

Dr. Richard Mahoney
Pediatric Dengue Vaccine Initiative, *Seoul*

People who have dengue feel often like they're going to die. It's not just "Oh, I have a headache." or "I have a fever." or whatever. They really, really feel sick.

Dr. Tran Ngoc Huu
Pasteur Institute, *Ho Chi Minh City*

Dengue is one of the main priorities in public health in Vietnam. Every year we have about 100,000 cases.

Dr. Lam Sai Kit
Department of Medical Microbiology, *Kuala Lumpur*

During the last thirty years or so you can see an increasing incidence of dengue. If you analyze the data decade by decade it has actually increased so much that it has become a major public health issue in Malaysia.

Dr. Duane Gubler
Asia-Pacific Institute of Tropical Medicine and Infectious Diseases, *Honolulu*

Malaria is probably the most over-diagnosed disease in the world, and I think dengue is one of the most under-diagnosed diseases in the world. Dengue occurs in over 100 countries around the world. We estimate over 100 million infections, probably many more, every year. It's certainly the most important arboviral disease of humans.

Dr. Pratap Singhasivanon
Mahidol University, *Bangkok*

I think that dengue has more impact than many diseases. As you know, everyone is at risk of dengue because the vector is everywhere. And the burden and impact on the economy, impact on the mental health of the parents, and many issues are, I think, tremendous.

Dr Sutee Yoksan
Mahidol University, *Bangkok*

About 2.5 billion people are at risk. And we have been waiting for a vaccine for a long time.

Dr. Joachim Hombach
World Health Organization, *Geneva*

The countries where dengue is endemic clearly send a message to WHO that this is a priority. And of course because it's an epidemic prone disease when a country has experienced an epidemic, it rises further up. I think what is required now is a steady support and a steady prioritization that goes beyond an immediate reaction to an epidemic that a country has experienced.

Dr. Lam Sai Kit
Department of Medical Microbiology, *Kuala Lumpur*

We have biotechnology, we've got genetic engineering, all types of things are coming in and the approach has been quite different in some of the directions that are now being tested. I think that really makes a significant difference in the progress that we are making.

Dr. Joachim Hombach
World Health Organization, Geneva

We see progress with dengue vaccines, and I think it's very encouraging that companies are now planning really to engage into larger scale trials.

Dr. Richard Mahoney
Pediatric Dengue Vaccine Initiative, Seoul

In our view it seems that it's likely that the first vaccine may be licensed as early as 2013, perhaps, if everything goes perfectly well, at the end of 2012.

Dr. Lam Sai Kit
Department of Medical Microbiology, Kuala Lumpur

When we have a vaccine, we want it to be able to be used by the community, whether it is a developed country or a developing country. I think the issue mainly is how to get it to the community in developing countries.

Dr. Joachim Hombach
World Health Organization, Geneva

There will be countries that can probably buy the vaccine and can negotiate affordable prices, but there will be countries that will need assistance. This is absolutely sure.

Dr. Richard Mahoney
Pediatric Dengue Vaccine Initiative, Seoul

We need to work with those people who are doing the distribution so that they can provide the vaccine in a safe and effective way, and a cost effective way.

Dr. Joachim Hombach
World Health Organization, Geneva

I think that one also needs to keep in mind that we are not just talking vaccine cost. We are talking of other costs that come with the implementation of a vaccine: the delivery, the safety monitoring, and so forth, and so forth. All these are things that cost money and need to be assured.

Dr. Lam Sai Kit
Department of Medical Microbiology, Kuala Lumpur

I think what is important is to make sure that the governments know the value of vaccination, and that they should, if necessary, direct some of their budget to preventive measures rather than firefighting measures.

Dr. Roberto Tapia-Conyer
Carso Health Institute, *Mexico City*

In order to have the vaccine available, there is still more research to be done, but at the same time, in parallel to that we need to start doing additional work. One is the surveillance systems, and the laboratory networking, building up a benchmark process of how countries are really knowing more their epidemiology and how countries can assess better the problems that they have.

Dr. Pratap Singhasivanon
Mahidol University, *Bangkok*

It's not a question of Thailand, or a question of Malaysia or Indonesia. It's a question of collaboration between countries because people are moving around the region and one country cannot do alone. We hope that the partnership, effective partnership, with the support of the organizations, agencies, and even the World Health Organization and other funding agencies should achieve that goal.

Dr. Roberto Tapia-Conyer
Carso Health Institute, *Mexico City*

There's need for advancement and to anticipate regulatory concepts. If you know that the vaccine is going to be available, we need to start working on what are the regulatory steps so that we don't have to wait to have the vaccine to start that process. So, the worst scenario would be to have the vaccine and still go through the regulatory process.

Dr. Julie Jacobson
Bill & Melinda Gates Foundation, *Seattle*

For the first time in public health we really are trying to do that with some of the investments that have been made, be clear about what we need to do, what we're trying to achieve and creating the tools to reach there. And, of course, I think vaccine is going to be a pivotal one in being able to control dengue. So, we have new mechanisms that are available now that weren't available before. We have the Global Alliance for Vaccines and Immunization (GAVI), and we have an increased understanding of the use of immunization as a tool to address public health problems outside of just routine E.P.I. and we're in a very exciting time now where we're looking at things much more dynamically and taking on new public health challenges in different way. So, all that is to say that I think that we're in a perfect time to be able to do that, but it doesn't mean we can just sit back and it is going to happen.

Dr. Richard Mahoney
Pediatric Dengue Vaccine Initiative, *Seoul*

But, we have an exciting opportunity within the next few years to have a dengue vaccine so we should all be getting behind it, to see how we can introduce it, use it, and control one of the most important diseases in developing countries.