

**Biosurveillance: Defining and Meeting DOD's Needs**  
**Standing Committee on the Department of Defense's Programs to Counter Biological Threats**

December 6-7, 2012

National Academy of Science Building, Room 120 and Secure Room  
2101 Constitution Avenue, NW, Washington, DC

AGENDA

The December 6-7 meeting of the National Academy of Sciences/National Research Council **Standing Committee on the Department of Defense's Programs to Counter Biological Threats** will focus on Biosurveillance\*. The meeting will look at the needs, current status and next steps for biosurveillance (BSV) related to biothreats that have the potential to interrupt military operations. Under this overarching parameter, the types of threats may include: intentional or naturally occurring; human and relevant zoonotic disease; existing or emerging disease. The meeting will provide a survey of the end-to-end process from defining needs to using BSV data for decisions, and next steps that DoD CDBP might consider. (Although diagnostics is a component of BSV, this meeting will emphasize the role of "detection".)

This meeting will examine the landscape of BSV and relevant DoD processes and programs, looking at:

- (1) Articulation of needs to make decisions – Who in DoD needs what kind of information and how they will use it, DoD requirements-driven and capabilities-based processes to define needs;
- (2) Current status of BSV-related science/technologies and related DoD and non-DoD programs;
- (3) Current status of BSV integration systems and related DoD and non-DoD programs; and
- (4) Future directions and bottlenecks: better use of current science/technologies and integration systems, and/or need for new science/technologies and systems.

The committee will learn more about each of these steps to ask: What are the appropriate processes, science and systems for DoD BSV to protect against operational interruption? What is the appropriate balance between requirements-driven and capability-driven articulation of needs? How well does DoD take advantage of current science? How well does DoD take advantage of current systems? Are the science and systems working in sufficiently integrated fashion towards a unified vision, or is more unity in effort needed? Is information being provided to decision makers (strategic and/or operational) in a way that they can use it? Do decision makers need different types of information or coordination to enable use of the information? Does DoD need to help improve current systems and/or address new science or system needs?

*\*The National Biosurveillance Strategy defines biosurveillance as "the process of gathering, integrating, interpreting, and communicating essential information related to all-hazards threats or disease activity affecting human, animal, or plant health to achieve early detection and warning, contribute to overall situational awareness of the health aspects of an incident, and to enable better decision making at all levels." HOWEVER, this meeting will focus on Biosurveillance/Detection knowledge that would impact DOD operations.*

**Thursday, December 6**

**CLOSED EXECUTIVE SESSION (in Classified Briefing Room)**

8:30 Committee Preparation (breakfast available at 8:00)

**CLASSIFIED**

8:45 Welcome and Introductions

9:00 **Description of DOD Needs**

*What are the needs of the DOD? What is DOD trying to be able to with Biosurveillance and detection for their own warfighter needs and what national strategies of Biosurveillance is DOD working to fulfill? Who needs BSV information, and how will they use it? The committee would like presentations to describe what the DOD has in mind for potential actions to use the biosurveillance data. Specifically, each of these presentations should cover the following: (a) What are the needs? (b) Who needs BSV data/information and how will they use it? (c) How are requirements-based and capabilities-based articulation of needs used, and how should they be used?*

**Presentations** (15 minutes each):

9:00 OSD/CBDP Sponsor, Gerry Parker, Ben Petro and/or Robert von Tersch, DOD

9:15 OSD/Health Affairs, Col Steve Niehoff, Director of Global Health Surveillance, DOD

9:30 NCMI –CMDR Glenn Dowling and Dylan George

9:45 **Panel Discussion**

10:45 Break

11:00 **Science/Technologies and Use of Technologies**

*What are the current capabilities that DOD and relevant federal agencies (that can be leveraged) have now, what are the capabilities that are being developed (ideas under development should include both foundational research and product/system development), and what are the gaps? Specifically, each presentation should cover the following: (a) brief description of the program; (b) How their technologies meet needs – is this the same or different from meeting defined requirements? Defined capabilities? How do intended technologies match the needs and realities in the field? (c) What further science/technology is needed?*

**Presentations** (15 minutes each):

11:00 JPEO-CBMS Acquisition program - Jason Roos, invited

- JBAIDS
- Next Generation Diagnostics

11:15 JSTO- DTRA-CB S&T, Alan Rudolph

- 24 month Challenge/Point of Need Diagnostics
- New ideas in development, if applicable.

11:30 DARPA – ADEPT

Susan Barker, PhD, Systems Planning Corporation, Contractor Support to DARPA/DSO

Mark D. Lim, PhD, Strategic Analysis, Inc., Contractor Support to DARPA/DSO

11:45 Cooperative Threat Reduction, DOD, Pete Pesenti

12:00 Working Lunch

**CLASSIFIED MEETING** (continued)

12:30 DoD-AFHSC-GEIS Kevin Russell– AFHSC commander

12:45 HHS- CDC - Global Disease Detection program, Scott Dowell and Joel Montgomery (by phone from Nairobi)

1:00 **Panel Discussion**

2:30 **Integration Systems**

*Current DoD and relevant non-DoD programs. Data integration and interpretation information that comes in from the technologies. Interoperability -- What is the information structure? Will the information be fed into a centralized information resource? How will the information be used to make decisions? How will it be interpreted and by whom? Taking signals of different types together. Specifically, each presentation should cover: (a) brief description of integration system, (b) how current technologies and integration system meet needs – and how these are the same as or different from requirements, capabilities, (c) what more is needed.*

**Presentations (15 minutes each):**

2:30 JSTO DTRA-CB: BSV Ecosystem –John Hannan, Branch Chief

2:45 JPEO-CBMS (JPEO-IS)- Jason Roos, invited

- GCAS (Global C-WMD Awareness System)
- Biosurveillance Portal (South Korea peninsula)

3:00 DHS Office of Health Affairs, NBIC – Steven Bennett, invited not confirmed

3:15 NCMI: Glenn Dowling and Dylan George

3:30 Short Questions and Answer Session

3:45 Break, Move to Room 120

**UNCLASSIFIED/OPEN MEETING – Room 120**

3:30 Metabiota (formerly Global Viral Forecasting), Nathan Wolfe

3:45 CDC: Social Media Integration, Taha Kass-Hout (by phone)

4:00 Comments on Social Media, Brian Norris

4:15 **Panel Discussion**

5:15 Adjourn

6:00 Working Committee Dinner, Rasika Restaurant, 1190 New Hampshire Avenue, NW WDC 20037

**Friday, December 7**

**CLASSIFIED/ CLOSED EXECUTIVE SESSION**

8:00 Committee Preparation (breakfast available at 7:30)

**CLASSIFIED MEETING**

9:00 Future Directions and Identification Of Bottlenecks And Gaps

Discussion of future directions. Is what is needed a better use of current S/T and integration system, new S/T and/or integration systems?

10:45 Break

**OPEN MEETING (Room 120)**

11:00 Discussion of Upcoming Meeting Topic (see handouts)

12:00 Lunch Break

**CLOSED EXECUTIVE SESSION**

12:30 Conflict of Interest and Bias (Paul Keim)

12:45 Debriefing on Meeting

1:15 Upcoming Topic: Personalized/Precision Medicine

1:45 Other Upcoming Topics

2:30 Adjourn