

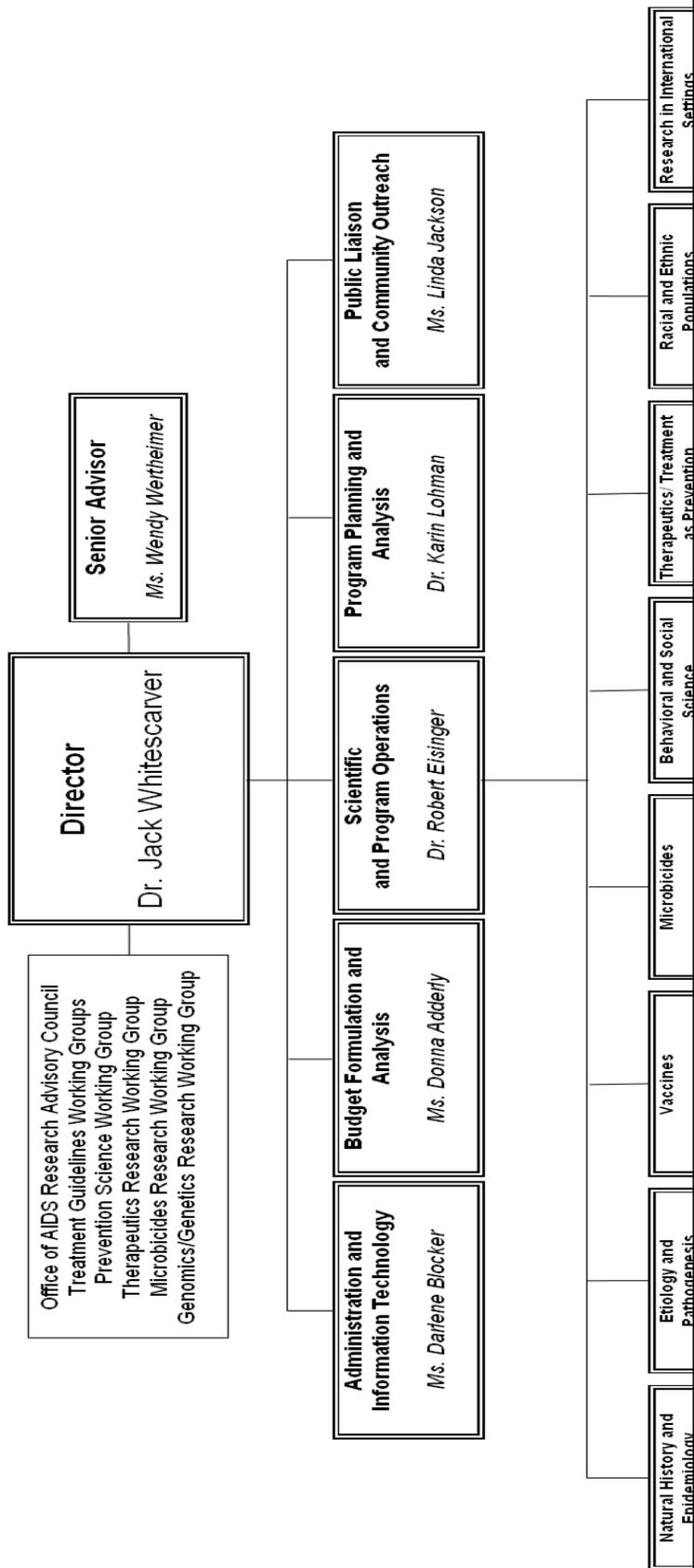
DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Office of AIDS Research Trans-NIH AIDS Research Budget

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# OFFICE OF AIDS RESEARCH



**National Institutes of Health  
Office of AIDS Research**

**Budget Authority by Institute and Center**

Institute/Center	FY 2009 Actual	FY 2010 Enacted	FY 2011 PB	Change FY 2010 Enacted/ FY 2011 PB
NCI	\$265,882,000	\$272,130,000	\$280,804,000	\$8,674,000
NHLBI	66,651,000	68,206,000	70,052,000	1,846,000
NIDCR	20,251,000	20,251,000	20,251,000	---
NIDDK	31,031,000	31,031,000	31,031,000	---
NINDS	46,531,000	47,027,000	47,027,000	---
NIAID	1,541,074,000	1,577,547,000	1,630,418,000	52,871,000
NIGMS	56,024,000	57,334,000	59,169,000	1,835,000
NICHD	142,334,000	145,652,000	149,986,000	4,334,000
NEI	10,633,000	10,631,000	10,232,000	-399,000
NIEHS	5,347,000	5,347,000	5,523,000	176,000
NIA	5,560,000	5,645,000	5,929,000	284,000
NIAMS	4,938,000	4,938,000	6,728,000	1,790,000
NIDCD	1,284,000	1,880,000	1,880,000	---
NIMH	186,665,000	191,051,000	197,103,000	6,052,000
NIDA	312,901,000	320,230,000	330,452,000	10,222,000
NIAAA	27,797,000	28,446,000	28,808,000	362,000
NINR	12,506,000	12,660,000	13,065,000	405,000
NHGRI	7,048,000	7,153,000	7,458,000	305,000
NIBIB	1,308,000	2,705,000	2,705,000	---
NCRR	167,111,000	171,012,000	176,037,000	5,025,000
NCCAM	2,441,000	2,441,000	2,440,000	-1,000
NCMHD	8,954,000	6,000,000	8,178,000	2,178,000
FIC	23,799,000	24,356,000	25,598,000	1,242,000
NLM	7,606,000	7,683,000	7,937,000	254,000
OD	63,617,000	64,241,000	65,525,000	1,284,000
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<b>TOTAL, NIH</b>	<b>3,019,293,000</b>	<b>3,085,597,000</b>	<b>3,184,336,000</b>	<b>98,739,000</b>

**NATIONAL INSTITUTES OF HEALTH**  
**Office of AIDS Research**

**SUMMARY OF BUDGET BY MECHANISM**  
**(Dollars in thousands)**

MECHANISM	FY 2009 Actual		FY 2010 Enacted		FY 2011 PB		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<b>Research Grants:</b>								
<b>Research Projects</b>								
Noncompeting	1,790	1,343,290	1,749	\$1,319,490	1,705	\$1,318,406	(44)	(\$1,084)
Administrative supplements	(133)	26,451	(114)	25,667	(114)	26,837	0	1,170
Competing	540	291,558	599	327,008	698	378,916	99	51,908
Subtotal, RPGs	2,330	1,661,299	2,348	1,672,165	2,403	1,724,159	55	51,994
<b>SBIR/STTR</b>	90	37,003	99	40,362	99	41,212	0	850
Subtotal, RPGs	2,420	1,698,302	2,447	1,712,527	2,502	1,765,371	55	52,844
<b>Research Centers</b>								
Specialized/comprehensive	69	144,832	72	146,949	72	152,213	0	5,264
Clinical research	8	56,445	10	57,900	10	62,809	0	4,909
Biotechnology	2	3,753	2	3,750	2	3,750	0	0
Comparative medicine	21	60,950	20	58,828	20	58,853	0	25
Research Centers in Minority Institutions	5	11,910	4	12,528	4	12,541	0	13
Subtotal, Centers	105	277,890	108	279,956	108	290,166	0	10,210
<b>Other Research</b>								
Research careers	264	39,491	262	41,188	262	42,375	0	1,187
Cancer education	0	14	0	14	0	15	0	1
Cooperative clinical research	16	25,596	11	24,258	11	24,492	0	234
Biomedical research support	1	753	2	750	2	750	0	0
Minority biomedical research support	1	142	1	144	1	148	0	4
Other	148	55,075	153	57,624	157	59,111	4	1,487
Subtotal, Other Research	430	121,071	429	123,978	433	126,891	4	2,913
<b>Total Research Grants</b>	2,955	2,097,263	2,984	2,116,461	3,043	2,182,428	59	65,967
<b>Ruth L. Kirschstein Training Awards:</b>	<b>FTTPs</b>		<b>FTTPs</b>				<b>FTTPs</b>	
Individual awards	74	3,022	74	3,079	74	3,259	0	181
Institutional awards	658	31,102	664	31,589	664	32,986	0	1,397
Total, Training	732	34,124	738	34,667	738	36,245	0	1,578
Research & development contracts (SBIR/STTR)	194 (1)	411,450 (142)	149 (1)	451,103 (1,608)	153 (1)	466,066 (1,732)	4 (0)	14,963 (124)
Intramural research		306,103		308,746		320,251		11,505
Research management and support		106,736		110,379		113,821		3,442
Construction		0		0		0		0
Office of the Director		63,617		64,241		65,525		1,284
<b>Total Budget Authority</b>		3,019,293		3,085,597		3,184,336		98,739

NATIONAL INSTITUTES OF HEALTH  
Office of AIDS Research

Budget Authority by Program  
(dollars in thousands)

Area of Emphasis 1/	FY 2007 Actual	FY 2008 Actual	FY 2009 Actual 2/	FY 2010 Enacted	FY 2011 PB	Change
HIV Microbicides	\$96,413	\$115,495	\$128,670	\$136,353	\$143,855	\$7,502
Vaccines	582,403	556,139	560,956	567,204	603,245	36,041
Behavioral and Social Science	420,395	412,502	434,305	441,897	465,264	23,367
Therapeutics	656,264	698,461	670,561	689,379	694,417	5,038
Etiology and Pathogenesis	692,816	703,874	729,991	743,468	754,327	10,859
Natural History and Epidemiology	239,396	227,900	247,914	261,649	269,175	7,526
Training, Infrastructure, and Capacity Building	192,065	171,706	198,028	198,555	204,290	5,735
Information Dissemination	26,036	42,268	48,868	47,092	49,763	2,671
<b>Total</b>	<b>2,905,788</b>	<b>2,928,345</b>	<b>3,019,293</b>	<b>3,085,597</b>	<b>3,184,336</b>	<b>98,739</b>

1/ Beginning in FY 2008, HIV Microbicides became a separate activity. Dollars for HIV Microbicides were previously included within other science areas, such as Therapeutics, Etiology and Pathogenesis, Behavioral and Social Science, and Vaccines. The FY 2007 amounts are comparable budget figures.

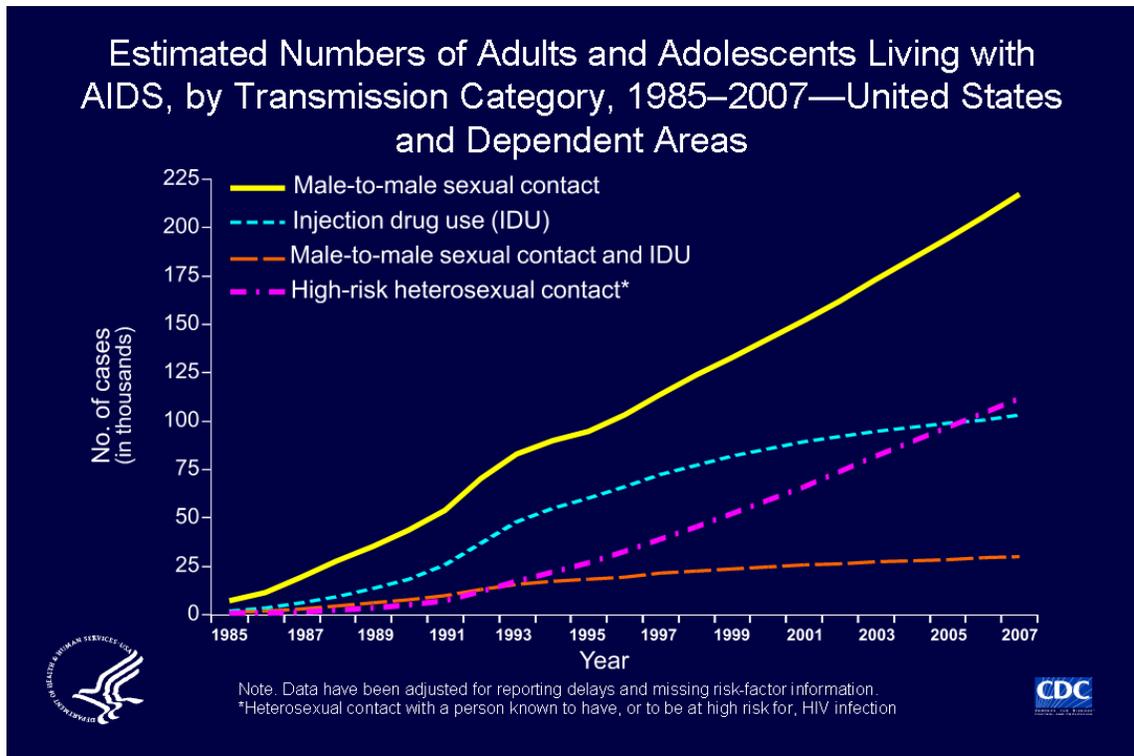
2/ Beginning in FY 2009, the funding for AIDS research projects supported by the National Center on Minority Health and Health Disparities is included in this trans-NIH budget.

# The AIDS Pandemic



## Global estimates for adults and children, 2008

- **People living with HIV**                      **33.4 million** [31.1 – 35.8 million]
- **New HIV infections in 2008**            **2.7 million** [ 2.4 – 3.0 million]
- **Deaths due to AIDS in 2008**            **2.0 million** [1.7 – 2.4 million]



## Justification of Budget Request

### OFFICE OF AIDS RESEARCH *Trans-NIH AIDS Research Budget Justification*

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Budget Authority

FY 2009 Omnibus	FY 2010 Appropriation	FY 2011 President's Budget	FY 2011+/- FY 2010
\$3,019,293,000	\$3,085,597,000	\$3,184,336,000	+\$98,739,000

#### DIRECTOR'S OVERVIEW

**Mission:** The Office of AIDS Research (OAR) coordinates the scientific, budgetary, legislative, and policy elements of the trans-NIH research program on AIDS and its wide spectrum of associated malignancies, co-infections, and clinical complications. OAR serves as an "institute without walls," vested with responsibility for all NIH AIDS-related research supported by every NIH Institute and Center. This diverse portfolio requires unprecedented trans-NIH planning, scientific priority setting, and resource management. OAR has established unique trans-NIH processes to identify the highest priority areas of scientific opportunity, enhance collaboration, minimize duplication, and ensure that precious research dollars are invested effectively and efficiently to lead to the development of new tools for use in the global fight against AIDS.

**The Pandemic:** AIDS remains a global scourge that affects people in nearly every country worldwide. UNAIDS reports that in 2008, more than 33 million people were estimated to be living with HIV/AIDS; 2.7 million were newly infected; and 2 million people died of AIDS-related illnesses. In the U.S., more than 1.1 million people are estimated to be HIV-infected; and someone is infected with HIV every nine and a half minutes, disproportionately affecting racial and ethnic populations, women of color, young adults, and men who have sex with men. In 2006, approximately one-quarter of HIV-infected adults in the U.S. were at least 50 years old, and individuals 50 years of age and older accounted for approximately 10 percent of all new HIV infections.

**Trans-NIH Research Program:** To address this pandemic, NIH has established the largest and most significant AIDS research program in the world, a comprehensive program of basic, clinical, translational, and behavioral research in domestic and international settings. NIH-funded research has led to: the critical discovery of antiretroviral therapies and regimens that have resulted in improved life expectancy for those with access to and who can tolerate these drugs; the development of treatments for many HIV-associated co-infections, co-morbidities, malignancies, and clinical manifestations; and advances in HIV prevention, including groundbreaking strategies for

the prevention of mother-to-child transmission. Despite these important advances, the epidemic continues to expand, and improved prevention strategies and therapeutic regimens are urgently needed.

**Trans-NIH Plan and Budget:** OAR's trans-NIH planning process, involving both government and non-government experts, results in the identification of clear, overarching AIDS-research priorities and specific research objectives and strategies. The priorities of the Plan (<http://www.oar.nih.gov/strategicplan/>) guide the development of the trans-NIH AIDS research budget. OAR develops each IC's allocation based on the Plan, scientific opportunities, and the IC's capacity to absorb and expend resources for the most meritorious science – not on a formula. This process reduces redundancy, promotes harmonization, and assures cross-Institute collaboration.

**Critical Priorities:** The overarching research priorities of the FY 2011 Trans-NIH Strategic Plan and this trans-NIH AIDS research budget request will establish the scientific foundation to achieve the goals of the President's National AIDS Strategy. These priorities are also aligned with the NIH Director's themes. They are:

- **Expanding Basic Discovery Research:** Research is needed to better understand the virus and how it causes disease, including studies to delineate how gender, age, ethnicity, and race influence vulnerability to infection and HIV disease progression. OAR will increase support for genomics studies and breakthroughs in sequencing the human genome, and for new opportunities to apply these valuable tools to the search for new HIV prevention and therapeutics strategies.
- **Reducing New Infections:** Key prevention research areas include vaccines, microbicides, and behavioral and social science. A critical new area is the study of treatment strategies as a method to prevent new infections. These include: post-exposure prophylaxis, the use of treatment to prevent HIV infection after exposure, including in a healthcare environment; pre-exposure prophylaxis (PreP), the long-term use of treatment regimens for high-risk uninfected populations to prevent HIV acquisition; and a potential prevention strategy known as “test and treat,” to determine whether a community-wide testing program with immediate treatment can decrease the overall rate of new HIV infections in that community.
- **Improving Disease Outcomes:** A growing proportion of patients receiving long-term antiretroviral therapy (ART) are demonstrating treatment failure, experiencing serious drug toxicities and side effects, and developing drug resistance. Recent studies have shown an increased incidence of malignancies, as well as cardiovascular and metabolic complications, and premature aging associated with long-term HIV disease and ART. There is a need to develop better, less toxic treatments and to investigate how genetic determinants, sex, gender, race, age, pregnancy status, nutritional status, and other factors interact to affect treatment success or failure and/or disease progression.

- **Reducing HIV-Related Disparities:** Research is needed to better understand the causes of HIV-related health disparities, their role in disease transmission and acquisition, and their impact on treatment access and effectiveness. These include disparities among racial and ethnic populations in the U.S.; between developed and resource-constrained nations; between men and women; between youth and older individuals; and disparities based on sexual identity. NIH will support research training for new investigators from racial and ethnic communities, development of research infrastructure, community outreach, information dissemination, workshops, leadership development, and research collaborations to help reduce these disparities.
- **Translating Research from Bench to Bedside to Community:** Research will focus on analyses of the feasibility, effectiveness, and sustainability required for the scale-up and implementation of interventions from a structured behavioral or clinical study to a broader "real world" setting, including critical epidemiologic and natural history studies to evaluate various operational strategies that can be employed to scale up and evaluate ART programs and successful prevention interventions in communities at risk.

**Global Impact of NIH AIDS Research:** Research to address the global pandemic is essential. Since the early days of the epidemic, NIH has supported research efforts in countries impacted by AIDS. Beginning in 1983 with a research project in Haiti and the establishment of Project SIDA in 1985 in what was then Zaire, NIH has maintained a strong international AIDS research portfolio. NIH has expanded this effort to encompass projects in approximately 100 countries around the world. AIDS research represents the largest component of the total NIH global research investment. International clinical trial sites are crucial to the NIH AIDS clinical trial networks with international scientists serving as equal partners in the design, conduct, and analyses of prevention and treatment strategies. NIH AIDS research studies are designed so that the results are relevant both to the host nation as well as for the U.S. Implementation studies are critical to translating clinical research results from these trials into community based interventions that can be operational in international settings. The development of research infrastructure, including training of scientists and healthcare providers, is an essential component of these research programs. Most of these grants and contracts are awarded to US-based investigators to conduct research in collaboration with in-country scientists; some are awarded directly to investigators in international scientific or medical institutions.

**AIDS RESEARCH CONDUCTED IN INTERNATIONAL SETTINGS**

(Dollars in millions)

<b>FY 2009 Actual</b>	<b>FY 2010 Enacted</b>	<b>FY 2011 PB</b>
<b>\$451.688</b>	<b>\$454.166</b>	<b>\$470.625</b>

**Overall Budget Policy:** The OAR FY 2011 budget request for the trans-NIH AIDS research program is \$3,184,336,000, which represents an increase of \$98,739,000 and 3.2% over the FY 2010 appropriation. This amount includes the total trans-NIH support for intramural and extramural research; research management support; research centers; training; and basic and clinical biomedical and behavioral research on HIV/AIDS and the wide spectrum of AIDS-associated malignancies, opportunistic infections, co-infections, and clinical complications. In FY 2011, OAR will place priority on research initiatives to establish the scientific foundation to achieve the goals of the President's National AIDS Strategy: (1) expand basic discovery research; (2) reduce new infections (3) improve disease outcomes; (4) reduce HIV-related disparities; and (5) translate research from bench to bedside to the community.

**OFFICE OF AIDS RESEARCH**  
***Trans-NIH AIDS Research Budget Justification***

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**HIV MICROBICIDES**

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Microbicides, antimicrobial products that could be applied topically, alone or in combination with other strategies, for the potential prevention of HIV and other sexually transmitted infections, may offer one of the most promising primary preventive interventions. NIH supports a comprehensive and innovative microbicide research program that includes the screening, discovery, development, preclinical testing, and clinical evaluation of microbicide candidates, as well as basic science aimed at understanding how HIV transverses mucosal membranes and infects cells. NIH also supports concomitant behavioral and social science research on the acceptability and use of microbicides among different populations and analyses of the safety of microbicide use during pregnancy.

**Budget Policy:** The FY 2011 budget request for this activity is \$143,855,000, which represents an increase of \$7,502,000 and 5.5% over the FY 2010 appropriation. HIV microbicide research is a top priority within the AIDS research agenda. In FY 2011, NIH will continue to support the design, development, and evaluation of microbicide candidates. Key ongoing activities include support for the microbicide clinical trials network and the necessary infrastructure to conduct microbicide trials, especially in developing countries; development of innovative, novel, and high risk-high reward approaches for the development and testing of microbicide candidates; the development of criteria for selecting potential products to be evaluated in clinical trials and for advancing them through the different phases of preclinical and clinical studies; and research on ethical, adherence, and other behavioral issues impacting these clinical trials. A number of trans-governmental working groups, conferences, workshops, and symposia also will be supported to foster coordination and collaboration in innovative microbicide research that will lead to the development of potential candidates that prevent HIV transmission and acquisition.

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**VACCINES**

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The best long-term hope for controlling the AIDS pandemic is the development of safe, effective, and affordable AIDS vaccines that may be used in combination with other prevention strategies. AIDS vaccine research remains a high priority to ensure that new and innovative concepts continue to advance through the pipeline. NIH supports a broad AIDS vaccine research portfolio encompassing basic, preclinical, and clinical research including studies to identify and better understand potentially protective immune responses in HIV-infected individuals and studies of improved animal models for the preclinical evaluation of vaccine candidates. Information gained from these

studies is being used to inform the design and development of novel vaccine strategies. The recent release of data from several vaccine clinical studies present new scientific opportunities for investigation that will require significant new investment and realignment of resources.

**Budget Policy:** The FY 2011 budget request for this activity is \$603,245,000, an increase of \$36,041,000 and 6.4% over the FY 2010 appropriation. Basic research studies are critically needed on the virus and host immune responses that can inform the development of new and innovative vaccine concepts; as well as the development of improved animal models to conduct pre-clinical evaluations of vaccine candidates. In FY 2011, NIH will fund additional basic research on HIV and host responses, as well as the design and development of new vaccine concepts and the pre-clinical/clinical development of vaccine candidates in the pipeline. Resources will be directed for basic, preclinical, and clinical studies identified as a result of the recent Phase III vaccine trial in Thailand. It also includes support for new initiatives to apply systems biology to HIV vaccine discovery and for additional research involving non-human primates.

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## BEHAVIORAL AND SOCIAL SCIENCE

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NIH supports research to better understand how to change the behaviors that lead to HIV acquisition, transmission, and disease progression, as well as how to maintain protective behaviors once they are adopted. In addition, NIH supports research aimed at modifying the social and cultural factors associated with HIV infection, particularly in communities with high HIV incidence, including racial and ethnic communities in the United States and men who have sex with men. This research will contribute to the implementation of a broader range of preventive and/or therapeutic strategies. The development and implementation of comprehensive, multi-faceted approaches for prevention and treatment require an integration of biomedical and behavioral research. Behavioral issues associated with adherence to therapies are another area of priority investigation. NIH also supports research to improve the methodologies employed in behavioral and social science research, including studies of stigma and discrimination, relevant to HIV prevention and treatment.

**Budget Policy:** The FY 2011 budget request for this activity is \$465,264,000, which is an increase of \$23,367,000 and 5.3% over the FY 2010 appropriation. NIH will continue to fund research to develop and evaluate effective interventions to prevent HIV transmission and acquisition by reducing HIV-related risk behaviors and increasing protective behaviors. Resources will be directed towards several new prevention initiatives, including studies focused on behavioral and social science aspects of new biomedical prevention strategies and studies of behavioral aspects related to treatment as prevention.

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## THERAPEUTICS

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Antiretroviral treatment (ART) has resulted in improved immune function in patients who are able to adhere to the treatment regimens and tolerate the toxicities associated with antiretroviral drugs; and it has delayed the progression of HIV disease, extending the time between initial infection and the development of AIDS. However, a growing proportion of patients receiving long-term therapy are demonstrating treatment failure, experiencing serious drug toxicities and side effects, and developing drug resistance. Epidemiologic studies have revealed a number of co-infections, co-morbidities, malignancies, and complications associated with long-term HIV disease and ART, including tuberculosis, Hepatitis C, malignancies, metabolic disorders, cardiovascular disease, and neurologic disorders. NIH supports a comprehensive therapeutics research program to design, develop, and test drugs and drug regimens to maintain long-term undetectable viral load, overcome drug resistance and treatment failure, prevent and treat AIDS-associated comorbidities and complications, and eradicate persistent viral reservoirs that may lead to a potential or functional cure for HIV disease.

**Budget Policy:** The FY 2011 budget request for this activity is \$694,417,000, which represents an increase of \$5,038,000 and 0.7% over the FY 2010 appropriation. While improved therapeutic regimens for the treatment of HIV and its associated co-infections and co-morbidities are urgently needed, especially regimens that can be implemented in resource-limited settings, the increase in funding for therapeutics research will be less than other areas to allow for increased funding for HIV prevention science research. Funds from a portion of expiring grants and contracts for therapeutics research will be re-allocated to studies of the treatment and prevention of HIV-associated co-infections and co-morbidities and to support vaccine, microbicides, and behavioral/social science research. Resources within the area of Therapeutics also will be directed to several new and/or expanded initiatives to determine the feasibility of a number of “treatment as prevention” strategies.

**Treatment as Prevention:** A critical new area of prevention research is the study of treatment strategies as a method to prevent new infections. This new approach builds on NIH-sponsored research that successfully demonstrated that treatment of HIV-infected pregnant women could significantly reduce transmission of HIV from mother to child. Strategies currently being investigated include: post-exposure prophylaxis, the use of treatment to prevent HIV infection after accidental exposure, including in a healthcare environment; pre-exposure prophylaxis (PreP), the long-term use of treatment regimens for high-risk uninfected populations to prevent HIV acquisition; and a potential prevention strategy known as “test and treat,” to determine whether a community-wide testing program with immediate treatment can decrease the overall rate of new HIV infections in that community.

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## ETIOLOGY AND PATHOGENESIS

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NIH supports a comprehensive portfolio of research focused on gaining a better understanding of how HIV infection is established and maintained and what causes the associated profound immune deficiency and severe clinical complications. Research on basic HIV biology and AIDS pathogenesis has revolutionized the design of drugs, methodologies for diagnosis, and monitoring of the safety and effectiveness of antiviral therapies. Ground-breaking strides have been made towards understanding the fundamental steps in the life-cycle of HIV, the host-virus interactions, and the clinical manifestations associated with HIV infection and AIDS. Additional research is needed to further the understanding of the virus and how it causes disease, including studies to delineate how sex, gender, age, ethnicity, race, pregnancy, nutritional status, and other factors interact to affect treatment success or failure and influence vulnerability to infection and HIV-disease progression, including the development of HIV-associated comorbidities, malignancies and coinfections. Studies of the genetic determinants associated with HIV disease progression and treatment response may lead to the development of customized therapeutic regimens formulated for an individual patient based on his or her genetic sequence. A gene sequence associated with allergic reactions to the drug abacavir already has been identified. This finding led the FDA to recommend that doctors conduct genetic screening before prescribing abacavir to patients. Research examining the mechanisms by which HIV establishes and reactivates latent reservoirs of infection is a high priority for the NIH. A better understanding of these processes could lead to the development of therapies that eradicate, or functionally eradicate, persistent virus reservoirs. Some have speculated that the eradication of persistent virus reservoirs might cure HIV disease.

**Budget Policy:** The FY 2011 budget request for this activity is \$754,327,000, which is an increase of \$10,859,000 and 1.5% over the FY 2010 appropriation. The results from recent microbicide and vaccine clinical studies have revealed gaps in knowledge and understanding of HIV etiology and pathogenesis, particularly with regard to host immune responses, how HIV interacts with and transverses mucosal surfaces, and the establishment and maintenance of latent viral reservoirs. The amount requested for FY 2011 includes funding for research on the biology of HIV transmission and pathogenesis, including studies on co-infections, malignancies, and other complications.

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## NATURAL HISTORY AND EPIDEMIOLOGY

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Natural history and epidemiologic research is essential for monitoring epidemic trends, developing and evaluating prevention modalities, following the changing clinical

manifestations of HIV disease in different populations, and measuring the effects of treatment regimens. NIH supports research in domestic and international settings to examine HIV transmission, HIV disease progression (including the occurrence of co-infections and opportunistic infections, malignancies, metabolic, cardiovascular, neurological, and other complications), the development of other HIV-related conditions, and improved methodologies to support this research. Epidemiologic research is instrumental in identifying and describing AIDS-related co-morbidities, disentangling effects related to treatment from those related to HIV disease itself. As the AIDS epidemic continues to evolve, there is a crucial need to continue to conduct epidemiologic studies in both domestic and international settings. These studies have delineated the significant health disparities that are critical factors in the epidemic. These include racial and ethnic disparities in the U.S.; disparities between developed and resource-constrained nations; disparities between men and women; disparities between youth and older individuals; and health disparities based on sexual identity. NIH will continue to place high priority on understanding the causes of HIV-related health disparities, both in the United States and around the world, their role in disease transmission and acquisition, and their impact on treatment access and effectiveness.

**Budget Policy:** The FY 2011 budget request for this activity is \$269,175,000, which represents an increase of \$7,526,000 and 2.9% above the FY 2010 appropriation. NIH will continue to provide support for high-priority epidemiology studies of groups and populations affected by HIV, including individuals over fifty years of age. NIH also will increase support for critical studies on the mechanisms of disease progression, the specific role of race and gender, the effects of nutritional status on disease progression and response to therapy, the impact of therapy in changing the spectrum of HIV disease, and the causes of death. In addition, resources will be directed towards implementation/operational science including the evaluation of strategies that can be employed to scale-up strategies and interventions to the community level.

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## TRAINING, INFRASTRUCTURE, AND CAPACITY BUILDING

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NIH supports the training of domestic and international biomedical and behavioral AIDS researchers, and provides support for the equipment necessary for the conduct of AIDS-related research and clinical studies. The expansion of NIH-funded HIV research globally has necessitated the development of research infrastructure in many locations, including resource-limited settings in Africa, the Caribbean, India, and Asia. Numerous NIH funded programs have increased the number of training positions for AIDS-related researchers, including programs specifically designed to recruit individuals from underrepresented populations into research careers and to build research infrastructure at minority-serving institutions in the United States.

**Budget Policy:** The FY 2011 budget request for this activity is \$204,290,000, which represents an increase of \$5,735,000 and 2.9% above the FY 2010 appropriation. NIH

will continue to support ongoing efforts to increase the supply of non-human primates, particularly rhesus macaques, for AIDS research and other areas of biomedical research both in the United States and abroad. NIH also will support training programs for U.S. and international researchers to build the critical capacity to conduct AIDS research both in racial and ethnic communities in the United States and in developing countries. In FY 2011, support will be provided for a special training program in molecular biophysics and structural biology. Support also will be provided for the NIH AIDS Research Loan Repayment Program and the newly established Intramural AIDS Research Fellowship program. The latter two programs will help ensure an adequate number of trained AIDS researchers at NIH.

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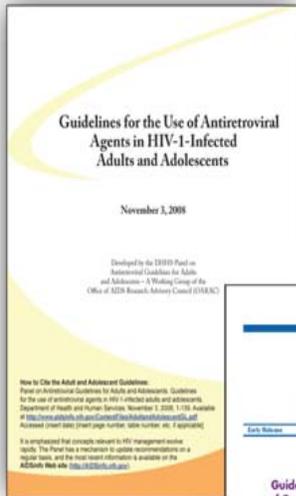
## INFORMATION DISSEMINATION

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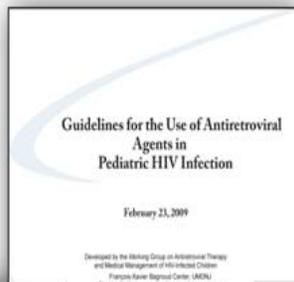
Effective information dissemination approaches are integral to HIV prevention and treatment efforts and critical in light of the continuing advent of new and complex antiretroviral treatment regimens, issues related to adherence to prescribed treatments, and the need to translate behavioral and social prevention approaches into practice. The changing pandemic and the increasing number of HIV infections in specific population groups in the United States, such as racial and ethnic populations, men who have sex with men, and women, underscore the need to disseminate HIV research findings and other related information to communities at risk. The flow of information among researchers, health care providers, and the affected communities represents new opportunities to rapidly translate research results into practice and to shape future research directions. NIH supports initiatives to enhance dissemination of research findings; develop and distribute state-of-the art treatment guidelines; and enhance recruitment and retention of participants in clinical studies, including women and racial and ethnic populations.

**Budget Policy:** The FY 2011 budget request for this activity is \$49,763,000, which represents an increase of \$2,671,000 and 5.7% above the FY 2010 appropriation. As the number and complexity of clinical studies increases, resources must be invested in clinical trials-related information dissemination to ensure recruitment of an adequate number of participants, particularly from populations at risk, including women and racial and ethnic populations in the United States. In addition, funding will be provided to ensure that critical federal guidelines on the use of antiretroviral therapy, as well as guidelines for the management of HIV complications for adults and children, will be updated regularly and disseminated to healthcare providers and patients through the *AIDSinfo* website ([www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov)).

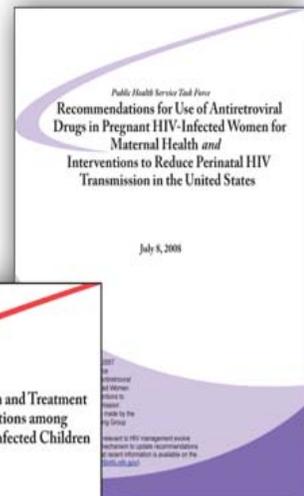
# Updated HIV Clinical Guidelines, 2008-2009



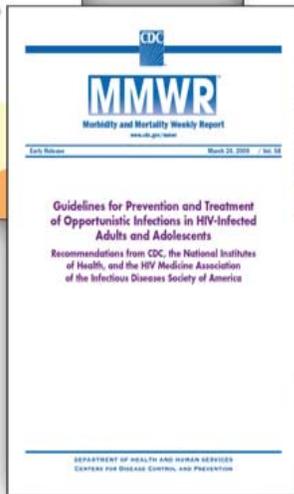
ARVs - Adults and Adolescents



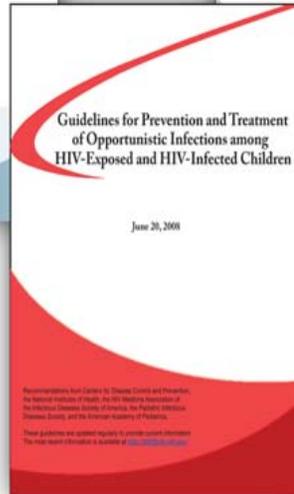
ARVs - Pediatric



ARVs - Perinatal



OIs - Adults and Adolescents



OIs - Pediatric

[www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov)