

The United States endeavors to make its annual BWC CBM Return complete, accurate and transparent. Pursuant to this goal, the U.S. Government (USG) continually works to improve the process by which information is assembled and reviewed for the CBM. When an error is discovered during this process, the USG will amend the relevant CBM Return.

ERRATUM:

The following entry on Form A, part 2 (ii) was inadvertently omitted from the U.S. CBM Return covering 2011. The facilities referenced therein were accurately declared on Form A, part 2 (iii) of said Return.

Form A, Part 2 (ii)

National biological defence research and development programme

II. Description

- 1. State the objectives and funding of the programme and summarize the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxicology, physical protection, decontamination and other related research.**

The Biological Countermeasures program in the Science and Technology (S&T) Directorate of the Department of Homeland Security (DHS) is broken into three research and development categories: Bioagent Detection, Bioagent Threat Assessment, and Bioagent Attack Resiliency that focuses emerging science and technology to provide the understanding, technologies, and systems needed to protect against biological attacks on the U.S. population, agriculture or infrastructure. The program focuses on research, development, testing, and evaluation (RDT&E) and on the transition to deployment of the needed technologies and systems. The five main areas of study are: 1) systems studies and decision support tools, 2) threat awareness, 3) surveillance and detection research and development (R&D), 4) forensics, and 5) response and restoration. The program supports other U.S. federal agencies in overall coordination of national biodefense efforts.

Programs conducted during 2011 include risk assessments, biodefense knowledge management, biological warning and detection systems for critical infrastructure and urban areas, decontamination of transit systems, national bioforensic analysis; at the National Biodefense Analysis and Countermeasures Center (NBACC), biological threat characterization, development of response plans and risk communication; and at the Plum Island Animal Disease Center, development of vaccines and diagnostics for foreign animal diseases.

The DHS Compliance Review Group, chaired by DHS Deputy Secretary, reviews all DHS- funded biological defense projects for compliance with the provisions of the Biological Weapons Convention and associated U.S. domestic laws and policies.

2. State the total funding for the programme and its source.

\$127,000,000 U.S. Department of Homeland Security (DHS)

3. Are aspects of the programme conducted under contract with industry, academic institutions, or in other non-defence facilities?

Yes

4. If yes, what proportion of the total funds for the programme is expended in these contracted or other facilities?

100 %

5. Summarize the objectives and research areas of the programme performed by contractors and in other facilities with the funds identified in paragraph 4.

The Biological Countermeasures program utilizes multiple activities to carry out its mission. For threat awareness, efforts are underway to characterize threats posed by biological weapons, anticipate future threats, and conduct comprehensive threat and risk assessments to guide prioritization of the Nation's biodefense investments. One such ongoing effort, Project Bioshield, seeks to develop modern, effective medical countermeasures to protect the population against attack by chemical, biological, radiological, or nuclear weapons.

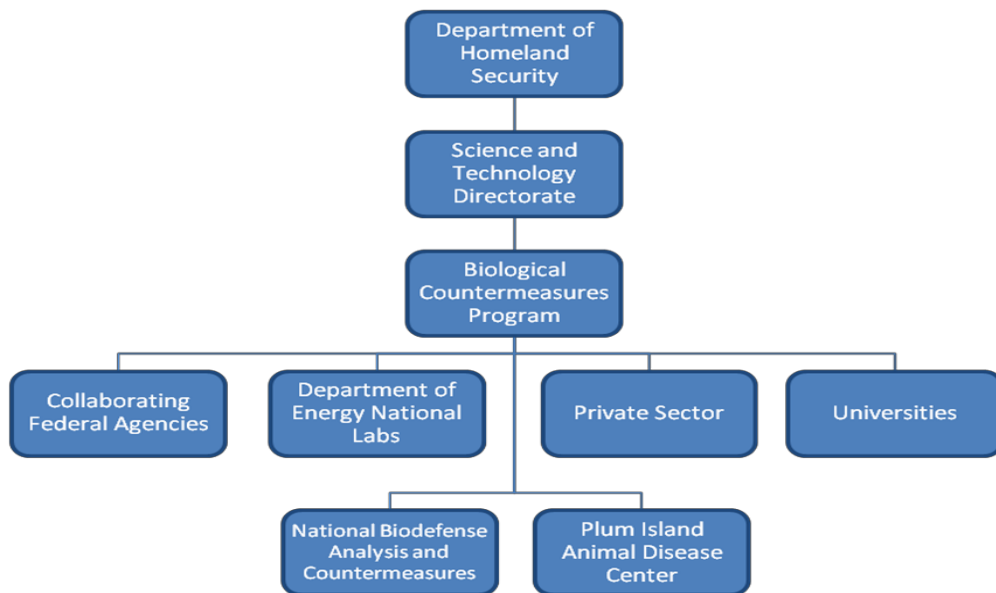
Within the area of surveillance and detection R&D, performers are developing next-generation detectors for biological threat agents, including fully autonomous detection capabilities for the third generation (Gen 3) BioWatch system. In addition, other efforts are underway to develop the assays (i.e., signatures or fingerprints of biological agents) needed by detectors to accurately recognize a biological agent. Another focus is on developing detect-to-protect systems specifically for use indoors as well as detection systems for protecting food products.

Under forensics, funding is devoted to operate the National BioForensics and Analysis Center (NBFAC) and conduct bioforensics research in support of criminal investigations and attribution by the appropriate Federal agency. These activities provide facilities, tools (i.e., assays, protocols, and strain libraries), analyses, and rigorous chain-of-custody controls needed to support the FBI and others in their investigation of potential biocrimes or acts of bioterrorism.

Lastly, the Biological Countermeasures program has a response and restoration element that provides advanced planning, develops concepts-of-operation, and funds exercises and

training for responding to and recovering from large-scale biological attacks. Biological agents have the potential to contaminate large portions of a city, covering multiple city blocks and facilities therein. The objective is to provide a more rapid and less expensive post-attack cleanup and restoration in such situations. This program is developing a systems approach for the restoration of citywide areas and of critical facilities, such as major transportation hubs; it is not developing specific decontamination technologies. Restoration demonstrations, which bring together Federal, State, and local partners to develop, test, and then share the concepts-of-operations for key scenarios, are at the heart of this approach.

6. Provide a diagram of the organizational structure of the programme and the reporting relationships (include individual facilities participating in this programme.)



7. Provide a declaration in accordance with Form A part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological defence research programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

In accordance with Form A, Part 2 (iii):

- National Biodefense Analysis and Countermeasures Center (NBACC)
- Plum Island Animal Disease Center (PIADC)