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**Fighting Malaria: Progress and Challenges**

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**House Committee on Foreign Affairs, Subcommittee on Africa, Global Health, and Human Rights**

I want to thank the Sub-Committee for taking the time to focus on malaria and for your commitment over the years to robust U.S. investment in global health and development.

We have come a long way in malaria from just 10 years ago.

Since 2000, 1.1 million African children have been saved from malaria. Approximately half of all countries with malaria have reduced malaria cases and deaths by 50 percent or more.

This tremendous progress against malaria has been due to innovation in prevention and treatment, increased funding and political will.

New tools such as long-lasting insecticide treated bed nets and recently developed drugs—along with prevention during pregnancy and indoor residual spraying—have made this progress possible.

The Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. President’s Malaria Initiative and the World Bank are essential to the remarkable successes in malaria control. The Global Fund’s impact is profound: it has distributed 190 million bed nets to protect families from malaria. The President’s Malaria Initiative provides life-saving prevention and treatment to millions of people in Africa and South-East Asia.

However, malaria still has a disproportionate impact on the world’s poorest and most vulnerable individuals, and still kills far too many children each year. If our children here in the U.S. do not have to suffer from malaria, no child anywhere should. Maintaining the gains achieved to date in malaria control is essential, but it is not assured without the continued commitment of multiple partners, including the U.S. government.

Guided by the principle that all lives have equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy and productive lives. Our Global Health Program seeks to ensure that life-saving advances are developed and reach those who need them most.

In malaria, we focus our efforts on improving existing tools and discovering new ones to reduce and prevent malaria transmission, and in the long-term, eradicate malaria worldwide.

Existing interventions have contributed to a 20 percent decline in mortality due to malaria. We must continue to improve access to interventions like long-lasting insecticide treated bed nets, indoor residual spraying, and treatment that save lives. The impact of the tools available right now is very real.

However, the malaria parasite has a history of adapting to drugs and insecticides. Drug resistance to the most effective drug available, artemisinin-based combination therapy, is developing in South-East Asia.

Research and development is essential because the preventive and curative tools that are available today – and are so effective at controlling malaria today – are not sufficient to control malaria in the long-term or for eradication, due largely to the development of resistance.

Today, the world has the strongest research and development pipeline for malaria that has ever existed and we must ensure that it stays this way. Significant credit goes to the National Institutes of Health, which is one of the primary funders of malaria research and development.

When I left the National Institutes of Health to join the Malaria Vaccine Initiative, I was asked why I would bet my career on creating a malaria vaccine. At the time, I didn’t have a good answer based on impact. Most researchers were not convinced that the scientific path to a malaria vaccine was clear. And even if our work resulted in promising candidates, we did not know how we would finance or deliver them. After all, at the time, even the cheap and broadly available measles vaccine was not being used worldwide.

# In the last ten years, a lot has changed.

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We are much closer to having a malaria vaccine that works, through significant efforts by the Malaria Vaccine Initiative and many partners. It is possible that a malaria vaccine will be available by 2015. The interim results for the RTS,S malaria vaccine, announced in October, show that the vaccine prevents clinical malaria in 56 percent of trial participants over a period of one year. These results are exciting. We now have proof that it is possible to create a vaccine that is effective against malaria. The U.S. government, through funding from the Department of Defense and USAID, has played an important role in the development of this vaccine.

Research is underway on other vaccine candidates, including transmission blocking vaccines, which would prevent people infected with the malaria parasite from passing the disease on to mosquitoes, who would then infect other people. In the effort for malaria eradication, these vaccines will be invaluable. However, significant work is still needed on the development of malaria vaccines and the U.S. government will continue to play an important role in supporting these efforts.

The Gates Foundation also invests in the development of new drugs and methods to control mosquitoes. There is significant potential on both fronts. Medicines for Malaria Venture, a non-profit organization that we support, is developing new drugs with entirely new classes of action, including a potential single dose cure, which would radically improve our ability to treat malaria. They also recently developed a malaria drug for children.

The Innovative Vector Control Consortium, and other partners, are working on new insecticides for bed nets and entirely new methods to control mosquitoes that could look like the mosquito coils we use in our backyards or wall linings with insecticide that are easier to use than bed nets. We must continue to support the development of new treatment and preventive measures to ensure we stay a step ahead of the evolving parasite.

We have reached an inflection point – a moment in which we either forge ahead, and ensure permanent progress in the fight against malaria; or slide back, and run the risk of losing much of what we have already achieved.

This is *not* the time to sit back and relax our guard. We cannot afford to accept partial success.

To fight malaria, we have to maintain momentum. We are either gaining ground, or we are losing it. Resistance to drugs and insecticides is a very real threat. We have come too far to accept backsliding in the fight against malaria.

In the face of today’s challenges, there is one primary reason that I am optimistic for the future of malaria – the commitment and dedication of so many people here in the U.S. and around the world – from scientists and researchers, program managers in the field, and political leaders, and the partnerships that have emerged to fight this disease.

I am optimistic, but we must face the current situation with urgency. Malaria fights back and recent gains could be lost. We need to be smarter and act faster. We must continue to fund the Global Fund and the President’s Malaria Initiative. This funding saves the lives of children, women, and entire families. Funding is also needed to develop novel treatments and methods of prevention and to deliver more effective and more affordable interventions.

The Gates Foundation’s long-term objective is the eradication of malaria, but we can only achieve eradication if we act urgently and maintain attention and funding today. We are committed to fighting malaria for the long haul. Commitment and leadership by diverse partners, including the U.S. government, African leaders, non-governmental organizations, and the private sector, is critical.

It has been an honor to appear before you today. I appreciate your time, and I look forward to a productive conversation.