Congressional Record

May 13, 2009

Mr. MATHESON.

Madam Speaker, I rise to re-introduce the "Strategies to Address Antimicrobial Resistance (STAAR) Act," which I believe has the potential to save many thousands of lives by strengthening the United States' response to infectious pathogens, including H1 influenza, that are becoming increasingly resistant to existing antimicrobial drugs (antibacterials, antivirals, antifungals, etc.).

I have been working on the issue of antimicrobial resistance for several years and it is alarming how often reports of resistant infections now appear. I do not believe the public health community simply is crying "wolf." We no longer can be complacent.

When I first introduced this bill two years ago, we were facing reports of extensively-drug resistant tuberculosis (XDR-TB) and fears of an Avian flu pandemic. Over the last few weeks, we all have followed the H1 influenza outbreak as we ramped up our awareness of influenza mitigation strategies and the impact of infectious pathogens. What received less attention is the fact that H1 is resistant to some of the drugs in our arsenal. The Centers for Disease Control and Prevention (CDC) will continue to watch the spread and evolution of this pathogen as flu season hits the southern hemisphere. Hopefully, we again will buy some time before we truly face a pandemic. But, now the possibility of a pandemic has become real to many of us. We have been forced to think about how quickly an infection can spread, especially in the age of international air travel, and the disastrous result if it were a strain of bacteria that failed to respond to our current antiviral drugs.

Another resistant infection that caught our attention over the past year is community-acquired methicillin-resistant Staphylococcus aureus (CA-MRSA). Historically, this infection was acquired during a hospital stay, but now is impacting young, healthy people and spreading in our communities. We've heard stories of high school, college and professional athletes losing their lives or careers as a result of these infections. Many of our constituents are facing serious illness and death due to MRSA infections. Sadly, this infection has become far too common, difficult to treat and has few options to fight it. It can leave individuals disfigured, if they survive. In my own state of Utah, the number of children with MRSA infections at the Primary Children's Medical Center in Salt Lake City has increased by almost 20 fold over the past two decades.

There are still more infections to worry about. We have numerous reports of our soldiers coming home from Iraq and Afghanistan with Acinetobactor-a resistant bacterial infection that is especially difficult to treat and the only option is a very toxic antibiotic.

Other examples of concern include vancomycin-resistant Staphylococcus aureus (VRSA), an alarming development because vancomycin is the drug of last resort for treating several serious infections, and Escherichia coli (E.coli), which has caused

outbreaks due to contamination of spinach, peanut butter, and other foods we regularly consume.

Madam Speaker, I believe strongly that this year we must take this issue seriously and ensure we have the public health infrastructure in place to both monitor and respond to these emerging drug resistant infections. The STAAR Act is the most comprehensive legislation introduced to date to address this serious and life-threatening patient safety and public health problem. We must act now to begin to reverse the alarming trend, and infectious disease experts tell me that the multi-pronged approaches contained in the STAAR Act provides our best chance to address the multiple problems that face us.

We have taken antimicrobial drug development for granted. Few of us remember medicine before the discovery of antibacterial and antiviral drugs. Antibacterial drugs in particular have allowed many medical advances, including routine invasive surgeries, organ transplants, and other procedures that otherwise would be impossible due to resulting infections. But we are falling behind in our ability to protect ourselves against infections, and we have a lot of catching up to do. Fifteen years ago, the Congressional Office of Technology Assessment (OTA) examined the problem of antimicrobial resistance and reported to Congress that "The impacts of antibiotic-resistant bacteria can be reduced by preserving the effectiveness of current antibiotics through infection control, vaccination and prudent use of antibiotics, and by developing new antibiotics specifically to treat infections caused by antibiotic-resistant bacteria."

In addition, there are problems of significant and inappropriate use of antimicrobials; a lack of adequate research to address the many facets of resistance, including basic, clinical, interventional, and epidemiologic research as well as research to support the development of new diagnostics, biologics, devices and, of course, drugs; a fractured and under-funded resistance surveillance system; and insufficient coordination of the federal response, which is critically needed as the solutions to addressing antimicrobial resistance involve multiple agencies and departments.

To begin to respond to the drug resistance problem, eight years ago Congress passed legislation that became Section 319E, "Combating Antimicrobial Resistance" of the Public Health Service Act. This law directed the Secretary to establish an Antimicrobial Resistance Task Force to coordinate Federal programs relating to antimicrobial resistance; required research and development of new antimicrobial drugs and diagnostics; established educational programs for medical and health personnel in the use of these drugs; and established demonstration grants for programs promoting the judicious use of antimicrobial drugs and the detection and control of the spread of antimicrobial-resistant pathogens. Authorization for these programs expired September 30, 2006. The STAAR Act reauthorizes these programs and builds on the Federal efforts that have been highlighted in the Public Health Service Action Plan to Combat Antimicrobial Resistance, published in 2001 by the Task Force.

The Action Plan identified thirteen key elements (out of 84 elements) as top priority action items that are critically necessary to address the growing resistance crisis. Regrettably, the Action Plan has never been funded.

In spite of these past efforts to address the problem, antimicrobial resistance continues to grow. In 2004, the Infectious Diseases Society of America (IDSA) published, "Bad Bugs, No Drugs: As Antibiotic Discovery Stagnates a Public Health Crisis Brews" to highlight the lack of research and development for new antibiotics. Updates to this report continue to make the case that we need to do more. Antibacterial drugs are not profitable compared to those that treat chronic (long-term) conditions and lifestyle issues. In addition, when a new antibiotic comes on the market, it is discouraged from use to avoid the development of resistance. Also, antibiotics are taken for short periods of time-unlike those for chronic disease which may be taken daily. As a result, big pharmaceutical companies have pretty much turned their back on antibiotic development. IDSA has published several other reports that support many of the provisions found in the STAAR Act.

The "Strategies to Address Antimicrobial Resistance (STAAR) Act" is comprehensive legislation that advances the thirteen key elements identified in the federal Action Plan and authorizes adequate funding for these strategies.

My bill strengthens existing efforts by establishing an Antimicrobial Resistance Office (ARO) within the Office of the Secretary of Health and Human Services. The Director of the ARO would serve as the director of the existing interagency task force and work in conjunction with the many Federal agencies which share responsibility to address antimicrobial resistance to ensure accountability and progress on the Action Plan. Also, to encourage input from experts outside the federal government, and to ensure accountability, my bill would establish a Public Health Antimicrobial Advisory Board (PHAAB) to provide much needed advice about antimicrobial resistance and strategies to address it. The STAAR Act will strengthen existing surveillance, data collection, and research activities as a means to reduce the inappropriate use of antimicrobials, develop and test new interventions to limit the spread of resistant organisms, and foster the development of new tools to detect, prevent and treat these "bad bugs." Infectious diseases experts have said they strongly support this multi-faceted, strategic approach.

The STAAR Act has been endorsed by a number of organizations, including: Infectious Diseases Society of America (IDSA), American Academy of Family Physicians (AAFP), Alliance for the Prudent Use of Antibiotics (APUA); American Association of Critical-Care Nurses (AACN); National Parent-Teacher Association (PTA); American Public Health Association (APHA); National Foundation for Infections Diseases (NFID); Council of State and Territorial Epidemiologists (CSTE); and Michigan Antibiotic Resistance Reduction Coalition (MARA); American Society of Health-System Pharmacists (ASHP); Association for Professionals in Infection Control and Epidemiology (APIC); International Society of Microbial Resistance (ISMR); Michigan Antibiotic Resistance Reduction Coalition (MARA); National Athletic Trainers

Association (NATA); Society of Infectious Diseases Pharmacists (SIDP); and Trust for America's Health (TFAH).

This legislation has been a long time coming. I urge my colleagues to join me in supporting this legislation and to work with me to give our federal agencies the tools they need to ensure that combating antimicrobial resistance becomes a priority.