with determining if larval source management may be a cost-effective complement their other malaria vector control strategies, and if so, where and how to implement and evaluate. The work stream is completing a Cochrane Review on Larval Source Management, and following the WHO Position Statement on larviciding, will work with WHO-GMP in the development of an operational manual on larval source management.
- Optimizing Evidence for Vector Control Interventions. This work stream is engaged with the implementation of new vector control tools and strategies. Examples include durable wall linings, spatial and individual repellents, and documenting evidence on combinations of LLINs and IRS. Vector control technologies cannot remain static but need to adapt to the changing programmatic, ecological and biological context. In 2012 the work stream will work more closely with the Innovative Vector Control Consortium, implementing partners and national programs to evaluate the deployment of new vector control strategies and tools.
- *Entomological Monitoring and Integrated Vector Management*. IVM, including capacity building for entomological monitoring, is the foundation of vector control. As programs adapt to insecticide resistance and constrained resources, the IVM orientation, i.e. "a rational decision-making process for the optimal use of resources in the management of vector populations" has never been more critical. WHO, with input from this work stream, has produced an IVM handbook, guidance for policy development and a core training curriculum. Other work stream partners have developed and employed training materials for basic entomological monitoring.

This was the largest VCWG meeting to date, reflecting not just the strong interest and critical role of vector control in global malaria efforts, but also the wide diversity of interests and experiences from the public and private sector, from Asia, Africa, the Americas and Europe. The VCWG recognizes that there is no single solution to the challenges presented; no single vector control tool or strategy that can be rolled out across regions without adaptation to the local context; and no single answer to the financial crisis that threatens our goal of universal coverage. Complementing the normative and policy functions of WHO GMP, it is through the diversity and range of interests reflected in the partnership, that current efforts can be enhanced, improvements developed, communicated and adapted to meet our common goal.