

Highlights of [GAO-12-994T](#), a testimony before the Subcommittees on Emergency Preparedness, Response, and Communications and Cybersecurity, Infrastructure Protection, and Security Technologies, Committee on Homeland Security, House of Representatives

## Why GAO Did This Study

A catastrophic biological event could have devastating consequences. The U.S. government has efforts to provide early detection and warning of biological threats. DHS's BioWatch, which aims to detect certain pathogens in the air, is one such program. DHS has been pursuing a third generation of BioWatch technology (Gen-3) to further enhance detection. GAO has published a series of reports on national biosurveillance efforts, including a report released today on DHS's efforts to acquire Gen-3. This statement discusses (1) prior biosurveillance work and related federal efforts, (2) today's report on the Gen-3 acquisition, and (3) prior strategy recommendations and the White House's July 2012 *National Strategy for Biosurveillance*. This statement is based on GAO reports published from December 2009 to September 2012 and GAO's review of the *National Strategy for Biosurveillance* in relation to prior GAO recommendations for a national biosurveillance strategy.

## What GAO Recommends

In prior reports, GAO made biosurveillance recommendations to DHS and the White House Homeland Security Council. DHS concurred with prior recommendations. The White House did not comment. In today's report, GAO recommended that before continuing the Gen-3 acquisition, DHS reevaluate the mission need and alternatives and update associated performance, schedule, and cost information. DHS concurred but stated it plans to reevaluate the acquisition and pursue performance testing concurrently. We believe DHS should first develop the critical information we recommended.

View [GAO-12-994T](#) For more information, contact William O. Jenkins at (202) 512-8757 or [jenkinswo@gao.gov](mailto:jenkinswo@gao.gov).

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## BIOSURVEILLANCE

### Observations on BioWatch Generation-3 and Other Federal Efforts

## What GAO Found

The Department of Homeland Security (DHS) and the White House have acted to strengthen biosurveillance consistent with prior GAO recommendations made from December 2009 through October 2011. In August 2012, DHS issued a strategic plan for its National Biosurveillance Integration Center (NBIC) that officials say was written in coordination with federal partners and designed to respond to GAO's December 2009 findings that NBIC did not have key resources to carry out its mission, in part due to collaboration issues it faced. In July 2012, the White House released the *National Strategy for Biosurveillance*, which describes guiding principles, core functions, and enablers for strengthening biosurveillance. In June 2010, GAO recommended a national biosurveillance strategy to provide a unifying framework for building and maintaining a national biosurveillance capability. In October 2011, GAO also recommended the strategy account for the need to leverage resources and respond to challenges while partnering with nonfederal entities. The July 2012 strategy partially responds to the issues GAO called for such a strategy to address, but does not fully address them, as discussed below. A strategic implementation plan is to be published within 120 days of strategy issuance (October 2012), and may align the strategy more fully with the array of issues GAO identified.

DHS approved the Generation-3 (Gen-3) acquisition in October 2009, but it did not fully engage its acquisition framework to ensure that the acquisition was grounded in a justified mission need and that it pursued an optimal solution. The performance, schedule, and cost expectations presented in required documents when DHS approved the acquisition were not developed in accordance with DHS guidance and good acquisition practices—like accounting for risk in schedule and cost estimates. Since October 2009, the estimated date for full deployment has been delayed from fiscal year 2016 to fiscal year 2022. The 2009 life-cycle cost estimate—a point estimate unadjusted for risk—was \$2.1 billion. In June 2011, DHS provided a risk-adjusted estimate at the 80 percent confidence level of \$5.8 billion. Several steps remain before DHS can fully deploy Gen-3 including additional performance testing, operational testing, and developing location specific deployment plans.

The White House's *National Strategy for Biosurveillance* serves as a foundation for enterprisewide efforts and begins to define mission, goals, and objectives, as we called for in making the June 2010 strategy recommendation; however, the strategy does not yet offer the mechanism GAO recommended to identify resource and investment needs, including investment priorities. Accordingly, the biosurveillance enterprise remains without a framework to guide the systematic identification of risk, assessment of resources needed to address those risks, and the prioritization and allocation of investment across the entire enterprise. In recommending a national strategy, GAO recognized the challenges individual federal programs and agencies face prioritizing resources to help ensure a coherent effort across the dispersed biosurveillance enterprise. Today's report on Gen-3 offers a timely and concrete example of this challenge—to assess the extent to which Gen-3 warrants the investment of scarce resources when the incremental value of the environmental monitoring Gen-3 offers is considered as part of a layered biosurveillance strategy.