World Health Organization launches emergency response to antimalarial drug resistance

GENEVA/ PHNOM PENH, Cambodia ¦ 24 April 2013 - On World Malaria Day, 25 April, the World Health Organization (WHO) recognizes significant accomplishments in preventing and controlling malaria, including in high-burden countries in sub-Saharan Africa, but highlights the threat of antimalarial drug resistance in south-east Asia's Greater Mekong subregion, where an emergency response is now being launched.

"In recent years endemic countries, including countries in sub-Saharan Africa, have made major headway in reducing new cases and deaths from malaria," says Dr Hiroki Nakatani, WHO's Assistant Director-General for HIV, TB, Malaria and Neglected Tropical Diseases. "But that progress could now be at risk. We are increasingly concerned by signs in the south-east Asia region that the malaria parasite is becoming resistant to some of the drugs that have helped make so much progress."

Antimalarial drug resistance

Antimalarial drug resistance – the ability of the malaria parasite to survive drugs – first became a global problem in the 1960s when the parasite developed resistance to chloroquine, the then widely-used antimalarial. Resistance first emerged in the Greater Mekong subregion and later spread to Africa, triggering a dramatic increase in malaria-related illness and death – particularly among children.

Today the treatment of choice is artemisinin-based combination therapies (ACTs).Resistance to artemisinins – the core component of the combination – has now been identified in Cambodia, Myanmar, Thailand, and Viet Nam. National efforts to contain resistance have had some impact, but urgent action is needed to fully eliminate resistant strains of the parasite and to ensure that ACTs remain effective.

"The consequences of widespread resistance to artemisinins would be catastrophic," says Dr Robert Newman, Director of WHO's Global Malaria Programme. "We must act now to protect south-east Asia today and sub-Saharan Africa tomorrow."

Although major efforts are under way to develop new classes of antimalarials, there are no replacement products on the immediate horizon.

Scaled-up response in the Greater Mekong subregion

"We need to invest more in order to tackle drug resistance," said Dr Mark Dybul, Executive Director of the Global Fund to Fight AIDS, Tuberculosis and Malaria.

WHO is launching a new Emergency Response to Artemisinin Resistance in Phnom Penh at an event hosted by the Cambodian Ministry of Health. Building on WHO's 2011 Global plan for

artemisinin resistance containment, as well as a multi-partner evaluation of containment efforts to date, the emergency response framework will guide a major scale-up of WHO-recommended strategies to combat this public health threat.

The framework urges affected countries to remove poor-quality antimalarial drugs and oral artemisinin-based monotherapies from circulation, as their use is compromising both the efficacy of artemisinin and the drugs combined with them as part of ACTs. According to WHO's latest assessment this month, at least 31 companies around the world are still marketing such monotherapies. Globally, 44 countries have withdrawn marketing authorization for these pills, but 14 countries continue to allow their marketing.

"We are at a tipping point. What seems to be a localised threat could easily get out of control and have serious implications for global health," said Dr Newman. "This response will require substantial funding, a high level of political commitment, and strengthened regional and cross-border collaboration."

The emergency response, which also includes the establishment of a WHO regional hub in Phnom Penh to support containment efforts, has received financial support from the Bill & Melinda Gates Foundation and AusAID. In addition, the Global Fund to Fight AIDS, Tuberculosis and Malaria has recently announced the allocation of US$ 100 million to tackle this threat over the next three years.

While these are significant steps forward, WHO currently estimates that about US$ 300-350 million of additional funding would be required from 2013-2015 to fully scale up malaria control and containment activities across affected countries in the Greater Mekong subregion.

Global funding needs for malaria control

In total, an estimated US$ 5.1 billion is needed every year between 2011 and 2020 to achieve universal access to malaria prevention, diagnostic testing, and treatment around the world. Although many countries have increased domestic financing for malaria control, the total available global funding remained at US$ 2.3 billion in 2011 – less than half what is required. Many people still lack access to prevention measures – such as mosquito nets and indoor residual spraying – and are unable to obtain diagnostic testing and effective medicines to treat malaria infection. Equally worryingly, there is a real danger that a recent slowdown in mosquito net procurement could lead to resurgences and outbreaks.

Malaria is an entirely preventable and treatable vector-borne disease. In 2012, malaria transmission occurred in 99 countries and territories around the world, putting an estimated 3.3 billion people at risk of illness. In 2010, an estimated 219 million cases occurred globally (range: 154 to 289 million) while the disease killed an estimated 660 000 people (range: 490 000 to 836 000), mostly children under five years of age.

Links:

Emergency response to artemisinin resistance in the Greater Mekong subregion
www.who.int/entity/malaria/publications/atoz/9789241505321/en/index.html

World Malaria Report 2012
http://www.who.int/malaria/publications/world_malaria_report_2012/en/index.html

WHO factsheet on malaria
http://www.who.int/mediacentre/factsheets/fs094/en/index.html

Q&A on artemisinin resistance
http://www.who.int/malaria/media/artemisinin_resistance_qa/en/index.html

Q&A on the Global plan for insecticide resistance management
http://www.who.int/malaria/media/insecticide_resistance_management_qa/en/index.html