

**National Institute on Drug Abuse  
Strategic Plan on Reducing Health Disparities**

**NIH Comprehensive Strategic Plan and Budget  
To Reduce and Ultimately Eliminate Health Disparities**

**MISSION**

The mission of the National Institute on Drug Abuse is to lead the nation in bringing the power of science to bear on drug abuse and addiction. This charge has two critical components: The first is the strategic support and conduct of research across a broad range of disciplines. The second is to ensure the rapid and effective dissemination and use of the results of that research to significantly improve drug abuse and addiction prevention, treatment, and policy.

**OVERVIEW OF NIDA’S STRATEGY FOR ADDRESSING HEALTH DISPARITIES**

Unlike other diseases, drug addiction poses many peculiar challenges to health researchers, providers, and public health officials in the search for effective prevention and treatment strategies and policies. These challenges emanate primarily from the fact that drug abuse and addiction are usually the result of illegal activity and drug abusers are often viewed as morally corrupt or weak-willed individuals who engage in not only voluntary self and socially destructive behavior but also criminal activity. In short, despite the fact that we know unequivocally that addiction is a disease like any other medical disease, it remains a stigmatized disease. And this stigma spills over to all aspects of drug abuse research, prevention and treatment (e.g., obtaining measures of use, safety and legal concerns, early intervention is compromised by efforts to hide the disease, and denial of dependency).

Racial/Ethnic minority populations are perhaps most adversely affected by this stigma and its effects leading to misperceptions about drug abuse and addiction in minority communities and the way in which prevention and treatment are delivered to them. For example, the common perception is that minority groups, particularly Blacks and Hispanics, use drugs more than whites even though epidemiologic data show little difference in overall use by race/ethnicity. In fact, in some instances minority groups are less likely to use licit or illicit drugs. There are, however, great differences in the consequences of drug use for racial/ethnic minorities creating a great need to better understand the unique prevention, treatment and health services needs of these communities.

NIDA has made a concerted effort, particularly over the last eight years, to better understand and address the drug abuse and addiction research needs of racial/ethnic populations focusing on research areas where there are significant gaps in knowledge and/or clear disparities in prevention and treatment. In 1993, NIDA established a Special Populations Office, which has two overall goals: (1) to encourage increased research on drug abuse in minority populations in NIDA divisions and (2) to encourage and enable increased minority participation in drug abuse research. Moreover, NIDA formed an institute-wide work group, the Consortium on Minority Concerns, which meets monthly to address research and

research development issues of concern to minority populations. Each program division and office is represented on the Consortium.

Several institute-wide initiatives and policies were implemented which has led to progress in research that addresses health disparities and the under-representation of minority scholars in drug abuse research. Some of these initiatives include:

**Historically Black Colleges and Universities (HBCU) Initiative.** This was designed to encourage HBCUs to become involved in drug abuse research and to assist them in developing the capacity to conduct drug abuse research. Some selected outcomes of this initiative include: increased support of HBCUs through the NIH competitive process (which has led to research on under-researched areas such as developing prevention programs for rural African American youth, understanding risk for drug abuse in African American youth at developmental transition points), the establishment of a center on drug abuse research at Howard University (which has since received a substance abuse grant from the Robert Wood Johnson Foundation), support of an established research scientist cooperative agreement program at four HBCUs in collaboration with the National Center on Minority Health and Health Disparities (NCMHD), formerly the Office of Research on Minority Health, (North Carolina Central has recruited a distinguished NIDA scientist with three independent awards - this has already led to collaborations for student and faculty research and training opportunities with Wake Forest University and UNC), and increased activity on the campuses around substance abuse awareness and prevention.

**Enhancement of the Underrepresented Minority Supplement Program.** NIDA instituted a new policy for the receipt, review and funding of minority supplement applications. In the last eight years, NIDA has more than doubled its support of Minority Supplements in amount of funds allocated yearly to the program and nearly doubled the number of new awards made (from FY 1994 to FY 2000). NIDA also established a policy to include Asians and Pacific Islanders in behavioral and clinical work because they are underrepresented in these areas of drug abuse research. Former recipients are applying for and receiving independent research awards, and often these recipients focus on disparities research issues and/or intend to mentor other underrepresented students and scholars.

**Summer Research with NIDA.** To address concerns about the insufficient pipeline of minority researchers, NIDA established a summer program to place minority high school and undergraduate students with extramural scientists. Response has been very positive from students and investigators. Initially started with NCMHD funds, NIDA completely supports the program now. Approximately 35 – 40 students are placed each summer, some of them returning to the same investigators.

**Minority Recruitment and Training Program.** This is an intramural summer research program for students and faculty. It accepts minority high school, college, graduate and medical students, and faculty members. About 25 students are placed

each summer. A successful minority student development program at Temple University requested that some of their students be placed with NIDA's intramural program based on the reputation of this program and its director.

**Minority Work Groups.** Work groups comprised of experts in substance abuse and addiction or health concerns of minority populations have been created. These Work Groups advise the NIDA Director on research and research development needs of the particular minority communities that will lead to effective prevention and treatment approaches for each group. Work groups exist for African American, Hispanic, Asian Pacific Islander, and Native American/Alaska Native communities. Some outcomes of the work of these groups include new PIs, identification of candidates for the supplement program, new opportunities for NIDA to interact with professional and community groups, new ideas for research, new study section members, and increased mentoring and collaboration among group members.

**Development of PAs and RFAs.** NIDA released a new program announcement, Minority Institution's Drug Abuse Research Program, to support minority institutions wishing to develop their capacity to conduct drug abuse research. Two new programs recently funded under this PA focus on Hispanic issues in drug abuse. An RFA, the HBCU Cooperative Agreement, was released in collaboration with the NCMHD. Four projects were funded under this RFA: one focuses on prevention interventions with urban African American youth and one focuses on epidemiology and prevention issues in minority populations. All include research training opportunities for minority faculty and students.

**Research Development Technical Assistance Workshops.** NIDA offers technical assistance to minority scholars on developing research studies in drug abuse and addiction. Participants are provided information on conceptual and methodological concerns in drug abuse and addiction research in addition to information on the NIH grants application and review processes. Participants in this program have become NIDA/NIH grantees, NIH peer reviewers, and grantees of other agencies and foundations.

As a result of these activities and individual division activities, NIDA has experienced approximately a 97% growth in minority researchers since FY 1993. With this growth in minority researchers (although all are not involved in minority focused research) and an intense focus on drug use and addiction in minority communities, we have observed an increase in applications and awards that focus on drug abuse disparities and needs in minority communities.

This proposed strategic plan reflects NIDA's insights and knowledge gained from our efforts to address health disparities among racial/ethnic groups over the last few years. In addition, the plan incorporates the recommendations made by the expert work groups described above and an extensive review of NIDA's research programs and activities conducted by staff. Public comments received were also considered and incorporated into the plan.

Over the next five years, NIDA will strive to: (1) improve our understanding of the incidence and causes of drug abuse and addiction in all racial/ethnic groups recognizing the diversity by gender, SES, and other factors within racial/ethnic populations, (2) strengthen and expand the community and research infrastructure for conducting research within racial/ethnic populations, (3) improve prevention and treatment for racial/ethnic groups at highest risk for addiction and medical consequences of drug use and addiction, and (4) widely disseminate information on drug use and the disease of addiction in racial/ethnic communities identifying best approaches to prevention and treatment.

In 2000, NIDA established a Health Disparities Committee, comprised of staff from all of NIDA's programs including the budget office and intramural program, to develop its Strategic Plan to Address Health Disparities. This committee was made a continuing committee by the Director to oversee the implementation of the strategic plan. As part of its work, the committee establishes institute-wide priorities, stimulates interest, and develops support for the goals and activities of the plan. This committee is chaired by staff of the Special Populations Office and reports to the Director of the institute. In addition, NIDA's National Advisory Council has a Health Disparities Subcommittee to monitor activities related to our strategic plan. The Special Populations Office meets with the Council Subcommittee at each regular Council meeting.

## **GOAL 1. RESEARCH**

### **Research Area of Emphasis 1. Epidemiology of Drug Abuse, Health Consequences and Infectious Diseases among Minority Populations**

#### Rationale and Priority

This is our first research priority.

Our understanding of drug use and addiction in racial/ethnic minority populations and the disparities resulting from drug abuse and addiction is limited. Over the next five years, we want to improve our understanding of the incidence and causes of drug abuse and addiction and its consequences in all racial/ethnic groups recognizing the diversity by gender, SES, and other factors within racial/ethnic populations. Aggressively pursuing research in this area will strengthen the discovery of better, more appropriate prevention and treatment strategies with racial/ethnic populations.

Having a good knowledge base on the incidence and patterns of drug use, abuse, and addiction is critical to assessing the need for and shaping the content of prevention and treatment programs. Current surveys such as the NIDA-supported Monitoring the Future study (a national survey of 8th, 10th, and 12th graders) and the SAMHSA-supported National Household Survey on Drug Abuse (NHSDA -- a national survey of persons 12 and older residing in households) provide important information on drug use patterns and trends. However, they are limited in the extent to which they reveal in-depth information about

racial/ethnic groups. For example, neither survey has adequate representation of Native Americans, Alaska Natives, Asians, or Pacific Islanders. Although this may change beginning with the increased sample size in the 1999 NHSDA survey, there is still concern about obtaining adequate adolescent samples for these subgroups. African Americans and Hispanics are included, but their numbers are not sufficient to form reliable subgroups to investigate within group profiles, e.g., develop separate profiles for Mexicans and Puerto Ricans. Moreover, there are selection biases that disproportionately affect minorities that may suppress their numbers in these general surveys. For example, Hispanics have a higher school drop-out rate than other groups and therefore may be more likely to be excluded from the school surveys and may be difficult to reach in household surveys. Since dropout rates correlate with higher risk for deviant behavior, we may be missing information on a group with a high risk for drug abuse and addiction.

More work is needed to better understand the causes of drug use in minority communities. Promising studies are underway on risk and protective factors especially on the role of culture, religiosity, ethnic identity, family, peer, and environmental/community level factors in drug initiation. For example, minority youth tend to initiate drug use later than white youth. Yet, when African Americans start using, they seem to progress to addiction faster. Among Hispanic youth, drug use seems to increase with increased acculturation to US norms and with years and generations in the US. We know little about predictors of use in Pacific Islander and Asian subpopulations.

Better measures and designs are needed to appropriately assess drug abuse and addiction and related behaviors in racial/ethnic populations.

Minority populations are disproportionately affected by HIV/AIDS and other infectious diseases that are a consequence of using drugs and engaging in other risky behaviors. African Americans and Hispanics, especially women, comprised 54.7% of the AIDS cases reported to CDC in 1998. This percentage is far greater than their representation in the general population. Other studies indicate a plethora of ways in which minorities may be adversely affected by drug abuse-related diseases: women, particularly African American women, are at higher, unique risk for HIV/AIDS; injection drug users are at increased risk for mycobacterium tuberculosis infection and Hepatitis B and C infection; there is possibly an association between vascular injury of the neonatal central nervous system and the level of prenatal cocaine exposure; and Hispanic homeless are more likely to share needles. We know relatively little about the varying patterns of initiation of drug use and addiction among women of diverse racial and ethnic groups.

NIDA has continuously attempted to be responsive to the need to understand the patterns and causes of drug abuse in all populations through a number of activities such as releasing program announcements and requests for applications and convening conferences and meetings. For example, in 1998 NIDA reissued its "Epidemiologic Research on Drug Abuse" PA which encourages a number of epidemiologic strategies including monitoring of trends over time of drugs of use/abuse, identification and measurement of health problems associated with drug abuse, and international epidemiology of drug abuse. Applications submitted in response to this PA are expected to guide the development of interventions,

define subpopulations, identify groups at risk for various health conditions such as HIV, TB, hepatitis, poor pregnancy outcomes, ADHD, mental disorder, and other conditions (predisposing and consequential to drug use/abuse), inform and influence local state and federal health agencies, and provide guidance for public policy. Investigators have been strongly encouraged to conduct analyses by race/ethnicity.

NIDA staff have been working actively at numerous meetings to increase the number of grant applications in such areas as HIV in the African American population, health care/primary care access and utilization among minority drug abusers with HIV infections, and epidemiology of HIV in the Caribbean.

**Objective 1:** Improve the knowledge base on the patterns and origins of drug abuse and addiction in all racial/ethnic populations including producing estimates of racial disparities on the incidence and prevalence of drug use and addiction within those populations, examining both risk and protective factors.

**Action Plan**

Expand research to:

Assess, within and across racial/ethnic groups, the magnitude, incidence and prevalence of drug abuse analyzing by gender.

Identify and assess both individual and community/environmental vulnerability, risk and protective factors for drug use and abuse and related consequences in various racial/ethnic populations analyzing by gender.

Develop better sampling methods for hard-to-reach minority populations and more effective ways to reduce survey non-response and increase the validity of self-reported drug use and associated behaviors.

Support the secondary analysis of data obtained under NIH-supported research pertinent to understanding the epidemiology and etiology of drug abuse in racial/ethnic populations including analyses by gender.

**Primary Outcome Measure.** The primary outcome measure is to greatly increase the scientific knowledge base on drug use patterns and causes in ethnic minority populations.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop research opportunities in this area through Program Announcements, Request for Applications, and/or Administrative Supplements	Announcements by FY 2002
Increase number of studies supported	Annual increases through FY 2005

Increase amount of money supporting this research	Annual increases through FY 2005
Prepare the field for research in this area through technical assistance, resource materials, and meetings	Annual activities
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities.	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies with specific aims focused on the investigation of drug use, abuse and addiction patterns, incidence and prevalence in ethnic minority populations	Annual increases through FY 2005
Increased number of articles in the scientific literature	Increases expected in FY 2003 through FY 2006
Increased number of scientific presentations	Annual increases
Development of better, culturally appropriate measures and procedures	Annual progress
Increased understanding of drug use within ethnic minority populations particularly as determined by gender, age, environment, and urban/rural residency	Annual progress

**Objective 2:** Identify and examine issues of health disparities in drug abuse and associated infectious diseases particularly HIV/AIDS within racial/ethnic populations including analyses by gender.

**Action Plan**

Expand research to:

Increase scientific knowledge about the medical and health consequences of HIV infections within women and men of racial/ethnic minority groups including assessing the magnitude, incidence and prevalence of HIV/AIDS and other STDs, HBV, HCV, TB, and its impact on racial/minority populations, identifying the associated risk and protective factors for HIV/AIDS and other STDs, HBV, HCV, TB, mental disorders and socio-

economic status (SES) among racial/minority populations, and identifying subgroups within racial/minority groups (e.g., homeless, homosexuals, prison inmates) at greatest risk. Develop and implement appropriate intervention strategies for reducing risk factors among women and men in these groups.

Increase access to, utilization of, and adherence to antiviral therapies by HIV infected ethnic minority male and female drug users through identifying new, simplified, and innovative strategies/approaches and mechanisms to complement and improve traditional approaches for individuals in this population.

Increase scientific knowledge on how gender and other factors such as community, culture, education, and SES affect HIV transmission within racial/ethnic populations.

**Primary Outcome Measure.** The primary outcome measure is to reduce disparities in the medical consequences (e.g., HIV/AIDS) associated with drug use experienced by ethnic minority individuals.

Major Performance Measures	Target/Timeline
Develop research opportunities in this area through Program Announcements, Request for Applications, and/or Administrative Supplements	Announcements by FY 2002
Increase number of studies supported	Annual increases through FY 2004
Increase amount of money supporting this research	Annual increases through FY 2005
Prepare the field for research in this area through technical assistance, resource materials, and meetings	Annual activities
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities.	At least three times a year
Coordinate with other I/Cs or agencies where appropriate and likely to advance the research	On-going

Major Outcome Measures	Target/Timeline
Increased number of studies that focus on the investigation of HIV/AIDS and other medical consequences of drug involvement for ethnic minority populations	Annual increases through FY 2004
Increased number of articles in the scientific literature	Annual increases through FY 2004
Increased number of scientific presentations	Annual increases
Development of accessible and culturally appropriate adherence approaches	Annual progress
Increased understanding of the risk and protective factors associated with drug use and HIV among ethnic minority drug user populations particularly as determined by gender, age, environment, and urban/rural residency	Annual increase

**Objective 3.** Identify both the short- and long-term effects of drug use, abuse, addiction, and violence and their interrelationships on the overall health (including physical, mental and emotional health) of men, women, and children in racial/ethnic populations.

**Action Plan**

Expand research to:

Identify and assess issues of co-morbidity across the age span for all racial/ethnic groups and the relationship between drug abuse, co-morbid conditions and health disparities within and across those groups and by gender within these groups.

Investigate health and developmental disparities across racial/ethnic groups for children and adolescents who have experienced prenatal drug exposure and/or early use of illicit drugs by gender within these groups.

Identify and review the state of knowledge and availability of data on the coexistence of substance abuse and mental/emotional disorders and the presence of health disparities across and within racial/ethnic groups including analyses by gender.

Identify the impact of the drug-using environment on racial/ethnic women and men living under those conditions. Assess proposed strategies for interventions to reduce drug abuse in these groups.

Evaluate the role of stress (e.g., cultural adaptation) in initiating and escalating drug use/abuse and its impact on various male and female racial/ethnic populations. Sensitivity and responsiveness of the needs of the

target audience must be considered in all instrument development, administration, analysis, and evaluation of the data.

Explore the contextual relationships between drug use, violence, employability, school performance, family structure, and economic well being of the community. Sponsor a series of workshops and meetings with grantees and others to explore the current state of the knowledge.

**Primary Outcome Measure.** The primary outcome measure is to increase and improve the scientific knowledge base on the social, emotional, psychological, health, and behavioral consequences and impact of drug use and addiction on ethnic minority populations, identifying disparities experienced.

Major Performance Measures	Target/Timeline
Develop research opportunities in this area through Program Announcements, Request for Applications, and/or Administrative Supplements	Announcements by FY 2002
Increase number of studies supported	Annual increases through FY 2005
Increase amount of money supporting this research	Annual increases through FY 2005
Prepare the field for research in this area through technical assistance, resource materials, and meetings	Annual activities
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities.	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies on disparities related to co-morbidities, environment, stress, and other contextual variables.	Annual increases through FY 2005
Increased number of articles in the scientific literature.	Annual increases
Increased number of scientific presentations	Annual increases
Advances in research methods and assessment tools related to this line of research	Annual progress
Increased knowledge of consequences of drug use and addiction specific to ethnic minority women and children	Annual increases

### **Epidemiology Research Area of Emphasis Budget**

FY 2002	\$4,000,000 increase (President's Budget)*
FY 2003	4,200,000 (5% increase)
FY 2004	4,400,000 (5% increase)
FY 2005	4,600,000 (5% increase)
FY 2006	4,800,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.

### **Research Area of Emphasis 2: Prevention of Drug Abuse and Addiction**

This is our second research priority.

NIDA has made great strides in the last few years in its prevention research program. NIDA has supported two long-term minority prevention research centers that focus on African Americans, Hispanics, and Native Americans as well as several other research projects that include ethnic minorities. Results from these and other research studies research suggest that racial/ethnic populations may have special prevention needs and prevention strategies may have to be specific to their culture and circumstances to be successful. For example, research indicates that including culturally specific components in a generic prevention program enhances effectiveness with African Americans.

Epidemiologic data show that race/ethnic groups differ in patterns of drug use, preferences, and accessibility and risks requiring prevention programs that attend to these needs. For example, Hispanic youth are more likely to be school dropouts making school-based prevention programs unlikely to reach Hispanic youth at greatest risk. African Americans have late onset of (or delayed onset) drug use suggesting that they may be more in need of prevention programs after high school, in their late adolescent/early adult years. Native Americans on reservations need prevention programs at an early age and such programs

must be acceptable to tribal councils. Second generation immigrants may be at higher risk for drug use than first generation. Moreover, the heterogeneity or diversity within racial/ethnic groups must be acknowledged in prevention efforts, e.g., gender, SES, education, cultural styles, rural-urban, and the specific risk factors for these subgroups need to be better understood to inform prevention efforts.

More prevention programs are needed to reach minority populations in high-risk settings and neglected, hard-to-reach areas or communities. This includes, for example, persons in correctional facilities (more likely to be African Americans and Hispanics), persons in rural areas, migrant workers/seasonal farm workers (often Hispanic and Haitian), children in drug abusing families, and minority women addicts (who are at great risk for infectious diseases). More research is needed on prevention efforts with Asian/ Pacific Islanders and Native Americans/Alaska Natives and their subgroups.

**Objective 1.** Support prevention research targeting racial/ethnic minorities to: (1) understand the drug abuse and HIV/AIDS prevention needs of minority populations across the life span with specific attention to very early and late onset initiation of use and diversity in vulnerability to use across the life cycle, e.g., immigrant groups adapting to new environment, transition points, stress; (2) understand how to develop culturally appropriate prevention interventions and how to adapt "generic" prevention models for specific minority populations; (3) examine the effectiveness of mass media prevention/education messages that target specific minority populations; (4) develop more prevention interventions that reach minority populations in contexts such as the family, church/faith community, and other community programs to ensure that prevention expertise becomes a permanent part of the community; (5) address the complexities and requirements of developing effective prevention programs for diverse groups within multiethnic, multicultural settings, e.g., schools with multiethnic student bodies, persons with multiple ethnic identification or affiliations, and (6) identify how cultural norms affect gender differences in drug use and risk factors.

**Action Plan:**

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Develop research opportunities in the above areas.

**Primary Outcome Measure.** The primary outcome measure is to improve the scientific knowledge base on the factors that contribute to effective prevention interventions for ethnic minority populations.

**Major Outcome Measures**

**Target/Timeline**

Increased number of studies focusing on specific prevention needs of each ethnic minority populations	Annual increases through FY 2005
Increased number of articles in the scientific literature	Annual increases
Increased number of scientific presentations	Annual increases
Increased number and/or refinement of prevention strategies/models	Annual progress

**Objective 2.** Ensure that racial/ethnic minority populations are fully incorporated into the planning and implementation of NIDA's next generation of prevention research initiative. (The Next Generation of Prevention Research is an initiative designed to gain a better understanding of the factors that account for prevention program effectiveness.)

**Action Plan:**

NIDA staff will review plans for the next generation studies to make certain that concerns of racial/ethnic minorities are adequately addressed.

**Primary Outcome Measure.** The primary outcome measure is the adequate representation of ethnic minority issues and populations in this major prevention initiative.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Encourage research applications in this initiative	Continuing with formal announcement of initiative
Require the inclusion of ethnic minority issues and populations in research supported through this initiative	Continuing
Monitor inclusion of minority populations in the studies	Continuing

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Adequate inclusion of ethnic minority populations and issues in prevention effectiveness research trials	
Increased articles in the scientific literature on prevention effectiveness with ethnic minority populations	
Increased number of scientific presentations	
Better understanding of process and factors necessary to develop effective prevention programs for ethnic minority groups	

**Objective 3.** Develop effective, culturally specific drug abuse prevention strategies for minority populations who are at increased risk for drug abuse such as individuals in detention or correctional facilities, the homeless, and persons who have been abused or neglected, and those groups who are underserved such as those living on Indian reservations or in rural areas and migrants or seasonal farm workers, and youth in the early stages of cultural adaptation and acculturation.

**Action Plan:**

Expand research opportunities in this area.

**Primary Outcome Measure.** The primary outcome measure is to reduce disparities in prevention efforts available to ethnic minority populations who are underserved or at increased risk for drug abuse and addiction.

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies that focus on prevention with ethnic minority populations at higher risk for drug abuse and addiction and its consequences	Annual increases through FY 2005
Increased number of articles in the scientific literature	Annual increases
Increased number of scientific presentations	Annual increases
Development/Refinement of prevention strategies specifically for higher risk individuals	Annual progress

**Prevention Research Area of Emphasis Budget**

Budget:	FY 2002	\$4,000,000 increase (President’s Budget)*
	FY 2003	4,200,000 (5% increase)
	FY 2004	4,400,000 (5% increase)
	FY 2005	4,600,000 (5% increase)
	FY 2006	4,800,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.

**Research Area of Emphasis 3: Addressing Disparities in Treatment and Health Services Research**

This is our third research priority.

NIDA currently supports several activities that focus on racial/ethnic groups and cultural factors in treatment for addiction. For example, the Behavioral Therapy Development Program supports several studies that are evaluating family-based treatment approaches for drug using minority youth (based on research findings suggesting that family variables are more influential in substance use in certain minority youth). Some of these studies suggest that treatment engagement procedures may be different for Mexican American and Cuban youth. Analyses will be conducted to ascertain whether outcome differences are due to cultural factors associated with Mexican-American and Cuban families or other factors. A study was funded that is evaluating the efficacy of adding a culturally-relevant, community-based community reinforcement enhancement to an existing residential treatment program for homeless, crack-using, African-American women with children. This study is using the

Black church as a vehicle for implementing the intervention. To advance the current knowledge base about potential ethnic differences in nicotine dependence, NIDA is supporting a study that will design and test the efficacy of smoking cessation programs in treating Chinese American smokers.

NIDA's newly established National Drug Abuse Treatment Clinical Trials Network (CTN) will provide yet another vehicle for NIDA to ensure that minority populations are included in both NIDA's treatment research protocols and in actually conducting treatment research. The CTN will provide a much-needed national research and dissemination infrastructure to more rapidly and systematically bring new science-based addiction treatments into real-life treatment settings.

Considering the severe consequences of drug abuse and addiction on racial/ethnic populations, NIDA realizes that minority populations need to be more fully included in treatment research and clinical trials. Moreover, more attention needs to be directed at examining medical, social, and cultural factors that may influence adherence to treatment and treatment outcomes. For example, some minority populations are included in NIDA supported clinical trials of pharmacotherapies and behavioral therapies; however, data are not completely analyzed by race/ethnicity to better understand behavior in treatment or outcomes of treatment. In some clinical research studies, there have been difficulties in enrolling and retaining adequate numbers of minorities in order to conduct meaningful data analyses. Other research indicates that race/ethnicity may be important in physiological responsiveness to drugs. For example, pharmacokinetic studies indicate that there are differences in some ethnic populations in their ability to metabolize different drugs.

Racial/ethnic minorities may experience more difficulties in obtaining the most appropriate health care services. Research suggests that they may be more vulnerable to gaps and lack of coordination in systems of care and that they may encounter bias in treatment assignments. The need for services appears to differ by race/ethnicity, e.g., one study suggests that Latinos may require more intensive services.

**Objective 1.** Increase the number of treatment research studies that focus on racial/ethnic differences and improve dissemination of the study results.

**Action Plan:**

Ensure that all racial/ethnic minority populations are fully included in NIDA's newly established National Drug Abuse Treatment Clinical Trials Network (CTN) as clients, advisors, and research staff. Ensure that a sufficiently large sample is recruited in each study to allow for analyses by specific racial/ethnic groups.

Develop a strategy to obtain more input from minority populations for the NIDA research agenda.

Encourage research to develop and test behavioral treatments that are culturally- and gender sensitive and relevant for racial/ethnic minorities; and encourage studies of behavioral treatments, alone and in combination with pharmacological treatments, for racial and ethnic minority drug abusers, including adolescents, women, and those involved with the criminal justice system.

Develop systems to encourage NIDA grantees to include sufficient numbers of minority populations, to analyze the data that are collected on racial/ethnic minorities, and to publish the results.

Encourage research to develop validated, reliable clinical screening and assessment instruments in languages other than English for use in clinical research with non-English speaking subjects.

Expand NIDA's intramural clinical research to address treatment issues by race/ethnicity, and further develop the program focusing on smoking cessation techniques with minority youth.

Sponsor a series of workshops and meetings with grantees and the minority advisory groups to explore the current state of knowledge, identify gaps in the research, and make recommendations for future research. The professional organizations representing different minority populations should also participate in this process.

**Primary Outcome Measure.** The primary outcome measures are to increase the inclusion of ethnic minority populations in treatment research and improve the validity and appropriateness of the research for ethnic minority populations.

Major Performance Measures	Target/Timeline
Institute procedures for the adequate inclusion of ethnic minority issues and populations in the CTN	By FY 2003
Develop research opportunities through Program Announcements, Request for Applications, and/or Administrative Supplements	By FY 2004
Implement strategies to solicit input from the field	Ongoing
Implement procedures to improve assessment tools	By FY 2003
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies that focus on effective clinical interventions with ethnic minority individuals	Annual increases through FY 2005
Clinical tools available in languages other than English	By FY 2004
Expanded research agenda that reflects needs of the field	Ongoing
Increased number of scientific presentations	Annual increases
Increased number of articles in the scientific literature	Annual increases

**Objective 2.** Determine the factors that contribute to differences, if any, experienced by racial/ethnic minority populations in access to services and outcomes of treatment in managed care and other service systems. In addition, assess the impact of welfare reform on substance abuse services provided to ethnic minorities especially minority women.

**Action Plan:**

Expand the treatment and prevention services research portfolio to better understand the organization, management, financing and delivery of services and to enhance the integration of treatment and prevention strategies and programs into existing community level service delivery systems.

Sponsor a series of workshops and meetings with grantees and the minority advisory groups to explore the current state of knowledge, identify gaps in the research, and make recommendations for future research. The professional organizations representing different minority populations should also participate in this process.

**Primary Outcome Measure.** The primary outcome measure is the reduction of disparities in drug treatment services experienced by ethnic minority populations.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop research opportunities in this area through Program Announcements, Request for Applications, and/or Administrative Supplements	By FY 2004
Increase number of studies supported	By FY 2005
Encourage and prepare the field for research in this area	Ongoing
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's Subcommittee on Health Disparities.	At least three times a year
Provide forum/opportunities for the field to build research agenda	Ongoing

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies	Annual increases
Increased number of professional presentations	Annual increases
Expanded research agenda	Ongoing
Better understanding of factors that contribute to disparities in drug treatment and services for each ethnic minority population	Annual progress

**Treatment and Services Research Area of Emphasis Budget**

Budget:	FY 2002	\$6,000,000 increase (President’s Budget)*
	FY 2003	6,300,000 (5% increase)
	FY 2004	6,600,000 (5% increase)
	FY 2005	6,900,000 (5% increase)
	FY 2006	7,200,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.

**Research Area of Emphasis 4: Addressing Racial/Ethnic Disparities in Basic and Clinical Neurosciences**

This is our fourth research priority area.

Research is needed to better understand racial/ethnic differences in genetic vulnerability and/or resilience to drug abuse and addiction; neurotoxicity; and neurobiological and behavioral processes underlying tolerance, dependence, and relapse. Pharmacokinetic studies have revealed distinct differences in some ethnic populations in the ability to metabolize different drugs, indicating a clear biological basis in response to drugs. Studies focusing on the interaction between racial/ethnic differences and the effects of drugs on underlying neural and behavioral processes will provide the basis for more targeted treatment and prevention approaches in different populations.

**Objective 1:** Increase the number of neuroscience, clinical neuroscience, and basic behavioral science studies that focus on racial/ethnic differences.

**Action Plan:**

Provide support to key investigators to over sample under-represented groups in their studies.

Require NIDA program staff to emphasize the importance of inclusion of minority subjects to all Principal Investigators conducting human subject

research and to work closely with those who are deficient in their minority recruitment.

Provide avenues for publication of basic research findings comparing sub-groups, including NIDA sponsored publications such as NIDA monographs.

Provide information on strategies for recruiting under-represented groups into basic human subject based research.

Expand research that directly targets minorities in the basic and clinical neurosciences and behavioral sciences, with the intent of addressing minority health disparities

**Primary Outcome Measure.** The primary outcome measure is the improvement of our understanding of any neurobiological effects associated with drug use in ethnic minority populations, noting especially disparate processes and effects.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop research opportunities in this area through Program Announcements, Request for Applications, and/or Administrative Supplements	By FY 2003
Increase number of studies supported	By FY 2004
Increase amount of money supporting this research	FY 2003
Prepare the field for research in this area through technical assistance, resource materials, and meetings	Ongoing
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's Subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased number of studies	Annual starting in FY 2004
Better understanding of genetic and neurobiological factors associated with addiction	Annual progress
Increased number of articles in the scientific literature	Annual increases starting in FY 2004
Increased number of scientific presentations	Annual increases starting in FY 2004
Better informed researchers and practitioners	Annual progress

**Neuroscience Research Area of Emphasis Budget**

Budget:	FY 2003	2,000,000 (increase in President’s Budget)*
	FY 2004	2,100,000 (5% increase)
	FY 2005	2,200,000 (5% increase)
	FY 2006	2,300,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.

**Goal 2. Research Capacity (Infrastructure Development)**

Research capacity is our first overall priority.

NIDA recognizes that conducting scientifically valid health disparities research requires a research infrastructure that includes well-informed and trained scientists, knowledgeable and cooperative communities (e.g., community-based organizations, professional associations, faith community, tribal councils), and academic institutions with competency and interest in health disparities research. NIDA has made concerted efforts to build this critical infrastructure for health disparities research. We have worked to increase the number of underrepresented scholars involved in drug abuse research and to increase our support of useful and appropriate research on drug abuse in minority communities. A number of initiatives, programs and activities have been implemented to eliminate this underrepresentation, for example, the establishment of expert work groups on racial/ethnic populations, the strengthening of the Minority Supplement Program, the development of an HBCU Initiative, the provision of technical assistance in grants development, and the development of program announcements and RFAs to build the minority research infrastructure. NIDA plans to build upon these already successful programs and expand them to increase training and career development opportunities for underrepresented minorities. In addition, NIDA plans to increase the numbers of researchers and research studies that focus on abuse and addiction in minority communities and to, in general,

stimulate interest and enhance competency in conducting research for eliminating disparities experienced by racial/ethnic populations related to drug abuse and addiction.

### **Objective**

Ensure proper resource requirements through training/career development for students, faculty and investigators, academic institutions, and professionals and communities.

### **Action Plan**

Student Development and Support. NIDA will continue to support its current activities to increase the number of underrepresented students entering drug abuse research careers. This includes the Minority Recruitment and Training program sponsored by the intramural program, the extramural Summer Research with NIDA program for minority high school and undergraduate students, and the Minority Supplement program. In addition:

NIDA will encourage applications for short-term training grants (T35) from drug abuse and addiction programs particularly those involved in the National Drug Abuse Clinical Trials Network (CTN) to offer summer research training experiences for promising undergraduate and graduate minority students.

Faculty and Investigator Development.

NIDA will continue to support its current activities to increase the number of faculty and scholars conducting drug abuse and addiction research. This includes the Minority Supplement Program, the Research Development Technical Assistance program, and the on-line research grants development program. In addition, NIDA will:

Develop a Visiting Scholar Program to recruit and train African American, Hispanic and other minority drug abuse researchers with a special outreach to scholars from minority programs and institutions such as HBCUs, HSIs and tribal colleges to spend time in selected research programs learning state-of-the-art methodology. The small grant mechanism (R03) could be used to support a period of training in laboratories using state-of-the-art technologies to examine a variety of aspects of drug abuse and addiction.

Develop a Career Development Award (K01) for minority faculty interested in all areas of drug abuse and addiction research. This program would be aimed at faculty seeking a period of protected time to devote to developing drug abuse research projects at their institutions. Special efforts will be undertaken to increase the number of minority researchers in prevention and clinical research.

Establish a Minority Clinical Research Scholars Program in the NIDA Intramural Research Program.

Develop a plan with the Center for Substance Abuse Treatment to bring more minority scientists into drug abuse and addiction clinical research. Explore the possibility of supporting minority supplement grants on CSAT research and evaluation projects.

Establish a Minority Clinical Research Scholars Fellowship as part of NIDA's CTN program.

#### Academic Institution Development.

NIDA will continue its efforts to increase the capacity of academic institutions, especially minority colleges and universities, to conduct drug abuse research. This includes the Minority Institutions Drug Abuse Research Program and the HBCU Initiative. In addition, NIDA will:

Develop partnerships between institutions with well-established drug abuse research programs and minority institutions that are interested in developing capacity in this area. Collaborate with ORMH on plans to establish partnerships between drug abuse research centers and minority institutions.

Establish a NIDA Minority Access to Drug Abuse Research Careers Program through the National Research Services Act (NRSA) to encourage and engage promising minority undergraduate scientists in drug abuse and addiction research.

Support or examine the possibility of establishing Training Centers (T32s) in the basic neurosciences and behavioral sciences, and clinical neurosciences at HBCUs and other minority education-oriented colleges and universities. Encourage the participation of minority students at already existing centers.

#### Professional and Community Development

NIDA will continue its efforts to involve the broader community in addressing health disparities in racial/ethnic communities caused by drug abuse and addiction. This includes the various expert work groups on African American, Hispanic, Asian American and Pacific Islander, and Native American and Alaska Native communities. In addition, NIDA will:

Encourage clinical minority professional organizations to create and administer clinical minority research development programs through the K12 mechanism. This can be modeled after the successful American Psychiatric Association and American Academy of Child and Adolescent Psychiatry

programs to recruit and train minority clinicians interested in drug abuse and addiction research.

Host a series of writing workshops to facilitate publications in peer reviewed journals by minority scholars.

Develop opportunities (e.g., forums at professional meetings) to discuss drug abuse research needs, plans, and opportunities with key stakeholder groups to include practitioners and consumers.

Support workshops or programs to train investigators on conducting responsible drug abuse research in racial/ethnic minority communities. Consider creating guidelines for ensuring that such research is appropriate and sensitive.

**Primary Outcome Measure.** The primary outcome measure is a significant increase in well-informed and trained scientists engaged in minority and health disparities research in drug abuse.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop research development opportunities through Program Announcements, Request for Applications, Minority Supplement Program, and/or Administrative Supplements	Start by FY 2002
Increase budget to support these initiatives	Annual increases
Collaborate with other I/Cs and agencies on programs/activities of mutual interest	Ongoing
Prepare the field to pursue drug abuse research in minority health and health disparities areas	Ongoing
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increased involvement of minority institutions in drug abuse research on minority populations and health disparities, e.g., more grants, collaboration with grantees	Annual increases
Increased number of minority investigators	Annual increases
Increased number of investigators researching minority and health disparities issues in drug	

abuse and addiction	
Increased number of students pursuing careers in drug abuse research	Annual increases
Availability of new programs to support ethnic minority students and faculty	
Increased participation in meetings and forums (to disseminate information on research development needs and opportunities)	Ongoing

**Research Capacity Budget**

Budget:	FY 2002	\$2,000,000 (increase in President's Budget)*
	FY 2003	2,100,000 (5% increase)
	FY 2004	2,200,000 (5% increase)
	FY 2005	2,300,000 (5% increase)
	FY 2006	2,400,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.

**Goal 3. Community Outreach, Information Dissemination, and Public Health Education**

This is our third overall priority.

There are special challenges and problems in creating culturally appropriate information for special populations. To meet these challenges NIDA has organized and convened ethnic advisory panels for Latinos, Asian-Americans/Pacific Islanders (AAPIs), and African Americans to improve our outreach to these various ethnic and minority groups. Acting upon the advise of these experts, NIDA has:

- Developed Spanish translations of our two popular marijuana pamphlets, "Marijuana: Facts for Teens" and "Marijuana: Facts Parents Should Know"
- Created a radio Public Service Announcement campaign on marijuana abuse for African American males aged 13-25
- Produced over 30 fact sheets about drug abuse and addiction in Spanish as part of our fax-back system, "INFOFAX"
- Marketed the "INFOFAX" series as well as the NIDA web site via a Spanish art card distributed to appropriate outlets nationally
- Given financial and editorial support to "Pro Salud," a national publication marketed to Hispanic communities
- Developed Spanish translations of the drug abuse Problem Oriented Screening and Assessment Instrument for adolescents.

In addition to these efforts, NIDA routinely distributes all of its press releases to media outlets designed to reach special populations.

**Objective 1:** Educate racial/ethnic minority populations about drug abuse and addiction prevention and treatment. Also, identify and improve mechanisms for dissemination of research findings within and across minority groups. NIDA is focusing on four key cultural minorities at present, Asian Americans/Pacific Islanders, Hispanic, Native Americans, and African Americans. Based on discussions with members of our cultural minority advisory panels, we have also identified some subpopulations with special needs (e.g., Vietnamese, Cambodian, Filipino, other Pacific Islander).

**Action Plan:**

Develop a series of radio PSAs and educational videos targeting Hispanic women. Hispanic women have a strong influence in health and lifestyle decisions within the Hispanic community. In addition to PSAs, a Hispanic family-targeted brochure and video highlighting specific drugs of abuse known to be a problem in various Hispanic communities (as well as among mainstream youth) will be provided as collateral materials. A comprehensive marketing plan to get the PSAs aired and the brochure distributed includes forming partnerships with appropriate Hispanic organizations and persons of influence (journalists, entertainers, etc.). NIDA will work closely with the NIH Hispanic Initiative Coordinator during the preparation of all related materials.

Create a year 2001 calendar for Native Americans that will be used to provide information about drug abuse. It will be marketed broadly in the fall 2000 via appropriate organizations, the media and other venues (e.g., Native American-owned businesses; Indian Health Service clinics).

Create television drug abuse PSAs and videos in Spanish which will be distributed to appropriate Hispanic outlets. The PSAs and videos will follow the theme of NIDA's national campaign, "Addiction is a Brain Disease," in an effort to educate the Hispanic community about the disease of addiction.

Translate and adapt other popular NIDA publications into Spanish including, "Principles of Drug Addiction Treatment". When completed, these materials will be packaged as a comprehensive set and broadly distributed to Hispanic-oriented schools, health organizations, and community groups. Provide targeted training to Hispanic substance abuse treatment providers on effective treatment methods.

Enhance NIDA collaboration with minority professional organizations through the NIDA Constituent Conference, NIDA Town Meetings, etc.

**Primary Outcome Measure.** The primary outcome measure is the production of general audience materials and dissemination strategies that educate each ethnic minority community about drug abuse in a scientifically accurate and culturally appropriate manner.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop materials specific to the audience as indicated in the plan	Ongoing
Consult with experts on communication and ethnic minority populations	Ongoing
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Materials available in Spanish	Ongoing
Established ongoing relationships with various ethnic minority constituent groups	Ongoing
Dissemination plans for Hispanic and Native American populations available	By FY 2004
Calendars prepared for Native Americans available	Annual

**Objective 2.** Put research into practice in minority communities by providing science-based prevention and treatment information to service providers serving these populations.

**Action Plan:**

Translate "Preventing Drug Use Among Children and Adolescents: A Research-Based Guide" and "Principles of Drug Addiction Treatment: A Research-Based Guide" into Spanish and distribute them to care givers and service providers who work with Hispanic populations.

Distribute to service providers working in minority communities the "NIDA Toolkit." The "NIDA Toolkit" is a national NIDA initiative to get the latest treatment information, including a set of NIDA Treatment Manuals to service providers across the Nation.

Develop an outreach program to community leaders of specific special populations groups that will enable them to help families understand drug abuse problems within their communities and give those families the culturally appropriate tools for prevention and treatment in those communities.

Translate the NIDA treatment manuals into Spanish and distribute them to treatment providers who work with minority populations.

Develop a research-based prevention guide for persons working with racial/ethnic minority groups.

**Primary Outcome Measure.** The primary outcome measure is the availability of research-based drug abuse materials and tools on ethnic minority populations for health care providers and researchers.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Develop the materials as outlined in the plan	By FY 2004
Distribute the materials to service providers and community leaders working with ethnic minority populations	By FY 2005
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Availability of guides and manuals in other languages	By FY 2005
Culturally appropriate outreach program available	By FY 2006

**Objective 3.** Educate the research and practice community about the state-of-the-art in drug abuse and addiction research with racial/ethnic minority populations.

**Action Plan:**

Sponsor a national conference on drug abuse and addiction research and racial/ethnic communities.

Develop a guide and web site where information on research with racial/ethnic populations is available. Information such as current research, research findings, and valid measures would be available.

Provide guidelines and training on how to conduct research with racial/ethnic groups including information on cultural styles and ethical issues.

Identify and improve mechanisms for dissemination of research findings within and across minority groups.

**Primary Outcome Measure.** The primary outcome measure is the increase in the cadre of researchers and practitioners knowledgeable about ethnic minority and health disparities research in drug abuse and addiction.

<b>Major Performance Measures</b>	<b>Target/Timeline</b>
Convene the national conference	FY 2001
Develop information sources as outlined	Annual progress
Routinely monitor and discuss implementation progress, concerns and needs to determine if activities need to be modified. This will be led by the Special Populations Office and the Health Disparities Committee with consultation from NIDA's expert work groups and National Advisory Council's subcommittee on Health Disparities	At least three times a year

<b>Major Outcome Measures</b>	<b>Target/Timeline</b>
Increase in persons informed about drug abuse research in ethnic minority populations	Ongoing
Availability of easily accessible information on drug abuse research in ethnic minority communities (web-based information)	By FY 2003
Increased interaction of NIDA staff with students, researchers, and practitioners interested in drug abuse research	Ongoing
Better trained/prepared researchers pursuing or conducting drug abuse research in ethnic minority communities	Ongoing
Increased use of NIDA as a resource	Ongoing

**Public Information Budget**

Budget:	FY 2002	\$1,000,000 (increase in President's Budget)*
	FY 2003	1,050,000 (5% increase)
	FY 2004	1,100,000 (5% increase)
	FY 2005	1,150,000 (5% increase)
	FY 2006	1,200,000 (5% increase)

\*Please note that yearly budget dollars refer to expected percent increments above current levels of expenditures for this area.  
(Nov. 2001)

NIDA Health Disparities Budget  
(Dollars in Millions)

Institute/Center	FY 2002			FY 2003		
	Research	Infrastructure	Outreach	Research	Infrastructure	Outreach
NIDA	\$26.50	\$2.00	\$1.00	\$28.90	\$2.10	\$1.10