"We must work harder to prevent maternal infections and devise compassionate ways to ensure that any child born with disabilities from this or any other infection is welcomed, loved and gets the care he or she needs."

Chairman Chris Smith

"Just as scientists found ways, including highly efficacious drugs, to prevent transmission of HIV-AIDS in pregnant women to their unborn children, further research must be undertaken to prevent mother to child transmission of other infectious diseases including Zika virus, if that link is established"

Chairman Chris Smith

The Global Zika Epidemic

Africa, Global Health, Global Human Rights, and International Organization Subcommittee Hearing Chairman Chris Smith – Remarks February 10, 2016

In 1947, in a remote area of Uganda, scientists discovered a previously unknown virus among the rhesus monkey population. They called it the Zika virus for the forest in which it was found. It is endemic to Africa and Southeast Asia.

Scientists know that the Zika virus, like dengue fever and chikungunya, is spread almost exclusively through the bite of an Aedes species mosquito, an aggressive daytime biter. These mosquitoes had been significantly diminished in this hemisphere, certainly in the United States, until the recent resurgence of dengue and chikungunya disease. We know a great deal about these disease-vectors, but there is much scientists admit they don't know about the Zika virus itself.

Lack of knowledge and misinformation has stoked apprehension and fear among many.

According to the World Health Organization (WHO) some of the reasons we don't know more about this disease include:

- A relatively small proportion (about 1 in 4) of infected people develop symptoms;
- A virus that is only detectable for a few days in infected people's blood;
- The failure of current tests to definitively distinguish Zika from similar viruses, such as dengue and chikungunya.

The WHO recommends that all people in areas with potentially infected mosquitoes, especially pregnant women, wear protective clothing and repellants and stay indoors to the extent possible with windows closed or screened. Pregnant women are urged to postpone travel to affected areas or to diligently protect against mosquito bites if travel is unavoidable.

Currently no therapeutics exist to treat Zika virus nor is there a vaccine – but that gap need not be forever. One of our witnesses today – Dr. Anthony Fauci, Director of NIH's allergy and infectious diseases institute will explain the scope of NIH research on the Zika virus as well vector control. Lessons learned from years of malaria vector control have applicability to Zika. Our two other distinguished witnesses include Dr. Thomas Frieden and Ariel Pablos-Mendez, Assistant Administrator for Global Health at USAID

The U.S. Government has for quite some time promoted such tactics as insecticide-laced mosquito nets, window and door screens, small pool and container drainage and the use of strong but safe pesticides to eradicate mosquitoes. However, our programs largely are tailored for developing countries. With the reemergence of dengue fever and chikungunya in the southern United States, we have to step up our domestic efforts to control mosquitoes before warmer weather leads to an explosion of the mosquito population during an imminent epidemic in the homeland.

According to Luiz Alberto Figueiredo Machado, Ambassador of Brazil to the United States, the Brazilian government has deployed 220,000 troops and 300,000 health agents to fight the vector of the infection by visiting communities to educate the population and help eliminate all mosquito breeding grounds.

Experts cite possible links with the Zika infection of pregnant mothers and disorders affecting their unborn children, although they – including our witnesses today – are quick to point out that no definitive proof of such a linkage.

According to Brazil's Ambassador Machado, "Microcephaly in newborn babies can also be caused by a number of other diseases. Health experts are dealing with something new: the link between Zika and microcephaly is unprecedented in the scientific literature and requires in-depth studies and analyses...."

In fact, in announcing the Administration's proposal for a supplemental sum of \$1.8 billion to fund efforts to combat the Zika virus, the White House statement says there "may" be a connection between the Zika virus and disorders experienced by newborns in affected countries.

Dr. Marcos Espinal, Director of Communicable Diseases and Health Analysis at the Pan American Health Organization (PAHO), said there is a broad spectrum of impacts for microcephaly. A fact sheet on Microcephaly in Boston Children's hospital notes that "Some children with microcephaly have normal intelligence and experience no particular difficulty with schoolwork, physical activity, relationships or any other aspect of their lives. However, many children with the disease – especially those with more severe cases – face: mild to significant learning disabilities, impaired motor functions, difficulty with movement and balance, speech delays."

In the meantime, we must work harder to prevent maternal infections and devise compassionate ways to ensure that any child born with disabilities from this or any other infection is welcomed, loved and gets the care he or she needs. USAID's Ariel Pablos-Mendez will testify today that we need to expand "best practices for supporting children with Microcephaly." In like manner, parents of children with disabilities need to be tangibly supported.

Ana Carolina Cáceres, a Brazilian journalist born with microcephaly, told the BBC's Ricardo Senra in a February 5 interview that the condition "is a box of surprises. You may suffer from serious problems or you may not...On the day I was born, the doctor said I had no chance of survival. 'She will not walk, she will not talk...' But he—like many others—was wrong. I grew up, went to school, went to university. Today I am a journalist and I write a blog...People need to put their prejudices aside and learn about this syndrome."

This hearing will look into the implications of the current and long-term threat from the Zika virus, and we have assembled expert infectious health leaders from the Centers for Disease Control and Prevention, the National Institutes of Health and the U.S. Agency for International Development to help us do so.

For more than four years, I have been urging passage of my bill the End Neglected Tropical Diseases Act –-H.R. 1797. The full Foreign Affairs Committee approved it last month. Since 2011, we've accelerated our discussions on the need for more study and funded efforts to identify tropical diseases and find diagnostics, vaccines and treatments of such illnesses.

At that time, West Nile virus was quietly making its way across the globe, including the United States, from its origins in East Africa.

Ebola virus, first discovered in a remote area of Central Africa in 1976, caused a global health crisis only two years ago.

For the second consecutive year, the administration has slashed funding for global health accounts in the budget proposal released this week, including a 19 percent cut for global program on Tuberculosis – the world's leading infectious disease killer. Additionally, the Administration is being short-sighted with regard to Neglected Tropical Diseases, cutting that program by nearly 15 percent. In the face of the waves of infectious disease epidemics in recent years, including multi-drug resistant Tuberculosis, West Nile virus, Ebola and now Zika, the administration's habitual disregard of the increasing danger from infectious diseases is simply inexplicable.

Zika has now joined the ranks of previously little-known diseases that have created global alarm.

Before the next explosive health crisis appears, we must provide sufficient resources to the study of tropical diseases. H.R. 1797 authorizes the creation of Centers of Excellence to study every aspect of these dreaded diseases.

Zika virus is the latest crisis but won't be the last.