

Why GAO Did This Study

A biological event, such as a naturally occurring pandemic or a terrorist attack with a weapon of mass destruction, could have catastrophic consequences for the nation. This potential threat underscores the importance of a national biosurveillance capability—that is, the ability to detect biological events of national significance to provide early warning and information to guide public health and emergency response. The 9/11 Commission Act of 2007 addresses this capability, in part, by creating NBIC within the Department of Homeland Security (DHS); it was tasked with integrating information from human health, animal, plant, food, and environmental monitoring systems across the federal government, to improve the likelihood of identifying a biological event at an earlier stage. In recent years, NBIC's budget has ranged from \$10 million to \$13 million annually.

GAO was asked to evaluate NBIC. This report discusses the (1) extent to which NBIC is implementing its roles as a biosurveillance integrator, and (2) options for improving such integration. To conduct this work, GAO reviewed NBIC products and activities; conducted interviews and surveyed 19 federal partners, 11 of which have key roles in biosurveillance; interviewed NBIC officials; and analyzed the 9/11 Commission Act, *NBIC Strategic Plan*, and *National Strategy for Biosurveillance*.

What GAO Recommends

GAO is not making recommendations. GAO provided this draft to DHS and its federal partners who provided technical comments which were incorporated, as applicable.

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BIOSURVEILLANCE

Challenges and Options for the National Biosurveillance Integration Center

What GAO Found

The National Biosurveillance Integration Center (NBIC) has activities that support its integration mission, but faces challenges that limit its ability to enhance the national biosurveillance capability. In the Implementing Recommendations of the 9/11 Commission Act of 2007 (9/11 Commission Act) and *NBIC Strategic Plan*, GAO identified three roles that NBIC must fulfill to meet its biosurveillance integration mission. The following describes actions and challenges in each role:

- **Analyzer:** NBIC is to use technology and subject matter expertise, including using analytical tools, to meaningfully connect disparate datasets and information for earlier warning and better situational awareness of biological events. GAO found that NBIC produces reports on biological events using open-source data, but faces challenges obtaining data and creating meaningful new information. For example, most of the federal partners with key roles in biosurveillance (8 of 11) stated that NBIC's products help their agencies identify biological events to little or no extent, generally because they already obtain such information directly from other federal partners more quickly. In addition, data that could help to identify and characterize a biological event may not exist or are not in a usable form. Further, few federal partners (5 of 19) reported that they share the data they do have with NBIC, citing legal and regulatory restrictions, among other reasons..
- **Coordinator:** NBIC is to bring together partners across the federal biosurveillance community to enhance understanding of biological events. NBIC has developed procedures and activities to coordinate with partners, such as daily and biweekly calls, but faces challenges related to the limited partner participation in the center's activities, lack of partner personnel detailed to NBIC, and competing structures for convening federal partners. For example, although NBIC would like to obtain liaisons from each of its federal partners, only 3 of 19 partners provided NBIC with dedicated liaisons.
- **Innovator:** NBIC is to facilitate the development of new tools to address gaps in biosurveillance integration. GAO found that NBIC has efforts underway to develop some tools, such as pilot projects examining the use of social media data to identify health trends, but faces challenges prioritizing developmental efforts. For example, partners noted limitations in NBIC's ability to address gaps, like limited resources and the difficulty in prioritizing the center's innovation efforts because its partners have diverse needs.

GAO identified various options that could address these challenges, ranging from strengthening the center's ability to implement its current roles to repealing NBIC's statute. GAO also identified potential benefits and limitations with each option. For example, one option would be to provide NBIC with additional authorities to obtain data to better develop meaningful information; however this may also require additional investments. Another option is to not pursue national biosurveillance integration through NBIC and to consider designating one of the other federal partners with key roles in biosurveillance as the federal integrator. The options identified are not exhaustive, and some could be implemented together or in part. GAO did not evaluate the financial implications of each option, but acknowledges some options may require additional investment or shifting of resources or priorities to result in significant long lasting change.