

Board of Scientific Counselors, Office of Infectious Diseases
Centers for Disease Control and Prevention
Teleconference on April 18, 2013

A 1-hour open teleconference of the Board of Scientific Counselors (BSC), Office of Infectious Diseases (OID), Centers for Disease Control and Prevention (CDC), was held on April 18, 2013, from 2:00-3:00 PM, Eastern Time. The teleconference was announced in the Federal Register on March 21, 2013. The meeting was convened to discuss the potential for forming an infectious disease laboratory working group under the BSC/OID. The meeting also included a brief update on the outbreak of avian influenza A (H7N9) virus occurring in China.

Opening Remarks

BSC Chair Ruth Berkelman, Rollins Professor, Emory University, called the meeting to order and was joined in welcoming participants by Rima Khabbaz, CDC Deputy Director for Infectious Diseases, and Robin Moseley, the BSC/OID Designated Federal Officer.

H7N9 Influenza Update

Steve Redd, Director, Influenza Coordination Unit, described the outbreak of avian influenza A (H7N9) virus occurring in multiple provinces in eastern China, and in Beijing and Shanghai. The virus, not known to have previously infected humans, was first detected in March. To date, more than 80 laboratory-confirmed cases and 17 deaths have been reported, with most cases occurring among persons in their 60s. Although limited clusters have been reported, no evidence of ongoing human-to-human transmission has been found. Investigations into the sources and reservoirs of the infection are ongoing. For patients with available information, data suggest that most, but not all, had exposure to animals (primarily chickens and ducks) on farms or in urban wet markets. While the novel H7N9 virus is associated with unusually high mortality in humans, it has low pathogenicity in poultry. In response to a question regarding the potential for other reservoirs, Dr. Redd stated that there has been no confirmation of the virus in swine. Dr. Redd stated that a reference diagnostic test has been developed, and CDC is working with the U.S. Food and Drug Administration (FDA) on an Emergency Use Authorization. Also, of note, H5N1 influenza virus is also circulating in this area.

Proposal to create a laboratory working group under the OID, BSC

Dr. Khabbaz described the critical need for CDC to integrate state-of-the-art molecular and bioinformatics technologies into public health efforts to control infectious diseases. These technologies are offering powerful new applications for controlling infectious diseases and are revolutionizing the practice of microbiology.

Moreover, as culture-independent diagnostic tests have become more efficient and affordable, they are increasingly being used in clinical settings—requiring a retooling of large public health surveillance systems such as PulseNet that rely on culture.

Dr. Khabbaz stated that a blue ribbon panel that was convened in 2011 to review the status of these technologies at CDC found severe gaps in the Agency’s bioinformatics capacities, which will ultimately affect CDC’s capacity to fulfill its public health mission. CDC has taken steps to build this capacity, including the formation of a small bioinformatics program, but has lacked resources to gain momentum. Towards that goal, CDC is requesting dedicated FY 2014 funding to develop and incorporate new molecular technologies and bioinformatics capacities into public health.

Dr. Khabbaz stated that the formation of a working group under the BSC/OID to help guide CDC’s efforts in this area has been proposed. The working group would comprise experts across the fields of microbiology, pathology, bioinformatics, laboratory information technology, and public health. Regardless of whether new funding is received, this working group could help provide expert advice as CDC works to develop and integrate these new technologies into public health practice to prevent and control infectious diseases.

During their discussion, board members noted that this is a rapidly changing field with new technologies constantly in development. CDC should ensure that it has the flexibility to incorporate these technologies to ensure that public health can best contribute to and benefit from their use. Dr. Berkelman proposed the formation of a BSC/OID working group to provide guidance in this area. Because of technical difficulties with the phone lines, a decision was made to hold the vote at the beginning of the upcoming full board meeting on May 8, 2013.

Participants

BSC Members

Ruth Berkelman
Jack Bennett
Nancy Bennett (*representing ACIP on behalf of Jon Temte*)
Kristy Bradley
Harry Chen
Frank Cockerill
Carolyn Deal (*representing NIAID on behalf of Carole Heilman*)
Jesse Goodman
Jim Hadler
Kent Kester
Beth Lautner
Laurene Mascola
Steve Ostroff
Andy Pavia
Scott Ratzan
Bob Sautter
Ken Scott (*representing Public Health Agency of Canada on behalf of Rainer Engelhardt*)
Kim Smith
Julio Sotelo
Jill Taylor
Judy Wasserheit

CDC Staff

Robin Moseley
Rima Khabbaz
Kim Distel
Jan Nicholson
Steve Redd
Steve Solomon
Sarah Wiley