

**Testimony of the Infectious Diseases Society of America's (IDSA)
Prepared for the
U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Oversight and Investigations Hearing:
"Examining the U.S. Public Health Response to Seasonal Influenza"
Submitted by
Stephen B. Calderwood, MD, FIDSA, IDSA President
February 3, 2015**

On behalf of the Infectious Diseases Society of America (IDSA), thank you for the opportunity to submit testimony on the importance of building a strong public health infrastructure to protect Americans from severe illness and death caused by seasonal influenza. IDSA represents over 10,000 physicians and scientists devoted to patient care, prevention, public health, education, and research in infectious diseases. IDSA members stand ready to help lead our nation's response to any future bioterrorism event, pandemic or other infectious disease emergency at the federal, state and local level, as we have in the past.

Seasonal influenza is a highly contagious respiratory illness—affecting 5 to 20 percent of the U.S. population annually. In the U.S. alone, annual deaths caused by flu range from 3,300 to 48,600 people, and more than 200,000 patients are hospitalized each year from flu-related complications. In addition, flu kills approximately 100 U.S. children less than five years of age every year. During the 2013-14 flu season, 109 pediatric deaths were reported to the CDC and so far this season, 56 children have died due to influenza and its complications.

Influenza vaccines are currently our best interventions for prevention of seasonal influenza, even when vaccines are less than perfectly matched to the circulating virus strains. Widespread vaccination coverage within a community provides the strongest protection. Although this year's vaccine offers a relatively low level of protection specifically to the H3N2 strain due to unanticipated genetic variation, it can still prevent some infections with currently circulating H3N2 flu viruses and also reduce the illness severity, related complications, and hospitalizations. It is critically important, however, that we continue to invest in better vaccines. Unfortunately, seasonal influenza vaccines available today are less effective than many other widely-used vaccines. The long timeline needed to produce the vaccines with the outdated technology currently available makes the risk of genetic mismatch even higher between the time of selection of the strains for inclusion in the vaccine, and subsequent flu outbreaks.

Patients who become symptomatic with influenza virus infection can also benefit from antiviral treatment. IDSA recommends that clinicians start antiviral treatment with oral oseltamivir as soon as possible for any hospitalized patient with suspected or confirmed influenza and for any patient with suspected or confirmed influenza who has severe or progressive illness. When oseltamivir resistance is either suspected or confirmed in a seriously ill or immunocompromised influenza patient, intravenous peramivir is recommended. Unfortunately, however, antivirals remain underutilized in both the inpatient and outpatient setting.

Moreover, our existing arsenal of influenza antiviral agents is limited and at risk of losing effectiveness. Currently, neuraminidase inhibitors (including oseltamivir, peramivir and zanamivir) are the only class of antivirals widely available. If widespread resistance to this class develops in seasonal influenza strains or, worse yet, in a pandemic strain, we will be left without alternatives in the current pipeline, and influenza-related morbidity and mortality will increase. The development of resistance over time is a very real threat, and our experience with antibiotic use and emergence of resistance in bacteria suggests resistance to antiviral agents will likely occur if we fail to improve on vaccine development and bolster the antiviral pipeline.

Unfortunately, political, economic, scientific, and pragmatic barriers continue to prevent sufficient and sustained funding for influenza preparedness. The disappointing vaccine effectiveness assessment this season reflects the scientific challenges and uncertainties facing influenza vaccine developers and reinforces the need for better vaccines. In addition, a strong, integrated public health and healthcare system response is critical to facilitate vaccine and antiviral access and to support healthcare facilities experiencing patient admission surges. In addition to the need for better vaccines and preparedness, IDSA supports research on novel influenza diagnostics and therapeutics, including antivirals and immunotherapy for both seasonal and pandemic preparedness, as well as stockpiling of antiviral agents for pandemic influenza preparedness.

In 2012, IDSA released “[Pandemic and Seasonal Influenza Principles for United States Action](#),” which outlines steps needed to protect Americans from future influenza outbreaks. IDSA strongly believes that much work remains, and overall responses to seasonal influenza and pandemic preparedness must be closely interrelated. IDSA calls for:

- enhanced coordination between the Department of Health and Human Services (HHS) and other U.S. government departments, as well as better coordination within HHS, particularly concerning influenza vaccine development, antiviral production, and R&D of diagnostic tests;
- clear processes for continual review of critical and rapidly evolving components of influenza preparedness, such as the contents of the Strategic National Stockpile (SNS)
- policies to increase the uptake of the annual influenza vaccine by healthcare workers, including the adoption of mandatory vaccination policies (see [IDSA's policy statement](#) for details)
- significant and sustainable multi-year funding that may be used flexibly, particularly by local health departments for "All-Hazards" preparedness

In the long term, continuously funded influenza preparedness efforts will be more cost-effective and have a greater impact in preventing illness and saving lives than the periodic emergency supplemental funding approach that historically has been used to fund such efforts. We look forward to working with the Committee to strengthen U.S. capacity to mitigate and respond to seasonal influenza.

Contacts:

Infectious Diseases Society of America
1300 Wilson Boulevard, Suite 300
Arlington, VA 22209

Amanda Jezek
Vice President, Public Policy and Government Relations
Infectious Diseases Society of America
Tel: (703) 740-4790
ajezek@idsociety.org

Jonathan Nurse
Director, Government Relations
Infectious Diseases Society of America
Tel: (703) 299-0202
jnurse@idsociety.org