“Meeting the Challenge of Drug-Resistant Diseases in Developing Countries”

Excerpts of Remarks by Chairman Chris Smith  
Subcommittee on Africa, Global Health, Global Human Rights, and Int’l Organizations  
April 23, 2013  
2172 Rayburn House Office Building

Good afternoon. Today’s hearing will examine a deadly phenomenon involving both natural and man-made elements – diseases that are resistant to most or all available methods of treatment. While this is a growing problem of increasing concern throughout the world, the subcommittee will be focusing today on the impact of such diseases – known as “superbugs” – in developing countries and the challenges to preventing and treating these diseases in this part of the world.

There is a family of germs that occur normally in everyone’s digestive system. They can cause infections when they get into the bladder, blood or other areas where they don’t belong. That is the natural part of this growing problem. Gut flora are absolutely essential for health and an effectively functioning immune response. There are about 100 trillion microorganisms in our digestive systems – ten times the number of cells in our bodies. Most of them help break down the foods we eat. Those that are not helpful are usually can be treated with existing medicines, such as antibiotics.

The man-made part is that antibiotics have been used increasingly to treat naturally-occurring germs, but many of them have become resistant to such treatment. These so-called “superbugs” pose a threat because of overuse or misuse of antibiotics, but they also pose a threat because of what some call a “drug discovery void,” in which there has been insufficient research and development of new medicines to treat emerging mutating infections.
This situation recently has become much more serious. In the last 10 years, these drug-resistant diseases have been identified in patients in more than 200 hospitals in 42 states in this country. Over that period, their prevalence rate has increased from 1 percent of patients to 4 percent for those in short-term care, but for patients in long-term care facilities, the rate is as high as 18 percent. Half of all patients who contract these diseases do not survive.

Methicillin-resistant Staphylococcus aureus, or MRSA, one of the better known of these superbugs, now kills as many as 19,000 Americans each year and a similar number in Europe. That is higher than the annual rate of deaths from HIV and AIDS.

Last year, the World Health Organization identified strains of gonorrhea and tuberculosis that are currently completely untreatable, as well as a new wave of what might be called “super superbugs” with the mutation known as NDM1. These frightening new strains were first seen in India, but they have now spread worldwide. The spread of the H7N9 bird flu in China is causing considerable concern – with more than 100 confirmed cases and 22 deaths reported thus far. According to Agence France Presse, WHO said yesterday that there is still no evidence that H7N9 was spreading in a “sustained” way between people in China.

According to WHO, artemesinin, when used in combination with other drugs is now considered the world’s best treatment against malaria, but malarial parasites resistant to artemesinin have emerged in western Cambodia, along the border with Thailand.

In the developed world, we pride ourselves on having top-flight medical care widely available to patients. If we lose half of all patients who contract these drug-resistant diseases, what about patients in the developing world, where statistics are often scarce and effective medical care can be even scarcer. Using accepted protocols for treating these diseases, their rate of infection can be curbed.

In Israel, infection rates in all 27 of its hospitals fell by more than 70% in one year with a coordinated prevention program. By following accepted protocols for handling these diseases, the Colorado Department of Public Health and Environment and the Florida Department of Health both have stopped outbreaks of these drug resistant diseases in recent years. But what about hospitals in developing countries?

For example, the brain drain has sent trained medical personnel in Africa in search of better working conditions and pay in the developed world. The lack of equipment and supplies that partly led to this brain drain would facilitate the rapid spread of drug resistant diseases in these countries. What would be simple interventions, including removing temporary medical devices such as catheters or ventilators from patients as soon as possible, is less likely under current conditions in developing world hospitals. Adding to this problem is the presence of expired and counterfeit drugs. Patients whose lives could be saved may not be because of inadequate medical care. Unfortunately, because so many countries do not maintain and report statistics on medical issues, we have little idea how serious the situation is today in developing countries in Africa and elsewhere around the world.
In our interconnected world, that means that infected people in the developing and developed countries pose a mutual threat.

Last month, a Nepalese man was detained at the Texas border while trying to make an illegal crossing from Mexico. Officials found he was infected with an extensively drug resistant strain of tuberculosis and had carried this potentially deadly airborne disease through 13 countries over three months – from his home country of Nepal through South Asia, Brazil, Mexico and finally the United States. Who can say how many people he infected during this long journey?

Conversely, six years ago an American infected with multi-drug resistant tuberculosis traveled from this country to France, Greece and Italy before returning through the Czech Republic and Canada. Upon his return to the U.S., he became the first person subjected to a Centers for Disease Control and Prevention isolation order since 1963.

Clearly, both developed and developing nations must work together to prevent and treat for these diseases and find a way to implement the new strategies in an era of constrained budgets and loosening control of authority in far too many countries. However, the Administration’s proposed FY 2014 budget calls for a 19% cut in funding for tuberculosis programming at a time we need such capacity the most.

Today’s witness heads an agency that is charged with examining the elements of disease and helping to develop the strategies for addressing the threats they pose to mankind. We look forward to hearing from Dr. Frieden, and exploring with him the means by which the U.S. Government is working with developing countries to counter this global health threat.