



CENTER FOR ARMS CONTROL AND  
NON-PROLIFERATION  
BIOLOGICAL AND CHEMICAL WEAPONS CONTROL PROGRAM

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**Federal Funding for Biological Weapons Prevention and Defense, Fiscal Years 2001 to 2007**  
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In the years since the 2001 terrorist attacks on the United States, the U.S. government has spent or allocated over \$36 billion among 11 federal departments and agencies to address the threat of biological weapons. For Fiscal Year 2007 (FY2007), the Bush Administration is proposing an additional \$8 billion in bioweapons-related spending, approximately \$120 million (or 1.5%) more than the amount that Congress appropriated for FY2006. This funding has and continues to focus primarily on research, development, and acquisition of medical countermeasures and protective equipment, enhancing medical surveillance and environmental detection of biological weapons agents, and improving state, local, and hospital preparedness. Only 2% of all federal bioweapons-related funding has been devoted to efforts to prevent the development, acquisition, and use of biological weapons by states and terrorists and other non-state actors. Stronger prevention efforts, including a commitment to broad cooperative international action, are essential for improving our nation's security.

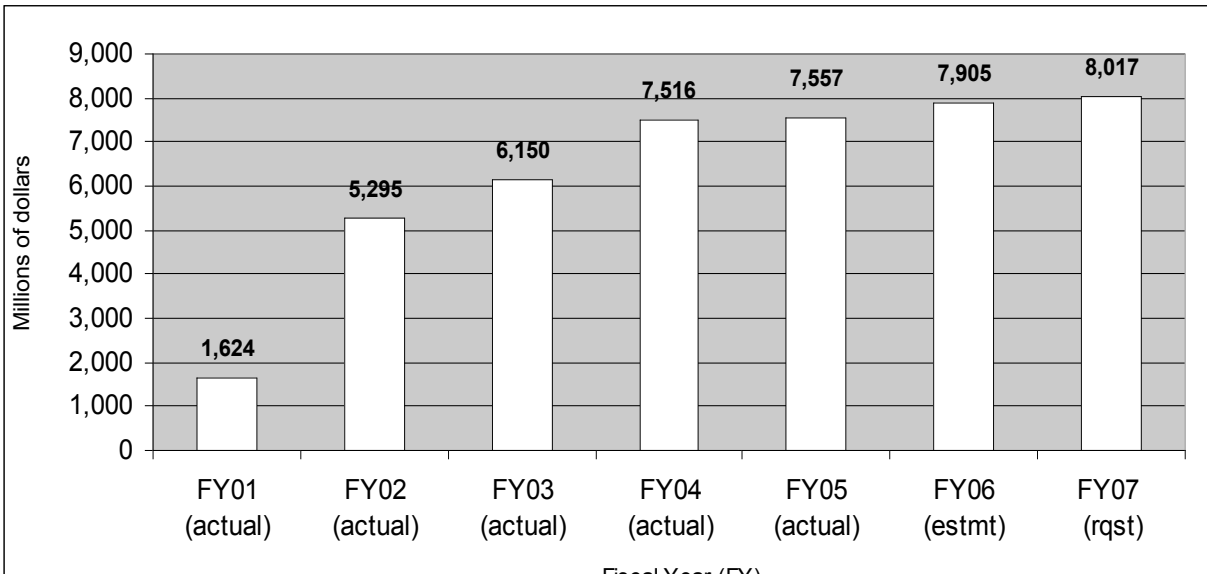
Annual bioweapons-related programs and funding for the following departments and agencies from FY2001 to FY2007 are summarized in Table 1: the Department of Agriculture (USDA), the Department of Commerce, the Department of Defense (DOD), the Department of Energy (DOE), the Department of Health and Human Services (DHHS), the Department of Homeland Security (DHS), the Department of State, the Department of Veterans Affairs (VA), the Environmental Protection Agency (EPA), the National Science Foundation (NSF), and the United States Postal Service (USPS). As illustrated in Figure 1, annual bioweapons-related spending grew rapidly from FY2001 to FY2004. Funding has since grown at slightly less than the rate of inflation.

**Table 1. Federal Funding for Bioweapons Prevention and Defense, by Agency, for FY2001-FY2007**  
*(in \$ millions)*

Department or Agency	FY01 (actual)	FY02 (actual)	FY03 (actual)	FY04 (actual)	FY05 (actual)	FY06 (estmt)	FY07 (rqst)	FY01 thru FY07
Agriculture (USDA)	7 <sup>a</sup>	42 <sup>a</sup>	204	111	298	253	322	1,237
Commerce (DOC) <sup>a</sup>	3	4	4	7	6	6	6	36
Defense (DOD)	1,030	1,313	1,528	1,480	1,665	1,952	1,691	10,659
Energy (DOE) <sup>a</sup>	46	94	7	6	7	13	6	179
Health and Human Services (DHHS)	324	2,980	4,035	3,703	4,147	4,088	4,259	23,536
Homeland Security (DHS)			119 <sup>a</sup>	1,960	720	1,355	1,434	5,588
State (DOS)	39	71	67	67	67	71	78	460
Veterans Affairs (VA)	n/a	n/a	27	23	9	10	9	78
Environmental Protection Agency (EPA) <sup>a</sup>	n/a	187	133	131	107	129	183	870
National Science Foundation (NSF)	0	17	26	27	27	27	28	152
U.S. Postal Service (USPS)	175	587	0	0	503	0	0	1,265
<b>Total</b>	<b>1,624</b>	<b>5,295</b>	<b>6,150</b>	<b>7,515</b>	<b>7,556</b>	<b>7,904</b>	<b>8,016</b>	<b>44,060</b>

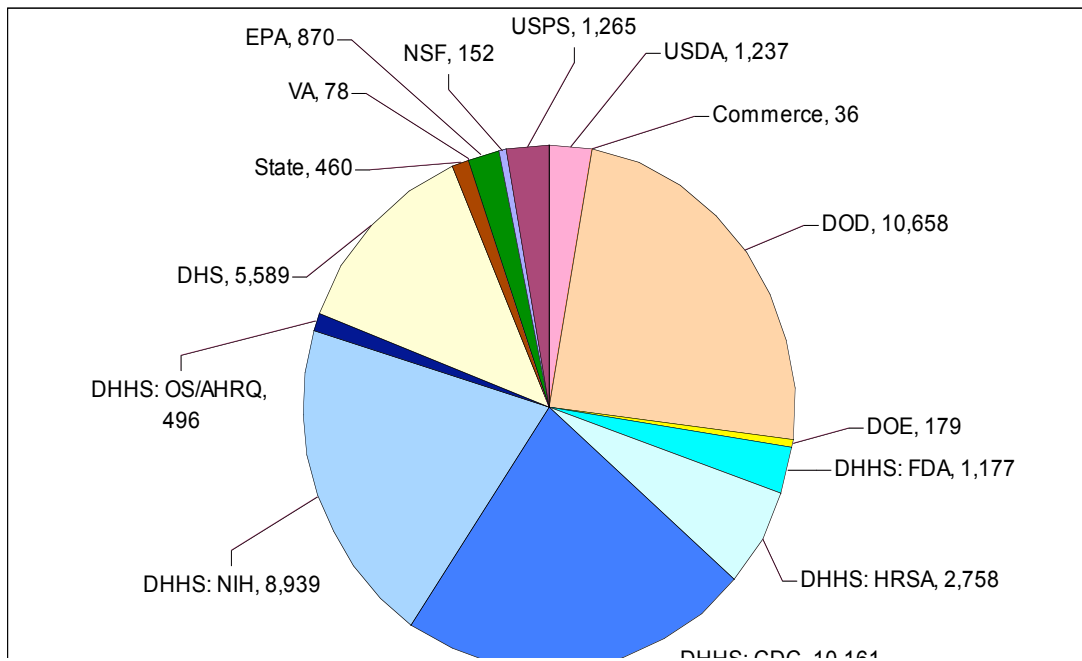
<sup>a</sup> These numbers are estimates. Please refer to the more detailed explanations found below in the sections on each department and agency.

**Figure 1. Total Annual Federal Funding for Bioweapons Prevention and Defense, FY2001 through FY2007 (in \$ millions)**



Cumulative total funding by agency for the entire FY2001 to FY2007 period (\$44.06 billion if the FY2007 request is funded in full) is illustrated in Figure 2, with DHHS funding broken down into its constituent agencies and offices (Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), the Centers for Disease Control (CDC), National Institutes of Health (NIH), and the Office of the Secretary (OS) plus the Agency for Healthcare Research and Quality (AHRQ)). Over 90% of all bioweapons-related funding goes to three lead departments: Health and Human Services, Defense, and Homeland Security.

**Figure 2. Total Federal Funding for Bioweapons Prevention and Defense since FY2001, by Agency (in \$ millions)**



In contrast to other preparedness efforts, biodefense research, development, testing, and evaluation (RDT&E) can be dual-use in nature: scientific knowledge, methods, and materials that can be used to

protect against biological weapons can often also be used to develop biological weapons. The dual-use problem has become a significant national and international policy concern. In the United States, the National Science Advisory Board for Biosecurity (NSABB) has been established under the auspices of the NIH, with *ex officio* representation from 18 Federal departments, agencies, and offices, in order to “provide advice, guidance, and leadership regarding biosecurity oversight of dual use research” to the Secretary of DHHS, the Director of the NIH, and the “heads of all federal departments and agencies that conduct or support life science research.”<sup>1</sup>

Funding for biodefense RDT&E from FY2001 through FY2007 will reach \$18.1 billion, or 41% of all bioweapons-related funding since FY2001 (Table 2). Of this, approximately \$1.7 billion has thus far been spent, allocated, or requested for improving existing or building at least 20 new high containment research facilities around the country, including 7 new biosafety level 4 (BSL-4) facilities for conducting work on the most dangerous pathogens, such as the ebola viruses and other hemorrhagic fever viruses. The Departments of Defense and Homeland Security are expected to request up to another \$1.4 billion over the next five years for two of these BSL-4 facilities.

**Table 2. Research, Development, Testing and Evaluation Funding for Biodefense (in \$ millions)**

Department or Agency	FY01 actual	FY02 actual	FY03 actual	FY04 actual	FY05 actual	FY06 estmt	FY07 rqst	FY01 thru FY07
<b>Facilities</b>								
USDA	7	30	143	0	121	58	0	359
DOD						21	29	50
DHHS	0	92	743	0	149	30	25	1039
DHS	0	0	30	108	68	23	0	229
<i>Facilities, Subtotal</i>	<i>7</i>	<i>122</i>	<i>916</i>	<i>108</i>	<i>338</i>	<i>132</i>	<i>54</i>	<i>1677</i>
<b>Programs</b>								
USDA	0	9	12	20	29	34	72	176
DOD: Army		17	19	22	19	16	15	108
DOD: DARPA	146	172	158	142	155	148	112	1034
DOD: CDBP	405	596	639	701	714	1048	958	5061
<i>DOD, Subtotal</i>	<i>551</i>	<i>785</i>	<i>816</i>	<i>865</i>	<i>888</i>	<i>1212</i>	<i>1085</i>	<i>6202</i>
DHHS: FDA	6	46	53	53	57	57	57	329
DHHS: CDC	18	18	18	n/a <sup>a</sup>	n/a	n/a	3	57
DHHS: NIH	53	198	810	1821	1593	1655	1770	7900
<i>DHHS, Subtotal</i>	<i>77</i>	<i>262</i>	<i>881</i>	<i>1874</i>	<i>1650</i>	<i>1712</i>	<i>1830</i>	<i>8286</i>
DHS: S&T <sup>b</sup>			89	306	223	226	202	1046
DOE	40	85	n/a	n/a	n/a	6	n/a	131
VA	n/a	n/a	27	23	9	10	9	78
EPA: S&T <sup>c</sup>	0	7	67	66	54	65	92	351
NSF	0	17	26	27	27	27	28	152
<i>Programs, Subtotal</i>	<i>668</i>	<i>1165</i>	<i>1918</i>	<i>3181</i>	<i>2880</i>	<i>3292</i>	<i>3318</i>	<i>16422</i>
<b>Research, Total</b>	<b>675</b>	<b>1287</b>	<b>2834</b>	<b>3289</b>	<b>3218</b>	<b>3424</b>	<b>3372</b>	<b>18099</b>

<sup>a</sup> n/a: no information available.

<sup>b</sup> Based on estimate that 60% of Biological Countermeasures portfolio funding in FY2004-FY2007 is devoted to RDT&E.

<sup>c</sup> Estimate based on comparison of White House and EPA budget documents, suggesting that approximately 50% of EPA homeland security funding is for programs clearly related to biodefense R&D in FY2006 and FY2007.

<sup>1</sup> biosecurityboard.gov

In contrast, federal funding for efforts to prevent the development, acquisition, and use of biological weapons is expected to reach approximately \$845 million in FY2007 (Table 3). This is less than 5% of the total funding for biodefense RDT&E during the same time period. Approximately 90% of prevention funding goes to DOD, DOE, and the State Department for Cooperative Threat Reduction efforts, primarily in states of the former Soviet Union. Other prevention-related funding is provided to the Department of Commerce for Export Controls on materials and equipment that could be used to develop biological weapons, and to the Select Agents programs at the CDC and USDA which regulate the possession, use, and transfer of potential biological weapons pathogens and toxins. The NSABB also receives roughly \$1 million per year for its activities.

**Table 3. Prevention Funding for Biodefense (in \$ millions)**

Department or Agency and Programs	FY01 actual	FY02 actual	FY03 actual	FY04 actual	FY05 actual	FY06 estmt	FY07 rqst	FY01 thru FY07
USDA: APHIS: Select Agents - Plants and Animals					3	3	5	11
DOD: CTR: BWPP	12	17	55	68	69	61	68	350
DHHS: CDC: Select Agents Program <sup>a</sup>	5	5	5	5	5	5	5	35
DHHS: NIH: NSABB				0.5	1	1	1	4
State: Nonproliferation Programs	35	67	52	50	50	52	56	363
Commerce: Export Controls <sup>b</sup>	3	4	4	7	6	6	6	35
DOE: Export Control and GIPP <sup>b</sup>	6	9	6	6	7	7	6	47
<b>Prevention, Total</b>	<b>61</b>	<b>102</b>	<b>122</b>	<b>136</b>	<b>140</b>	<b>134</b>	<b>146</b>	<b>845</b>

<sup>a</sup> Unlike USDA, HHS and CDC do not explicitly provide a number for the amount of money that the Select Agents Program receives. Based on USDA numbers and the FY02 numbers (from GAO-03-315R "CDC Select Agent Program" from 11/22/02), we estimate that CDC's Select Agent Program received about \$5 million for each fiscal year.

<sup>b</sup> Please refer to a more detailed analysis and explanation of the Department of Commerce's and the Department of Energy's funding numbers in the section under "Other Government Agencies."

A complete analysis of federal funding for biological weapons prevention and defense activities, prepared by Center for Arms Control and Non-Proliferation staff Stephanie Chang and Alan Pearson, can be found at [http://www.armscontrolcenter.org/resources/fy2007\\_bw\\_budget.pdf](http://www.armscontrolcenter.org/resources/fy2007_bw_budget.pdf)

### About the Biological and Chemical Weapons Control Program at the Center for Arms Control and Non-Proliferation

The Biological and Chemical Weapons Control Program and its [Scientists Working Group](#) work to prevent the development and use of biological and chemical weapons. The Program develops analyses, reports, recommendations and briefings on technical and policy issues for Congress, the public, and the international community. For more information, see <http://www.armscontrolcenter.org/cbw/>