



Office of Science and Technology Policy
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HOMELAND SECURITY

Research and Development Funding in the President's 2005 Budget

Research and development (R&D) funding for homeland security continues to be a priority with an estimated \$3.6 billion in FY2005, tripling the resources dedicated in FY2002, the first budget in response to September 11th. Research and development is focused on countering chemical, biological, radiological, nuclear, and other catastrophic threats. Priority areas where research and development will play a key role include:

Enhancing the detection, treatment and remediation of chemical, biological and radiological threats.

- In addition to the \$3.6 billion requested for R&D, the President's Budget also includes \$2.5 billion over 3 years for Project BioShield, an initiative that encourages the development and procurement of next-generation medical countermeasures against WMD agents.
- \$568 million is allocated for the U.S. Department of Agriculture, the Department of Health and Human Services and the Department of Homeland Security to improve food and agriculture defense. This is almost triple the current level. Increases include funding for: establishing new laboratories around the country and expanding the regional diagnostic laboratory network; continuing in-house research for emerging and exotic diseases and supporting new research to develop innovative strategies to prevent contamination of food; completing the animal disease laboratory and diagnostic facility at Ames, IA; and enhancing disease monitoring and surveillance and vaccine storage.
- In 2005, funding for EPA's Office of R&D at \$23 million will continue developing enhanced methods for detecting biological and chemical agents intentionally introduced drinking water and wastewater systems and methods for safe disposal of waste materials resulting from cleanups.
- In the Department of Defense, R&D to address terrorist and other unconventional threats continues to be a high priority. Systems and technologies under development to address defense against chemical or biological agents include: improved detectors of chemical and biological threats; troop protective gear for use under chemical and biological attack that is both more effective and more comfortable; and vaccines to protect against biological agents. (\$340 million)

Converting biosurveillance data into actionable knowledge. The President's Budget includes a new biosurveillance initiative that increases the federal government's ability to identify and respond to a bioterrorist attack. This effort includes an expanded BioWatch network (\$47 million increase) of sensors in high-threat areas to detect the release of biological pathogens and an additional \$31 million to develop next-generation biological sensors, bringing total spending on biosurveillance in DHS's Science and Technology Directorate to \$118 million. To speed the flow of information, the President's budget also includes \$11 million in DHS' Information Analysis and Infrastructure Protection Directorate to enable real-time biosurveillance data to be quickly integrated and shared with public health experts and counter-terrorism officials.

Countering radiological and nuclear threats. Our multi-layer strategy for defense against radiological and nuclear threat relies upon solid S&T investments. This strategy encompasses material control and tracking, counterproliferation, detection systems for material and device interdiction, and response (medical response, recovery, support to law enforcement, etc.). Investments in a number of agencies in threat assessment, systems for detection (including both in detector development and systems integration), attribution of proliferant activities or materials, and medical countermeasures will strengthen our ability to deter, prevent, or respond to a RDD/IND event.

DHS Homeland Security University and Fellowships Programs. In FY2005, the President's Budget continues to support its educational outreach programs. These programs include the Homeland Security Scholars and Fellows program and the Homeland Security Centers of Excellence (HS-Centers) program that fund a coordinated, university-based system to enhance the Nation's homeland security.