

# FY 2009 Superfund Congressional Justification

## FY 2009 Superfund Budget

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# Amounts Available for Obligation

## FY 2009 Superfund Budget

Note 1/

Source of Funding	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Appropriation	\$79,108,000	\$78,775,000	\$77,546,000
Pay cost add-on	9,000	0	0
Rescission	0	-1,229,000	0
Subtotal, adjusted appropriation	79,117,000	77,546,000	77,546,000
Subtotal, adjusted budget authority	79,117,000	77,546,000	77,546,000
Unobligated balance lapsing	-6,000	0	0
Total Obligations	79,111,000	77,546,000	77,546,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:

- FY 2007 - \$12,206,000 FY 2008 - \$14,000,000 FY 2009 - \$14,000,000

# Appropriation Language

## FY 2009 Superfund Budget

For necessary expenses for the National Institute of Environmental Health Sciences in carrying out activities set forth in section 311(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, and section 126(g) of the Superfund Amendments and Reauthorization Act of 1986, [\$78,887,000] *\$77,546,000* (Department of the Interior, Environment and Related Agencies Appropriation Act, 2008).

# Appropriations History

## FY 2009 Superfund Budget

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation	<u>1/2/</u>
2001 <u>2/</u>	\$48,526,700 <u>3/</u>	\$60,000,000	N/A <u>4/</u>	\$63,000,000	
Rescission	0	0	0	-138,600	
2002	70,228,000	70,228,000	70,228,000	70,228,000	
Supplemental	0	0	0	10,500,000	
2003	74,471,000	84,074,000	76,074,000	83,528,000	
2004	78,744,000	80,000,000	78,774,000	78,774,000	
Rescission				-465,000	
2005	80,486,000	80,486,000	80,486,000	80,486,000	
Rescission				-644,000	
2006	80,289,000	80,289,000	80,289,000	80,289,000	
Rescission				-1,181,000	
2007	79,108,000	79,414,000	78,414,000	79,117,000	
2008	78,434,000	79,117,000	78,434,000	78,775,000	
Rescission				-1,229,000	
2009	77,546,000				

1/ Reflects enacted supplementals, rescissions, and reappropriations.

2/ Beginning in FY2001, NIEHS received a separate appropriation.

3/ Estimate proposed by the Environmental Protection Agency.

4/ Senate version of the FY2001 VA-HUD appropriations bill did not include an appropriation for NIEHS' Superfund related activities.

# Authorizing Legislation

## FY 2009 Superfund Budget

	CERCLA/ SARA	U.S. Code Citation	2008 Amt Auth.	FY 2008 Enacted	2008 Amt Auth.	FY 2009 Budget Est
Environmental Protection Agency's Hazardous Substance Superfund	CERCLA	42§9660	Indefinite		Indefinite	
	Section 311 (a)	Section 9660(a)		\$49,629,000		\$49,629,000
	SARA	42§9660				
	Section 126(g)	Section 9660(a)	Indefinite	27,917,000	Indefinite	27,917,000
Total, Budget Authority				77,546,000		77,546,000

# Budget Authority by Object

## FY 2009 Superfund Budget

Object Classes		FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
	Personnel Compensation:			
11.1	Full-time permanent	\$1,020,000	\$1,067,000	\$47,000
11.3	Other than full-time permanent	104,000	109,000	5,000
11.5	Other personnel compensation	12,000	12,000	0
11.7	Military personnel	0	0	0
11.8	Special personnel services payments	0	0	0
	Total, Personnel Compensation	1,136,000	1,188,000	52,000
12.0	Personnel benefits	269,000	281,000	12,000
12.2	Military personnel benefits	0	0	0
13.0	Benefits for former personnel	0	0	0
	Subtotal, Pay Costs	1,405,000	1,469,000	64,000
21.0	Travel and transportation of persons	150,000	155,000	5,000
22.0	Transportation of things	0	0	0
23.1	Rental payments to GSA	0	0	0
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges	0	0	0
24.0	Printing and reproduction	0	0	0
25.1	Consulting services	23,000	23,000	0
25.2	Other services	1,080,000	1,066,000	-14,000
25.3	Purchase of goods and services from government accounts	2,482,000	2,482,000	0
25.4	Operation and maintenance of facilities	0	0	0
25.5	Research and development contracts	0	0	0
25.6	Medical care	0	0	0

25.7	Operation and maintenance of equipment	0	0	0
25.8	Subsistence and support of persons	0	0	0
<b>25.0</b>	<b>Subtotal, Other Contractual Services</b>	<b>3,585,000</b>	<b>3,571,000</b>	<b>-14,000</b>
26.0	Supplies and materials	11,000	11,000	0
31.0	Equipment	14,000	14,000	0
32.0	Land and structures	0	0	0
33.0	Investments and loans	0	0	0
41.0	Grants, subsidies and contributions	72,381,000	72,326,000	-55,000
42.0	Insurance claims and indemnities	0	0	0
43.0	Interest and dividends	0	0	0
44.0	Refunds	0	0	0
	Subtotal, Non-Pay Costs	76,141,000	76,077,000	-64,000
	<b>Total Budget Authority by Object</b>	<b>77,546,000</b>	<b>77,546,000</b>	<b>0</b>

FTEs are included with the regular NIEHS appropriation.

# Budget Authority by Program

## FY 2009 Superfund Budget

(Dollars in Thousands)

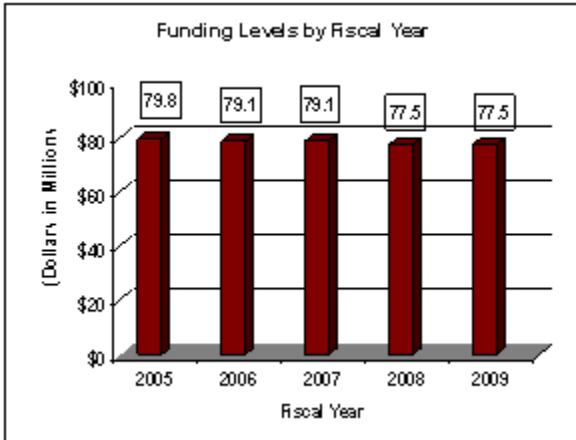
	<b>FY 2005 Actual Amount</b>	<b>FY 2006 Actual Amount</b>	<b>FY 2007 Actual Amount</b>	<b>FY 2007 Comparable Amount</b>	<b>FY 2008 Enacted Amount</b>	<b>FY 2009 Estimate Amount</b>	<b>Change Amount</b>
Detail: Superfund Research	-	-					
Worker Training	\$51,099	\$50,629	\$50,635	\$50,635	\$49,629	\$49,629	\$0
	28,743	28,479	28,482	28,482	27,917	27,917	0
<b>Total</b>	<b>79,842</b>	<b>79,108</b>	<b>79,117</b>	<b>79,117</b>	<b>77,546</b>	<b>77,546</b>	<b>0</b>
FTEs are included in the regular NIEHS appropriation.							



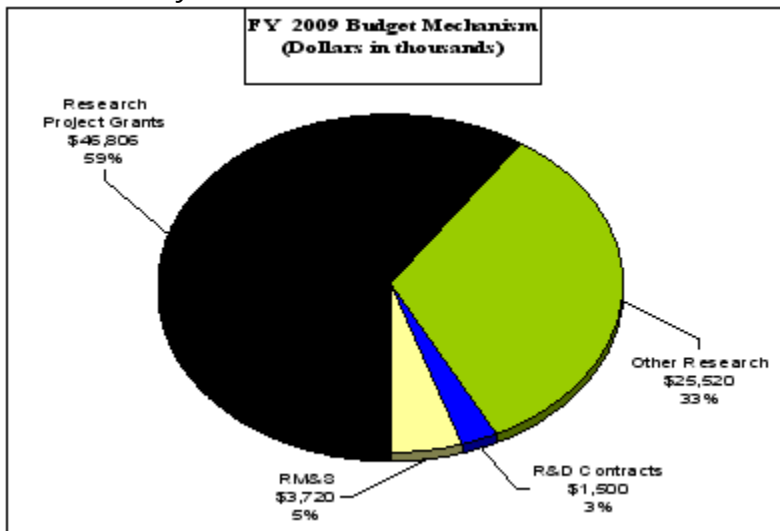
# Budget Graphs

## FY 2009 Superfund Budget

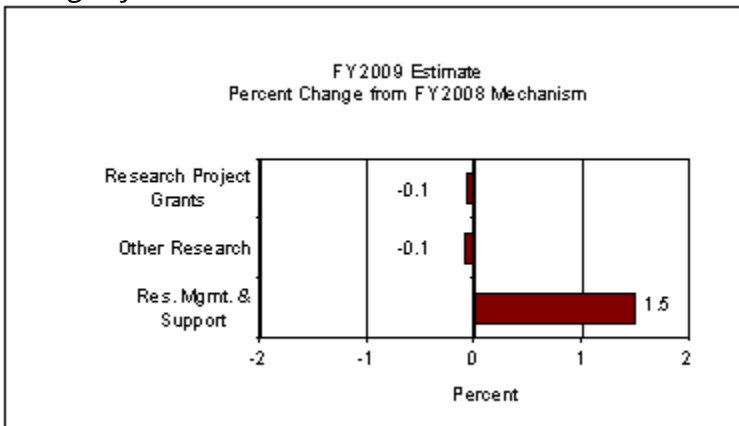
*History of Budget Authority:*



*Distribution by Mechanism:*



*Change by Selected Mechanism:*



# Budget Mechanism Table

## FY 2009 Superfund Budget

(Dollars in Thousands)

### Budget Mechanism Total

Mechanism	FY 2007 Actual		FY 2008 Enacted		FY 2009 Estimate		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<i>Research Grants:</i>								
<i>Research Projects:</i>								
Noncompeting	23	\$43,704	24	\$39,050	18	\$34,327	-6	-\$4,723
Administrative supplements	(9)	333	(3)	190	(3)	190	(0)	0
<i>Competing:</i>								
Renewal	0	0	2	4,773	4	8,222	2	3,449
New	4	1,170	3	755	8	2,000	5	1,245
Supplements	3	143	0	0	0	0	0	0
Subtotal, competing	7	1,313	5	5,528	12	10,222	7	4,694
Subtotal, RPGs	30	45,350	29	44,768	30	44,739	1	-29
SBIR/STTR	11	2,330	10	2,069	10	2,067	0	-2
<b>Subtotal, RPGs</b>	<b>41</b>	<b>47,680</b>	<b>39</b>	<b>46,837</b>	<b>40</b>	<b>46,806</b>	<b>1</b>	<b>-31</b>
<i>Research Centers:</i>								
Specialized/comprehensive	0	0	0	0	0	0	0	0
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	0	0	0	0	0	0	0	0
<i>Other Research:</i>								
Research careers	0	0	0	0	0	0	0	0

Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	0	0	0	0	0	0	0	0
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	0	0	0	0	0	0	0	0
Other	18	26,048	18	25,544	18	25,520	0	-24
Subtotal, Other Research	18	26,048	18	25,544	18	25,520	0	-24
<b>Total Research Grants</b>	<b>59</b>	<b>73,728</b>	<b>57</b>	<b>72,381</b>	<b>58</b>	<b>72,326</b>	<b>1</b>	<b>-55</b>
Research Training:	FTTPs		FTTPs		FTTPs			
Individual awards	0	0	0	0	0	0	0	0
Institutional awards	0	0	0	0	0	0	0	0
<b>Total, Training</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Research & development contracts	1	1,456	1	1,500	1	1,500	0	0
(SBIR/STTR)	(0)	0	(0)	0	(0)	0	(0)	0
Intramural research		0		0		0		0
Research management and support		3,933		3,665		3,720		55
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
<b>Total, NIEHS Superfund</b>	<b>0</b>	<b>79,117</b>	<b>0</b>	<b>77,546</b>	<b>0</b>	<b>77,546</b>	<b>0</b>	<b>0</b>

# Justification Narrative

## FY 2009 Superfund Budget

Authorizing Legislation: Section 311(a) of the Comprehensive Environmental, Response, Compensation, and Liability Act of 1980, as amended, and Section 126(g) of the Superfund Amendments and Reauthorization Act of 1986.

### Budget Authority

FY 2007 Actual BA	FY 2009 Enacted BA	FY 2009 Estimated BA	Increase or Decrease
\$79,117,000	\$77,546,000	\$77,546,000	\$0

FTEs are included with the regular NIEHS appropriation.

### Director's Overview

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For 20 years NIEHS' Superfund Program has provided research and training that is the foundation of environmental protection.

Through an interdisciplinary and multidisciplinary research platform, the Superfund Research Program (SRP) identifies, assesses, and evaluates the potential health effects of exposure to hazardous waste and develops innovative chemical, physical and biological technologies for remediating sites contaminated by hazardous substances. Investigators from diverse fields study the underlying biological and environmental principles pertaining to the nation's most recalcitrant environmental problems.

SRP's accomplishments were demonstrated at the Program's recent national scientific meeting celebrating "20 Years of Success and a Vision for the Future." SRP's basic premise, that the reduction of environmental exposures through improved engineering and public education can minimize environmentally related diseases, was a significant focus of this meeting. Intervention strategies, based on the biological consequences of contaminant exposure, also have a role in reducing environmentally related diseases. Research presented at this meeting also exemplified how cutting edge scientific knowledge is incorporated into decisions related to risk, cleanup and public health through a better understanding of the links between exposure and basic biological mechanisms.

Another recurring theme at the meeting was the ways in which the health effects of exposures to contaminants can be modulated by nutrition. Preliminary findings suggest that different types of dietary fatty acids can either be protective against polychlorinated biphenyl-induced vascular alterations or can potentiate vascular changes that lead to atherosclerosis. Similarly, ascorbate (Vitamin C) has long been recognized as an antidote for reducing the toxic effects of ingested chromium. New SRP studies demonstrate that when ascorbate enters the cell, it can act as a potent amplifier of chromium's damage to cellular DNA that could lead to an increased risk of developing cancer. This example demonstrates that a nutritional supplement can be both protective and harmful.

Another example of the association between nutrition and contaminant exposure is the finding that folate (a form of Vitamin B) supplements may reduce an individual's risk of arsenic-induced disease. Studies indicate that in some situations, nutrition may be a sensible means for mitigating the effects of exposure to toxic environmental insults. This research may lead to novel dietary recommendations at the national level for populations at risk, i.e., people residing near Superfund sites.

Environmental issues are also a critical part of disaster response. As part of the National Response Framework, Superfund's Worker Training Program (WTP) has played an active role in the federal response to significant disasters. In the aftermath of Hurricane Katrina, WTP developed a model training intervention that can now be used in future crises. For example, thousands of additional workers could be needed if a severe Avian Flu outbreak occurs in the poultry industry. WTP has laid the groundwork for training these workers by bringing the Department of Agriculture, FEMA and the Occupational Safety and Health Administration together for a planned response. The Program is also preparing materials and trainers for earthquakes, chemical disasters and a dirty bomb attack - response scenarios required by the President through the Department of Homeland Security.

WTP has worked across the country to keep America's cleanup workforce and emergency responders safe. During the past year, WTP funded training occurring in all fifty states, Puerto Rico and the Pacific Territories. Nearly 131,000 workers received training through nearly 8,000 classes. Training delivery stretched from Virginia, where numerous chemical emergency response courses were held, to the state of Washington, where basic Superfund Site worker training predominated; from Alaska, where training is available even in Barrow in the far north, to Mississippi, where the hazards of Katrina recovery are still being addressed.

## Justification by Program

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### *Program Descriptions and Accomplishments*

**Superfund Research Program (SRP):** SRP's goal is to gain a better understanding of how exposure to toxicants affects human health in order to help environmental managers and risk assessors make sound decisions related to Superfund and other hazardous waste sites. SRP also develops cost effective approaches to detect contaminants in the environment and for removing or reducing the amount of toxic substances found at hazardous waste sites.

SRP is supporting "industrial ecology" approaches that eliminate pollution from industrial processes by integrating recycling at all stages of a product's life cycle - from acquisition of raw materials to reuse of parts/materials when the product no longer functions - into creating new products that can break down or safely sequester toxic chemicals. In a newly developed process, grantees have created an iron-based cement-like substance using solid waste materials from sources such as open pit copper mines, coal-fired power plants, steel foundries, cement plants, and shot blasting facilities. An unexpected benefit of this process is that carbon dioxide, a primary greenhouse gas, is trapped in the cement matrix, thus reducing carbon dioxide emissions into the atmosphere. The resulting cement is stronger and more resistant to extreme environmental conditions, such as those found in seawater and other corrosive environments, than current commercially available products. Ongoing research is focused on testing this material's ability to permanently bind metal and organic contaminants found in the environment.

**Budget Policy:** The FY 2009 budget estimate for SRP is \$49.6 million, which represents the same level of funding as the FY 2008 enacted amount. Resources will be used to continue the support of high priority and scientifically rigorous multi-project research grants, covering the diverse areas of science needed to solve the complex health and environmental issues associated with the nation's hazardous waste sites. In addition, support will be continued for individual investigator grants to develop innovative approaches for the remediation of contaminated sediments. NIEHS also plans to initiate a new area of investigation in the development of nanotechnology based tools to understand the mechanisms of bioremediation. Support for SBIR grants will continue to develop innovative technologies for the monitoring and remediation of hazardous substances in the environment.

## Portrait of a Program: Improved Screening Strategy

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Portrait of a Program: Improved Screening Strategy">

FY 2008 Level	\$101,000
FY 2009 Level	101,000
Change	0

In FY 2007 SRP embarked on an exciting enterprise that draws from its past research investments, incorporates input from its stakeholders, i.e., Environmental Protection Agency (EPA) environmental practitioners, and promises to provide an improved screening strategy to detect harmful contaminants in sediments. Although only a small outlay is required in FY 2008 and FY 2009 to sustain this project, the major investment occurred over many years of grant support to seven individual research projects.

Contaminated sediments pose wide-ranging effects on human and ecological health, and contribute to the overwhelming cost required for site remediation. Costs to clean up just 11 of the 150 Superfund sites undergoing sediment remediation are expected to exceed \$50 million for each site.

SRP has sponsored research leading to the development of seven unique biological indicator assays. Combined, these assays have the potential for providing a battery of highly sensitive, cost-effective tests that can be used as screening tools for contaminants found in sediments. SRP investigators are now collaborating with EPA to use these assays in a tiered approach for the standardization of collection protocols and data integration. The hypothesis of this tiered approach is that **a battery of chemical class specific bioassays or biomarkers can predict diminished sediment quality by assessing the biological impact of contaminants**. It is also anticipated that the bioassays proposed will be more sensitive, less expensive and require less time to conduct than the standard bioassays.

By combining the experience of EPA scientists and SRP researchers, the probability that the outcomes will be utilized by environmental managers is greatly increased. Culmination of these efforts is anticipated in FY 2010. If successful, this collaborative strategy can serve as a model for increasing the utility of SRP-funded research to solve the complex challenges of environmental exposures and clean up.

**Worker Training Program (WTP):** WTP trains workers to protect themselves and their communities from exposure to hazardous materials encountered during hazardous waste operations, hazardous materials transportation, and environmental restoration of contaminated facilities or chemical emergency response. WTP works with a network of experienced worker safety and health experts, trainers, and support staff that can be mobilized to protect and assist during times of national crisis.

WTP provides model occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal or containment or chemical emergency response.

### Primary Worker Training Awards

	FY2007 Actual	FY2008 Estimate	FY2009 Estimate
Amount in thousands	\$26,048	\$25,544	\$25,520
Institutions	18	18	18
Classes	7,848	7,455	7,455
Workers Reached	131,037	124,485	124,485
Contact Hours	1,425,059	1,353,806	1,353,806

**Budget Policy:** The FY 2009 budget estimate for WTP is \$27.9 million, which represents the same level of funding as the FY 2008 enacted amount. Resources will be used to continue awards of WTP cooperative agreements to support ongoing (a) occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal, containment or chemical emergency response training activities, and (b) comprehensive training to disadvantaged urban youth in order to prepare them for employment in the construction and environmental cleanup fields. WTP will also continue to support small businesses through its innovative SBIR e-learning for worker safety and health training program. It will continue pursuing pre-deployment strategies and training materials development on a number of issues of key national response concern.

### Portrait of a Program: Serving Spanish-Speaking Workers

FY 2008 Level	\$700,000
FY 2009 Level	800,000
<b>Change</b>	<b>+100,000</b>

During FY 2009, WTP, while maintaining its core training missions, will undertake a significant expansion of its efforts to serve Spanish-speaking workers who are engaged in hazardous waste cleanup and emergency response. During the response to Hurricane Katrina, WTP learned that Hispanic workers are a particular at-risk population who



experience high rates of occupational injury and death. Currently, WTP training programs reach thousands of Spanish-speaking workers each year with very good results. For example, at a hazardous materials class in Tucson conducted in Spanish, one woman said that she liked the class because she felt respected and for the first time that she had support. She added "...we feel better because we understand more and we can ask any questions we want and we learn more like that." These are lessons in the safe use of hazardous materials that Hispanic workers can use at work to protect themselves and take back to their homes and neighborhoods to protect their families. WTP, through its awardees, will augment the delivery of actual training in the field through targeted outreach and support for additional bi-lingual trainers. Access to many of these multi-lingual resources will continue to be available through the NIEHS website, and access to classroom and hands-on training will be available to employers and workers through WTP.

effort began in August 2006 and will be continued through July 2010.

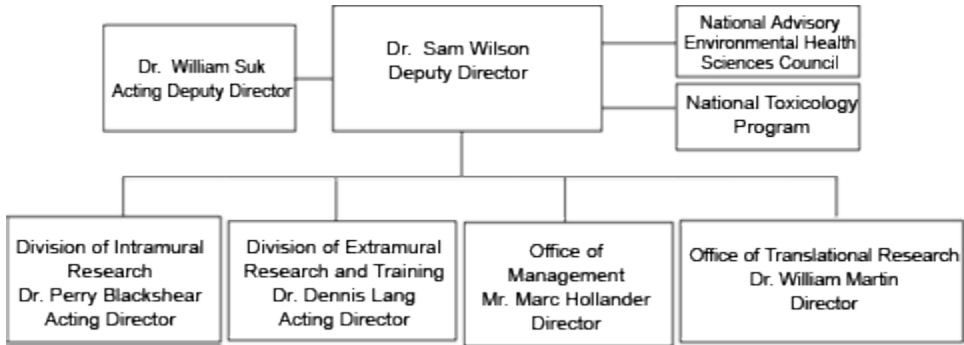
# Major Changes in Budget Request

## FY 2009 Superfund Budget

**Research Project Grants (RPGs) (-\$.031 million; total \$46.806 million):** NIEHS will support a total of 40 RPG awards in FY 2009. Although the overall change in RPGs is small, noncompeting RPGs decrease by -6 awards and -\$4.723 million, while competing RPGs increase by 7 awards and \$4.694 million. The first Superfund Research Program (SRP) investigator-initiated awards, awarded in 2006, are expiring in 2008 and new investigator-initiated SRP awards will be made in 2009. The NIH Budget policy for RPGs in FY 2009 is to provide no inflationary increases in noncompeting awards and no increase in average cost for competing RPGs.

# Organization Chart

## FY 2009 Superfund Budget



# Salaries & Expenses

## FY 2009 Superfund Budget

Object Classes	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
Personnel Compensation:			
Full-Time Permanent (11.1)	\$1,020,000	\$1,067,000	\$47,000
Other Than Full-Time Permanent (11.3)	104,000	109,000	5,000
Other Personnel Compensation (11.5)	12,000	12,000	0
Military Personnel (11.7)	0	0	0
Special Personnel Services Payments (11.8)	0	0	0
Total Personnel Compensation (11.9)	1,136,000	1,188,000	54,000
Civilian Personnel Benefits (12.1)	269,000	281,000	12,000
Military Personnel Benefits (12.2)	0	0	0
Benefits to Former Personnel (13.0)	0	0	0
Subtotal, Pay Costs	1,405,000	1,469,000	64,000
Travel (21.0)	150,000	155,000	5,000
Transportation of Things (22.0)	0	0	0
Rental Payments to Others (23.2)	0	0	0
Communications, Utilities & Miscellaneous Charges (23.3)	0	0	0
Printing and Reproduction (24.0)	0	0	0
Other Contractual Services:			
Advisory and Assistance Services (25.1)	23,000	23,000	0
Other Services (25.2)	1,080,000	1,066,000	-14,000
Purchases from Govt. Accounts (25.3)	2,482,000	2,482,000	0
Operation & Maintenance of Facilities (25.4)	0	0	0
Operation & Maintenance of Equipment (25.7)	0	0	0



Subsistence & Support of Persons (25.8)	0	0	0
<b>Subtotal Other Contractual Services</b>	<b>3,585,000</b>	<b>3,571,000</b>	<b>-14,000</b>
Supplies & Materials (26.0)	11,000	11,000	0
<b>Subtotal, Non-Pay Costs</b>	<b>3,746,000</b>	<b>3,737,000</b>	<b>-9,000</b>
Total, Administrative Costs	\$5,151,000	\$5,206,000	55,000

# Summary of Changes

## FY 2009 Superfund Budget

FY 2008 Enacted				\$77,546,000
FY 2009 Estimated Budget Authority				77,546,000
Net change				0
Changes	2008 Current Enacted Base		Change from Base	
	Budget Authority		Budget Authority	
A. Built-in:				
1. Research Management and Support:				
a. Annualization of January 2008 pay increase		\$1,405,000		\$12,000
b. January 2009 pay increase		1,405,000		31,000
c. One less day of pay		1,405,000		-5,000
d. Payment for centrally furnished services		99,000		1,000
e. Increased cost of laboratory supplies, materials, and other expenses		2,161,000		40,000
<b>Subtotal</b>				<b>79,000</b>
Subtotal, Built-in				79,000
B. Program:				
1. Research project grants:				
a. Noncompeting	24	\$39,240,000	-6	-4,723,000
b. Competing	5	5,528,000	7	4,694,000
c. SBIR/STTR	10	2,069,000	0	-2,000
Total	39	46,837,000	1	-31,000
2. Other research	18	25,544,000	0	-24,000
3. Research and development contracts	1	1,500,000	0	0
<b>Subtotal, extramural</b>				<b>-55,000</b>

4. Research management and support		3,665,000		-24,000
<b>Subtotal, program</b>		<b>77,546,000</b>		<b>-79,000</b>
Total changes				0

FTEs are included with the regular NIEHS appropriation.

# Summary of NIH Tables

## FY 2009 Superfund Budget

### President's Budget Request

Appropriation	FY2007 <u>1/ 2/ 3/ 4/ 5/</u>	FY2008 Enacted <u>10/</u>	FY2009 President's Budget <u>1/</u>	2009 PB. +/- 2008 Enacted
NCI	\$4,795,491,000	\$4,805,088,000	\$4,809,819,000	\$4,731,000
NHLBI	2,919,180,000	2,922,112,000 <u>11</u>	2,924,942,000	2,830,000
NIDCR	389,807,000	390,158,000 <u>11</u>	390,535,000	377,000
NIDDK	1,856,026,000	1,856,684,000 <u>11</u>	1,858,487,000	1,803,000
NINDS	1,534,904,000	1,543,901,000	1,545,397,000	1,496,000
NIAID	4,366,445,000 <u>7</u>	4,560,655,000	4,568,778,000	8,123,000
NIGMS	1,935,625,000	1,935,808,000	1,937,690,000	1,882,000
NICHD	1,254,144,000	1,254,708,000	1,255,920,000	1,212,000
NEI	666,675,000	667,116,000	667,764,000	648,000
NIEHS	641,733,000	642,253,000	624,875,000	622,000
NIA	1,046,500,000	1,047,260,000	1,048,278,000	1,018,000
NIAMS	508,060,000	508,586,000	509,080,000	494,000
NIDCD	393,540,000	394,138,000	395,047,000	909,000
NIMH	1,403,570,000	1,405,476,000 <u>12</u>	1,406,841,000	1,365,000
NIDA	1,000,014,000	1,000,700,000	1,001,672,000	972,000
NIAAA	436,057,000	436,259,000	436,681,000	422,000
NINR	137,287,000	137,476,000	137,609,000	133,000
NHGRI	486,427,000	486,259,000	487,878,000	1,099,000
NIBIB	298,391,000	298,645,000	300,254,000	1,609,000
NCRR	1,143,841,000	1,149,446,000	1,160,473,000	11,027,000
NCCAM	121,379,000	121,577,000	121,695,000	118,000
NCMHD	199,429,000	199,569,000	199,762,000	193,000



Appropriation	FY2007 1/ 2/ 3/ 4/ 5/	FY2008 Enacted 10/	FY2009 President's Budget 1/	2009 PB. +/- 2008 Enacted
FIC	66,422,000	66,558,000	66,623,000	65,000
NLM	319,792,000 <sup>8</sup>	320,507,000 <sup>11</sup>	323,046,000	2,539,000
OD	1,047,485,000 <sup>9</sup>	1,109,099,000	1,056,797,000	-52,302,000
B&F	81,081,000	118,966,000	125,581,000	6,615,000
Type 1 Diabetes	-150,000,000	-150,000,000	-150,000,000	0
Subtotal, Labor/HHS	28,899,345,000	29,229,524,000	29,229,524,000	0
Interior/Superfund Research Program	79,117,000	77,546,000	77,546,000	0
Total, NIH Discretionary B.A.	28,978,462,000	29,307,070,000	29,307,070,000	0
Type 1 Diabetes <sup>7/</sup>	150,000,000	150,000,000	150,000,000	0
Total, NIH Budget Authority	29,128,462,000	29,457,070,000	29,457,070,000	0
NLM Program Evaluation	8,200,000	8,200,000	8,200,000	0
Total, Prog. Level	29,136,662,000	29,465,270,000	29,465,270,000	0

1/ Includes fund to be transferred to the Global Fund for HIV/AIDS, Malaria, and Tuberculosis (FY 2007 - \$99,000,000; FY 2008 - \$294,759,000; and FY 2009 - \$300,000,000)

2/ Comparable for ASAM and ASPA transfer - \$62,000

3/ Comparable for DBEPS program transfer to NIBIB (FY 2007 \$1,528,000)

4/ Comparable for CIO transfer to OD (FY 2007 \$669,000)

5/ Comparable for K-30 transfer to NCRR (\$10,613,000)

6/ Includes fund for the Type I Diabetes Initiative supported with mandatory funds

7/ Comparable for transfer of Advanced Development Fund to ASPR (-\$40,500,000)

8/ Comparable for transfer to DHHS for PHS Historian (\$480,000)

9/ OD comparable (-\$49,500,000) to ASPR for Advanced Development Fund

10/ Includes recession of \$520,929,000

**11/** Includes IC transfer to NIDDK from NHLBI (816,000) and from NLM to NIDCR from NLM (\$455,000)

**12/** Transfer from DHHS of \$983,000

## Budget Mechanism - Total

Dollars in Thousands

Mechanism	FY 2007 Actual		FY 2008 Enacted		FY 2009 President's Budget		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<b>Research Grants: Research Projects:</b>								
Noncompeting	26,741	\$11,005,119	26,728	\$11,193,604	26,759	\$11,169,183	31	- \$24,421
Administrative supplements	(1,633)	204,567	(1,684)	195,090	(1,776)	214,059	(92)	18,969
Competing	10,323	3,788,494	9,771	3,533,832	9,757	3,519,905	(14)	-13,927
<b>Subtotal, RPGs</b>	<b>37,064</b>	<b>14,998,180</b>	<b>36,499</b>	<b>14,922,526</b>	<b>36,516</b>	<b>14,903,147</b>	<b>17</b>	<b>-19,379</b>
SBIR/STTR	1,781	628,552	1,740	619,904	1,741	619,929	1	25
<b>Subtotal RPGs</b>	<b>38,845</b>	<b>15,626,732</b>	<b>38,239</b>	<b>15,542,430</b>	<b>38,257</b>	<b>15,523,076</b>	<b>18</b>	<b>-19,354</b>
<b>Research Centers:</b>								
Specialized/comprehensive	1,193	2,237,998	1,150	2,224,836	1,155	2,231,376	5	6,540
Clinical Research	88	380,981	88	418,382	72	422,893	-16	4,511
Biotechnology	109	137,148	106	124,481	102	123,854	-4	-627
Comparative Medicine	54	124,146	54	121,875	60	131,330	6	9,455
Research Centers in Minority Institutions	28	53,606	28	53,579	28	53,579	0	0
Subtotal, Centers	1,472	2,933,879	1,426	2,943,153	1,417	2,964,032	-9	19,879
<b>Other Research:</b>								
Research Careers	4,293	662,800	4,451	687,989	4,449	684,800	-2	-3,189
Cancer Education	89	31,337	89	31,537	89	31,537	0	0
Cooperative Clinical Research	435	425,313	427	425,471	427	425,447	0	-24
Biomedical Research Support	188	98,312	143	63,533	144	63,533	1	0
Minority Biomedical Research Support	165	111,310	161	110,309	161	110,309	0	0

Other	1,756	465,090	1,726	490,021	1,706	470,227	-20	-19,794
Subtotal, Other Research	6,926	1,794,162	6,997	1,808,860	6,987	1,785,853	-21	-23,007
<b>Total, Research Grants</b>	<b>47,243</b>	<b>20,354,773</b>	<b>46,662</b>	<b>20,294,443</b>	<b>46,650</b>	<b>20,271,961</b>	<b>-12</b>	<b>-22,482</b>
<b>Ruth L. Kirschstein Training Awards:</b>	<b>FTTPs</b>		<b>FTTPs</b>		<b>FTTPs</b>			
Individual Awards	2,982	121,215	2,997	122,029	3,004	123,340	7	1,311
Institutional Awards	14,614	660,695	14,572	659,940	14,582	663,155	10	3,215
<b>Total, Training</b>	<b>17,596</b>	<b>781,910</b>	<b>17,569</b>	<b>781,696</b>	<b>17,586</b>	<b>786,495</b>	<b>17</b>	<b>4,526</b>
Research & development contracts	2,895	2,984,851	2,886	3,242,054	2,913	3,275,326	27	33,272
(SBIR/STTR)	(98)	(25,875)	(106)	(29,389)	(106)	(29,391)	(0)	(2)
Intramural Research		3,034,588		3,069,277		3,119,269		20,322
Research Management and Support		1,316,887		1,341,060		1,361,382		20,322
Extramural Construction		14,100		0		0		0
Office of the Director <u>1/</u>		473,235		523,835		431,670		-92,165
<i>(Appropriation)</i>		(1,047,485)		(1,109,090)		(1,056,797)		(-52,302)
Buildings and Facilities <u>2/</u>		89,001		126,886		133,421		6,535
<i>(Appropriation)</i>		(81,081)		(118,966)		(125,581)		(6,615)
NIH Roadmap for Medical Research <u>3/</u>		(483,000)		(495,608)		(533,877)		(38,269)
Type 1 Diabetes <u>4/</u>		-150,000		-150,000		-150,000		0
Subtotal, Labor/HHS Budget Authority		28,899,345		29,229,524		29,229,524		0
Interior Appropriation for Superfund Res.		79,117		77,546		77,546		0
Total, NIH Discretionary B.A.		28,978,462		29,307,070		29,307,070		0
Type 1 Diabetes <u>4/</u>		150,000		150,000		150,000		0

Total NIH Budget Authority		29,128,462		29,457,070		29,457,070		0
NLM Program Evaluation		8,200		8,200		8,200		0
Total, Program Level		29,136,662		29,465,270		29,465,270		0

**1/** Funding for NIH Roadmap for Medical Research and for the NIH Director's Bridge Awards is distributed by mechanism. Roadmap: (funding shown above). Bridge Awards -- FY 07: 244 awards \$91,250; FY 08: 240 awards \$89,656; FY 09: 244 awards \$91,250.

**2/** Includes the B&F appropriation plus the following included in NCI -- FY 07: \$7,920; FY 08: \$7,920; FY 09: \$7,840.

**3/** Included in above mechanisms

**41/** included in NIDDK - FY 07: \$150,000; FY 08: \$150,000; FY 09: \$150,000

**Numbers of grants identified in FY 2008 and FY 2009 are estimates, and WILL change as applications are received and selected for funding.**

## Full-Time Equivalents

Institutes and Centers	FY 2007 Actual	FY 2008 Enacted	FY 2009 President's Budget
NCI	2,828	2,833	2,854
NHLBI	814	815	821
NIDCR	240	240	242
NIDDK	636	637	642
NINDS	517	517	525
NIAID	1,607	1,637	1,649
NIGMS	133	144	145
NICHD	560	563	567
NEI	214	214	216
NIEHS	656	658	663
NIA	383	392	395
NIAMS	215	217	219
NIDCD	134	134	135
NIMH	615	615	619
NIDA	371	375	378
NIAAA	220	220	222
NINR	40	40	40
NHGRI	286	299	301
NIBIB	85	88	88
NCRR	108	108	109
NCCAM	69	69	70
NCMHD	22	29	29
FIC	54	56	56
<b>Subtotals, ICs</b>	<b>10,807</b>	<b>10,900</b>	<b>10,985</b>
NLM	676	676	681
OD	591	591	591
Central Services	4,910	4,910	4,945
<b>Subtotal, NIH</b>	<b>16,984</b>	<b>17,077</b>	<b>17,202</b>
Undistributed Reserve	3	51	42
CRADA FTEs <sup>1/</sup>	10	10	10
<b>Total, NIH</b>	<b>16,997</b>	<b>17,138</b>	<b>17,254</b>

1/ CRADA FTEs are supported by Cooperative Research and Development Agreements.