Meeting of the CDC Board of Scientific Counselors, Office of Infectious Diseases

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Meeting November 9, 2011

- The focus of the meeting was to generate ideas on how CDC laboratories can maintain core capacities and provide leadership and support to state and local laboratories at a time of rapid change and limited resources.
- Break-out discussions on this topic were held following opening remarks and updates, and presentations on changes and challenges for infectious disease laboratories by a panel of CDC laboratory leaders.

OID AND NATIONAL CENTER UPDATES

- Dr. Beth Bell, Director, National Center for Emerging and Zoonotic Infections Diseases (NCEZID)
- NCEZID proposal to establish a working group under the OID BSC to advise CDC on implementation of CDCled components of the 2011 A Public Health Action Plan to Combat Antimicrobial Resistance, which was issued in August by the Interagency Task Force on Antimicrobial Resistance (ITFAR) (http://www.cdc.gov/drugresistance/pdf/public-healthaction-plan-combat-antimicrobial-resistance.pdf)
- The motion was approved

Overview of the 2011 Food Safety Modernization Act (FMSA)

- Dr. Dale Morse, Senior Advisor, Division of Foodborne, Waterborne, and Environmental Diseases (DFWED) and NCEZID Office of the Director provided the overview
- CDC will work with FDA and other agencies by offering surveillance data and leadership in outbreak investigation in designing data driven preventative controls and food safety standards.

CDC Role in the Food Safety Modernization Act

- Improve coordination and data sharing with public health partners and the public
- Increase state and local participation in national surveillance networks.
- Expand and integrate national surveillance systems
- Enhance laboratory and epidemiological methods for agent identification, outbreak detection and investigation.
- Improve the attribution of specific illnesses to specific foods.

CDC and FSMA

- The ACT also directs CDC to designate five integrated Food Safety Centers of Excellence at the State Health departments to Identify and implement best practices in foodborne disease surveillance and to serve as a resource for public health professionals at state, local and regional levels.
- The HHS Health secretary is charged with creating a working group to guide efforts to establish these centers of excellence.

Working Group

- Dr. James Hadler, BSC member and co-chair of the OID/BSC FSMA working group reported on the group's first meeting, which was held Nov 7-8, immediately prior to the OID BSC meeting.
 - Structure of group was presented and some goals were mentioned:
 - Provide advice and recommendations for food borne surveillance.
 - Also supply advice on an ongoing basis regarding improvement of surveillance

Infectious Disease Framework

- Dr. Rima Khabbaz provided an update on OID, the CDC budget, and priority activities and accomplishments for CDC's infectious disease organizations.
- She also provided an update on the recently released CDC Infectious Disease Framework
 (www.cdc.gov/oid/framework.html) which focuses on three critical elements: strong public health fundamentals, high-impact interventions, and sound health policies.

Framework- Elements and Priorities

- Element 1: Strengthen public health fundamentals, including infectious disease surveillance, laboratory detection, and epidemiologic investigation
- Element 2: Identify and implement high-impact public health interventions to reduce infectious diseases
- Element 3: Develop and advance policies to prevent, detect, and control infectious diseases

Panel Discussion: The Changing Landscape for Infectious Disease Laboratories

- Overview of infectious disease public health laboratories, perspectives from a state public health laboratory, and three examples of CDC's infectious disease laboratories in action (foodborne diseases, influenza, and tuberculosis).
- Panelists included 4 CDC laboratory leaders and Dr. Joanne Bartkus from the Minnesota Department of Health.
- Panelists described successes and challenges facing public health laboratories, as well as the interconnectedness of the clinical, public health, and research laboratories.

A Laboratorian's Perspective

 A really good meeting and the following topics were discussed and seem most important to the public health and private laboratories

Some of the presentations that had touched upon the following topics:

- A concern was raised that no actual cultures were being done in the public and private sector and that rapid molecular tests had replaced this testing.
 - The feeling was that repositories were needed to store organisms and to track typing, antimicrobial susceptibility testing and etc.
 - Specifically N. gonorrhoeae and viral agents were discussed.
 - A possible solution was to have regional centers of excellence which may be other public laboratories to do this service for more than one state.
 - Most labs in the private sector do very few GC cultures with the majority of testing being NAAT
 - In addition it was noted that viral culture is becoming a thing of the past and that we should not abandon completely the age old methods.
 - Rather it was suggested to have molecular testing/ sequencing as primary with culture available.

- Work force shortages- microbiologists as well as all laboratorians are aging and very few replacements are being trained.
 - This is occurring in the public health laboratories as well as the private sector.
 - ASM was mentioned as an agency that is addressing this. However, all health care agencies need to promote laboratory science as it will be to critical mass shortly.

- Also, several excellent presentations were given by CDC directors on TB, Virology and etc.
- One issue of particular interest I believe it was mentioned that during the H1N1 outbreak that the virology laboratory at CDC evaluated rapid tests and came out with guidance on what testing should be performed.
- I think this is one of the most important tasks of CDC to evaluate and comment on the reliability of methods. It is very useful.
- What tasks do we as individuals believe are the most value added for CDC?

- Data streams were mentioned and actually in the presentation it was mentioned that ideally the data would flow in all directions.
- From the laboratories to Epidemiology and also from the sentinel laboratories to state and local health departments and to CDC and also back again; so that data streams flow both up the chain and down the chain.

- In addition, the topics turned often to funding and in that light one member mentioned that there really isn't any funding for surveillance. There isn't any laboratory funding for this either (private sector)
 - It was suggested that a sentinel system (E. coli STEC) much like for respiratory virology might work.
- Food Net gave a great presentation detailing Pulse Net and their activities.
- The CLIAC (laboratorians) might be of assistance with the antimicrobial resistance working group being put together, I would recommend that we should volunteer to help with that endeavor. The chair is to be Dr. Bob Weinstein