

Opening Statement of Chairman Tim Murphy
Subcommittee on Oversight and Investigations Hearing on “Combating
Superbugs: U.S. Public Health Responses to Antibiotic Resistance”
June 14, 2016

The Subcommittee convenes this hearing today to examine public health responses to the challenge of antibiotic resistant “superbugs.”

One of the world’s most pressing health problems is the emergence of bacterial infections that are resistant to antibiotics.

According to the Centers for Disease Control and Prevention, each year 2 million Americans become sick every year with antibiotic-resistant infections, and of that about 23,000 die.

Globally, some institutions estimate up to 700,000 die each year from antibiotic resistant infections. Without action, the researchers estimate 10 million people will die per year by 2050 from drug resistant infections.

The World Health Organization has declared that humanity is on the precipice of a “post-antibiotic era,” where common infections may once again be lethal because bacteria have become resistant to the antibiotics existing to treat them.

The antibiotic-resistance threat just got greater. Last month, a woman in my home state of Pennsylvania was diagnosed with an E. coli infection that had a rare gene called MCR-1, a new kind of superbug never before seen in the United States.

Medical professionals were alarmed for two reasons. One, this new superbug is resistant to colistin [Co – liss – tin], an antibiotic of last resort which is used when no other antibiotics can fight the infection.

Two, this MCR-1 gene can move from one bacteria to another. Eventually, MCR-1 could merge with another superbug that is resistant to all antibiotics, except for colistin, and form an unstoppable superbug.

In response to the discovery of the MCR-1 gene, CDC Director Dr. Tom Frieden commented that “the medicine cabinet is empty for some patients It is the end of the road unless we act urgently.” If the threat is not stopped, minor infections may become life threatening and treatment for disease such as cancer, diabetes or routine surgeries will be at risk.

Fortunately, the end of the road is not here yet. Congress and Federal agencies are working diligently to counter the effects of antibiotic resistance.

These efforts confront the two main contributors to the spread of antibiotic resistance: The over-prescription of antibiotics and the lack of new antibiotic development.

Since the discovery of penicillin in the early 20th century, almost every type of bacteria has become less responsive to antibiotics. As soon

as an antibiotic goes in to wide use among the general public, bacteria evolve to become resistant.

A study published last month in the Journal of the American Medical Association (JAMA) found that nearly a third of antibiotics prescribed in doctors' offices, emergency rooms, and hospital-based clinics in the United States are not needed. This amounts to nearly 47 million unnecessary prescriptions given out each year.

And the numbers in this report most likely undercount the use of antibiotics, because the data did not include urgent care clinics, retail pharmacies, dentists' offices, and prescriptions given over the phone, and by nurse practitioners and physician assistants.

To combat antibiotic over-use, the CDC has partnered with FDA to advocate for antibiotic "stewardship" programs in health care facilities throughout the United States. The CDC has issued guidelines about how

hospitals can minimize inappropriate or excessive use of antibiotics, which could help reduce antibiotic over-prescription.

Reducing the inappropriate use of antibiotics will help, but it can only slow the spread of antibiotic resistant bacteria. New antibiotics and alternative therapies must be developed.

Despite the need for antibiotic development, as of March 2016, there were only 37 new antibiotics in development. Just 13 were in phase 3 clinical trials. These drugs would potentially address many resistant bacteria – but they are not enough.

To combat this, in February of this year, the Biomedical Advanced Research and Development Authority (BARDA) has collaborated with NIH to establish a “Biopharmaceutical Accelerator” that will support research and development to incentivize antibacterial drug development. This Accelerator will (1) fund development of antibacterial products, (2) quickly move successful drug candidates through early development, (3)

provide business and drug development guidance, and (4) decrease barriers to research and development of antibiotics.

The CDC, FDA, NIH, and BARDA have, and continue to make, significant and ongoing contributions to implement the National Action Plan for Combating Antibiotic-Resistant Bacteria released last year, which outlines steps to implement a national strategy to combat antibiotic resistance.

Additionally, Congress has increased funding for these initiatives by 57 percent over last fiscal year, for a total of more than \$375 million.

Despite these promising developments, we are facing a public health challenge and we need to ensure that the federal government is taking the appropriate action to protect the American public.

I would like to thank the witnesses for appearing before the Subcommittee today and I look forward to hearing your testimony on this

very important issue. I now recognize the Ranking Member of the Subcommittee, Ms. DeGette of Colorado, for five minutes.