National Institute on Alcohol Effects and Alcohol-Associated Disorders

> CONGRESSIONAL JUSTIFICATION FY 2023

Department of Health and Human Services National Institutes of Health



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## DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTES OF HEALTH

National Institute on Alcohol Effects and Alcohol-Associated Disorders (NIAAA)<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The FY 2023 President's Budget proposes to rename the National Institute on Alcohol Abuse and Alcoholism to the National Institute on Alcohol Effects and Alcohol-Associated Disorders.

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#### **Director's Overview**

Alcohol misuse in the United States continues to impose substantial public health challenges, contributing to more than 200 disease and injury-related conditions. Alcohol contributes to about 50 percent of liver disease deaths, 15-20 percent of all drug overdose deaths, and 26 percent of suicides. Altogether, approximately 95,000 people die from alcohol-related causes annually. Alcohol misuse also inflicts a significant economic burden to society, with an estimated annual cost of \$249 billion in the United States.

Around 15 million Americans over the age of 12 experience alcohol use disorder (AUD), a medical condition characterized by an impaired ability



NIAAA Director George F. Koob, Ph.D.

to stop or control alcohol use despite adverse social, occupational, or health consequences. Despite a variety of effective behavioral and pharmacological treatment options for AUD, fewer than 10 percent of individuals who need help receive treatment.

Stigma remains a major barrier that prevents people from seeking help for AUD and other alcohol-related problems. Alcohol-related problems historically have been viewed as a moral failing or character flaw, although advances in neuroscience have revolutionized our understanding of AUD as a chronic medical condition. Recent efforts to promote the use of non-stigmatizing and person-first language have changed how we talk about alcohol misuse. Terms such as "alcohol abuse" or "alcoholic" are discouraged in favor of more neutral language such as "alcohol misuse" or "person with alcohol use disorder." While efforts have been made to reduce the use of stigmatizing language across federal agencies, remnants of the old vocabulary remain in the name of our Institute, the National Institute on Alcohol Abuse and Alcoholism (NIAAA). To further reduce stigma and better reflect our work to improve public health and support people with AUD, the FY 2023 Budget proposes that the Institute be renamed the "National Institute on Alcohol Effects and Alcohol-Associated Disorders." The acronym for the Institute would remain as NIAAA.

NIAAA's mission is to generate and disseminate fundamental knowledge about the effects of alcohol on health and well-being and to apply that knowledge to improve the diagnosis, prevention, and treatment of alcohol-related problems, including AUD, across the lifespan. Prior to the coronavirus disease 2019 (COVID-19) pandemic, alcohol-related mortality was rising and alcohol misuse was identified as a factor contributing to the declining lifespan in the United States. Mounting evidence for increased alcohol misuse and related consequences among certain groups, both before and during the pandemic, underscores the critical importance of increasing public awareness of the risks associated with alcohol misuse and expanding the use of evidence-based strategies to intervene with alcohol misuse and its adverse consequences.

#### Basic research provides the foundation for future advances

NIAAA-supported basic research continues to identify novel targets for the treatment of AUD and other alcohol-related conditions. For example, recent NIAAA-supported research challenged the long-standing view that alcohol metabolism occurs primarily in the liver, showing that it also occurs in the brain. In the study, alcohol metabolism by the major alcohol-

metabolizing enzyme aldehyde dehydrogenase (ALDH) was discovered in brain cells called astrocytes and was associated with behavioral effects of alcohol. The results highlight astrocyte ALDH as a potential therapeutic target for AUD. Basic research investigators in NIAAA's intramural research program demonstrated that a high-fat, low-carbohydrate ketogenic diet, compared to a standard American diet, mitigated symptoms of alcohol withdrawal and alcohol craving. The study provides preclinical and clinical evidence that a ketogenic diet may offer a unique AUD treatment option to alleviate withdrawal symptoms and to lower alcohol craving and consumption.

Neuroinflammation, an immune response in the brain, has been linked to neurodegenerative diseases such as Alzheimer's as well as AUD. Recent work from NIAAA-supported investigators demonstrated that inhibition of an immune response pathway called CCR2/5 reversed neuroinflammation induced by chronic alcohol consumption in animal models. The results support further exploration of the CCR2/5 pathway as a potential treatment target for alcohol-related neuroinflammation. Other basic research supported by NIAAA has pointed to a role for neuroimmune signaling as a mechanism through which chronic alcohol exposure leads to neuronal death, mimicking findings observed in postmortem brain tissue from individuals diagnosed with AUD.

## Addiction in context: Acknowledging the social determinants of health that contribute to alcohol misuse and alcohol-related health disparities

Social determinants of health (SDOH) include broad aspects of social and physical environments (e.g., healthcare access, education, socioeconomic status, and discrimination) that impact quality of life and health outcomes. SDOH can influence the likelihood of developing and recovering from AUD, contribute to alcohol-related health disparities, and impose additional burdens on brain systems involved in stress and emotion regulation, also increasing vulnerability for AUD. For example, recent NIAAA-supported research explored the link between discrimination, heavy drinking, and mental health in Latinx communities. Participants who reported heavy drinking<sup>2</sup> were interviewed to capture the social and structural conditions of being an immigrant in the United States. They reported feelings of exclusion that led to symptoms of anxiety and depression that, in turn, led to drinking to cope. Another NIAAA-supported study examined the relationship between adverse childhood experiences (ACEs), racial microaggressions, and alcohol misuse in emerging adults (ages 21-25) who reported heavy drinking two or more times in the past month. Analysis revealed that experiencing more ACEs was associated with higher alcohol consumption and more negative consequences of alcohol misuse. For Black young adults, racial microaggressions were also associated with more negative consequences of alcohol misuse. Another NIAAA-supported study identified socioeconomic status (specifically, income trajectory during young adulthood) as a factor contributing to disparities in AUD among Black and US-born Latino men.

In FY 2021, NIAAA issued a funding opportunity for alcohol health services research to address health disparities. Health services research examines conditions that influence the receipt and delivery of health care, such as accessibility, affordability, and implementation. One project is assessing the effectiveness of a brief, culturally adapted personalized feedback intervention

 $<sup>^{2}</sup>$  Although definitions may vary, heavy drinking is typically defined as consuming more than 4 drinks on any day or 14 per week for men, and more than 3 drinks on any day or 7 per week for women.

among Latinx individuals with alcohol misuse and anxiety within community-based health clinics. Another study is exploring the impact of various combinations of follow-up engagement with a diverse population of patients after alcohol-related hospitalization. Alcohol-related outcomes will be assessed across different racial and ethnic groups, including analysis of social determinants of health. A third study is examining barriers to AUD care by surveying Medicaid health plan policies related to delivery and management of AUD treatment and their relationship with access to and outcomes of care for racial/ethnic minorities, women, and rural Americans.

#### Alcohol and the COVID-19 pandemic

Multiple reports have indicated that alcohol misuse has increased among certain groups during the COVID-19 pandemic. Drinking to cope with stress or anxiety related to the pandemic was a common factor linked to increased alcohol consumption (see program portrait on drinking to cope in the Justification of Budget Request section later in this document). Recent findings from a NIAAA study following up with respondents who were surveyed early in the pandemic suggest that women were more likely than men to engage in heavy drinking and Black, non-Hispanic people were more likely than White, non-Hispanic people to engage in heavy drinking.

In addition, NIAAA awarded six new grants to explore the biological interactions of alcohol and COVID-19 as well as the psychological impact of the pandemic on risk for alcohol misuse and AUD in vulnerable populations. Through participation in the National Institutes of Health (NIH) Rapid Acceleration of Diagnostics Radical (RADx-rad) initiative, NIAAA is overseeing six new grants focused on developing novel, non-traditional approaches for automatic detection and tracing of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

In a recent analysis of data from the UK Biobank, NIAAA-supported researchers examined the association between alcohol consumption and odds of SARS-CoV-2 infection and risk of death. In this international study sample, frequent alcohol consumption was associated with greater risk for adverse COVID-19-outcomes, including intensive care unit admission and death, among White patients with obesity. Obesity has been identified as a risk factor for severe COVID-19 illness and the findings of the current study suggest that alcohol may contribute to poor COVID-19 outcomes among obese patients.

#### Advancing research on alcohol-associated liver disease (ALD)

Alcohol is involved in nearly half of all liver disease deaths in the United States each year. Alcohol-associated liver disease (ALD) is the most common alcohol-related cause of death and has replaced hepatitis C virus infection as the leading cause of liver transplantation due to a chronic disease. Since 1999, ALD-related deaths have increased by more than 40 percent and the greatest increase in deaths has been driven by alcohol-associated cirrhosis among young adults aged 25-34. A recent analysis supported by NIAAA indicated that ALD-related referrals to liver transplant units increased over the course of the COVID-19 pandemic, highlighting the clinical need for improved diagnosis and treatment of ALD.

NIAAA-supported researchers have made progress in improving diagnostic markers of liver damage. In a recent study, researchers compared plasma samples of participants with alcohol-associated hepatitis (AH), an acute condition with high mortality rates, to healthy participants to assess the diagnostic and prognostic significance of complement proteins in AH. Complement

proteins are key components of the body's innate immune system. The investigators identified two complement proteins that, when integrated with current predictive models, improved prediction of 90-day mortality for patients with AH. NIAAA continues to support a robust basic, translational, and clinical research program to improve prevention, diagnosis, and treatment of ALD. A new collaboration with the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Liver Cirrhosis Network will develop a longitudinal cohort of cirrhosis patients and conduct a clinical trial to evaluate a promising pharmacotherapy.

#### **Closing the treatment gap**

In addition to developing more effective treatments for AUD, closing the alcohol treatment gap requires greater focus on disseminating information about the impact of alcohol misuse on overall physical and mental health, educating clinicians and the public about AUD and enhancing treatment accessibility, and improving implementation of alcohol screening, brief intervention, and referral to treatment (SBIRT). We continue to provide Rethinking Drinking,<sup>3</sup> an interactive website that offers research-based information to help individuals evaluate their relationship with alcohol and find ways to make a change. In 2017, we released the NIAAA Alcohol Treatment Navigator,<sup>4</sup> a website designed to help individuals and their loved ones understand treatment options and search for professionally led, evidence-based treatment in their area. A recent update of the Navigator also includes information about telehealth services and a portal to assist healthcare providers in making referrals for their patients. NIAAA will soon launch a new Core Resource for Healthcare Providers that will serve as an educational tool for healthcare professionals. Funding increases have enabled development of resources like the Navigator and Core Resource.

As highlighted by the COVID-19 pandemic, telehealth and digital health technology offer opportunities to connect more individuals to health care, including AUD treatment. NIAAA supports a number of research projects that are studying telehealth (delivered via phone or video chat) or digital delivery of alcohol screening or interventions such as Computer Based Training for Cognitive Behavioral Therapy (CBT4CBT<sup>TM</sup>). Moving forward, we anticipate a larger role for telehealth in alcohol prevention, treatment, and recovery. (See the telehealth program portrait later in this document).

Alcohol SBIRT is recognized as a key component for intervening with alcohol misuse and connecting individuals with AUD to treatment. A recent analysis of data from the National Survey on Drug Use and Health demonstrated that although most participants reported being asked by their doctor about their alcohol use, few people with AUD received a brief intervention (less than 15 percent) and even fewer were referred to treatment (less than 7 percent). Stigma and lack of healthcare provider time and knowledge about alcohol were suggested as potential barriers to SBIRT implementation. NIAAA continues to promote alcohol SBIRT in primary care and other settings and supports research focused on reducing barriers to AUD treatment.

<sup>&</sup>lt;sup>3</sup> rethinkingdrinking.niaaa.nih.gov/

<sup>&</sup>lt;sup>4</sup> <u>alcoholtreatment.niaaa.nih.gov/</u>

## niaaa.nih.gov



## National Institute on Alcohol Effects and Alcohol-Associated Disorders

For over 50 years, NIAAA has served as the primary U.S. agency for conducting and supporting research on the causes, consequences, diagnosis, prevention, and treatment of alcohol-related problems across the lifespan. NIAAA also translates and disseminates evidence-based research findings for healthcare professionals, researchers, policymakers, and the general public. NIAAA's efforts have contributed to two decades of steady declines in underage drinking, the development of effective treatments for alcohol use disorder (AUD), and the recognition of AUD as a medical disorder.



## FY 2021 Spending by Scientific Division

Office of the Director, 1% Treatment and recovery, 15% Neuroscience and behavior, 40% Office of the Director, 1% Epidemiology and prevention, 17% Medications development, 6% Metabolism and health effects, 22%

## **NIAAA** Director



George F. Koob, Ph.D., assumed the role of NIAAA director in 2014. He is an internationally recognized expert on alcohol and stress, and the neurobiology of alcohol and drug addiction.

## NIAAA Facts and Figures – FY 2021

- 215 Full Time Employees
- 697 Research Project Grants
- 16 Early Stage Investigators funded
- 142 career development awards
- 331 training positions
- 12 grant supplements to support diversity

# Alcohol misuse is associated with 200+ diseases and health conditions



#### Alcohol Use Disorder (AUD) in the United States

14.5 million ple ages 12 and older had AVD in 201 Alcohol-Related Deaths in the United States

95,000 people die from alcohol-related causes annually. Economic Burden of Alcohol Use Disorder in the United States



U.S. Children Living With Parent / Caregiver With Alcohol Use Disorder (AUD)

More than 10 percent of U.S. children ages 17 and younger live with a parent with AUD.





## niaaa.nih.gov

**€YOUTH** 

### **Roadmap for the Future**

NIAAA is embarking on new strategic plan to guide its priorities over the next 5 years. Research priorities that crosscut NIAAA's mission to improve diagnosis, prevention, and treatment include:

- Applying a "whole person" health approach to preventing and treating alcohol-related problems
- Addressing health disparities, promoting health equity, and enhancing diversity and inclusion in the alcohol research enterprise
- Advancing women's health research and increasing focus on sex/gender differences across alcohol research
- Characterizing the unique risks for and outcomes of alcohol misuse across the lifespan
- Advancing research on conditions that frequently cooccur with alcohol misuse
- Promoting the development of innovative technologies and expansion of data science and collaboration to advance alcohol research

## **Ongoing Activities**

NIAAA has many ongoing research initiatives and activities. Examples of key activities with broad impact are:

- Developing a Core Resource for Health Professionals that will provide essential information to help them better recognize the effects of alcohol in their patients and deliver improved care for those whose drinking may be affecting their health.
- Reducing stigma, which has the potential to increase a person's willingness to seek help and may improve availability and quality of care.
- Establishing an operational definition of recovery that will be used to stimulate research into recovery and the elements of resilience that promote recovery.

Interventions Using NIAAA's

COLLEGE

## Translating research findings into evidence-based resources

Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide, helps health care professionals identify youth who are at risk for alcohol use, are using alcohol, or have AUD, and to intervene as appropriate. https://www.niaaa.nih.gov/sites/default/files/publications/YouthGuide.pdf

**College Alcohol Intervention Matrix (CollegeAIM)**, assists colleges and universities in choosing from more than 60 evidence-based college drinking interventions based on cost, effectiveness, and barriers to implementation. *https://www.collegedrinkingprevention.gov/collegeaim/* 

**Rethinking Drinking**, NIAAA's most popular resource for the public, is an interactive website and accompanying booklet that offers research-based information to help individuals evaluate their relationship with alcohol and find ways to make a change. *https://www.rethinkingdrinking.niaaa.nih.gov/* 

**NIAAA Alcohol Treatment Navigator**®, a web-based resource designed to help individuals and their loved ones understand AUD treatment options and search for nearby treatment that is professionally led and evidence-based. The Navigator includes information about telehealth services and a portal to assist healthcare providers in making referrals for their patients.

https://alcoholtreatment.niaaa.nih.gov/ Youth Screening Guide

> Screening and early intervention

Preventive Intervention **Rethinking Drinking** 

Self-Assessment

Treatment

RETHINKING

**CollegeAIM** 

Treatment Navigator

#### Major Changes in the Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2023 President's Budget request for NIAAA, which is \$11.8 million above the FY 2022 Continuing Resolution (CR) level, for a total of \$566.7 million.

<u>Research Project Grants (+\$5.7 million; total \$321.5 million)</u>: NIAAA will support a total of 713 Research Project Grant (RPG) awards in FY 2023. Noncompeting RPGs will increase by 44 awards and competing awards will increase by 12 awards and \$5.2 million.

<u>Research Centers and Other Research Grants (+\$3.0 million; total \$85.9 million)</u>: NIAAA will support a total of 24 Research Centers and 191 Other Research Grants in FY 2023.

<u>Research and Development Contracts (+\$0.3 million; total \$43.5 million)</u>: Funds are included in R&D contracts to support the expansion of clinical trials to test promising therapeutic agents for alcohol use disorders.

Intramural Research and Research Management and Support (+\$2.5 million; total \$99.2 million): This funding level will support NIAAA laboratories within the Division of Intramural Clinical and Biological Research as well as the Intramural Office of Laboratory Animal Science.

## **Budget Mechanism Table**

#### NATIONAL INSTITUTES OF HEALTH

#### National Institute on Alcohol Effects and Alcohol-Associated Disorders

#### Budget Mechanism\*

(Dollars in Thousands)

Machanism	Machanism FY 2021 Final FY 2022 CR		2022 CR	FY 20	23 President's	FY 2023 +/- FY 2022		
Michanism	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Research Projects:								
Noncompeting	554	\$237,202	508	\$238,359	552	\$236,422	44	-\$1,937
Administrative Supplements	(63)	\$6,748	(39)	\$4,000	(44)	\$5,200	(5)	\$1,200
Competing:								
Renewal	16	\$8,311	14	\$7,447	16	\$8,159	2	\$713
New	127	\$59,248	114	\$53,086	124	\$57,613	10	\$4,527
Supplements	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal, Competing	143	\$67,559	128	\$60,533	140	\$65,772	12	\$5,240
Subtotal, RPGs	697	\$311,509	636	\$302,892	692	\$307,394	56	\$4,502
SBIR/STTR	23	\$16,123	18	\$12,847	21	\$14,065	3	\$1,218
Research Project Grants	720	\$327,632	654	\$315,739	713	\$321,459	59	\$5,720
Research Centers								
Specialized/Comprehensive	21	\$33,130	23	\$35,347	24	\$36,819	1	\$1,472
Clinical Research	0	\$0	0	\$0	0	\$0	0	\$0
Biotechnology	0	\$0	0	\$0	0	\$0	0	\$0
Comparative Medicine	0	\$0	0	\$0	0	\$0	0	\$0
Research Centers in Minority Institutions	0	\$0	0	\$0	0	\$0	0	\$0
Research Centers	21	\$33,130	23	\$35,347	24	\$36,819	1	\$1,472
Other Research:			-			10070		. ,
Research Careers	142	\$24,567	142	\$24,567	150	\$26,067	8	\$1,500
Cancer Education	0	\$0	0	\$0	0	\$0	0	\$0
Cooperative Clinical Research	1	\$7,648	1	\$7,648	1	\$7,648	0	\$0
Biomedical Research Support	0	\$0	0	\$0	0	\$0	0	\$0
Minority Biomedical Research Support	0	\$594	0	\$594	0	\$594	0	-\$0
Other	40	\$14,727	40	\$14,727	40	\$14,727	0	\$0
Other Research	183	\$47,537	183	\$47,537	191	\$49,037	8	\$1,500
Total Research Grants	924	\$408,298	860	\$398,622	928	\$407,314	68	\$8,692
Ruth L Kirschstein Training Awards:	FTTPs		FTTPs		FTTPs		FTTPs	
Individual Awards	119	\$5,504	119	\$5,581	119	\$5,665	0	\$84
Institutional Awards	212	\$10,754	212	\$10,905	212	\$11,068	0	\$164
Total Research Training	331	\$16,258	331	\$16,486	331	\$16,733	0	\$247
Basaarah & Davialan, Contracts	50	\$22.090	61	\$42 192	65	\$42.500	1	\$219
SPIP/STTP (non add)	(5)	\$55,080	(6)	\$45,182 (\$1,338)	(5)	\$45,500 (\$3.564)	(1)	\$310 (\$774)
Intromural Research	(3)	(\$474) \$57 738	(0)	(\$4,330) \$58.344	(5)	(\$3,304) \$50,721	-(1)	-(\$774) \$1.477
Bas Management & Support	120	\$37,720	94	\$36,244	94	\$39,721		\$1,477
SRIR Admin (non-add)	(0)	(\$0)	(0)	φ30,309 (\$0)	(0)	φ37,430 (\$0)		\$1,007 (\$0)
Son Aunin. (non-uuu)	(0)	(90)	(0)	(\$0)	(0)	(90)		(00)
Construction		\$0		\$0		\$0		\$0
Buildings and Facilities		\$0		\$0		\$0		\$0
Total, NIAAA	215	\$553,216	238	\$554,923	238	\$566,725	0	\$11,802

\* All items in italics and brackets are non-add entries.

#### **Appropriations Language**

#### NATIONAL INSTITUTES OF HEALTH

## NATIONAL INSTITUTE ON ALCOHOL EFFECTS AND ALCOHOL-ASSOCIATED DISORDERS

For carrying out section 301 and title IV of the PHS Act with respect to alcohol misuse, alcohol use disorder, and other alcohol-associated disorders, \$566,725,000.

## **Summary of Changes**

#### NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Effects and Alcohol-Associated Disorders

#### Summary of Changes

(Dollars in Thousands)

FY 2022 CR	\$554,923
FY 2023 President's Budget	\$566,725
Net change	\$11,802

	FY	2022 CR	FY 202	3 President's Budget	Built-In Change from FY 2022 CR	
CHANGES	FTEs	Budget Authority	FTEs	Budget Authority	FTEs	Budget Authority
A. Built-in:						
1. Intramural Research:						
a. Annualization of January 2022 pay increase & benefits		\$19,837		\$20,565		\$132
b. January FY 2023 pay increase & benefits		\$19,837		\$20,565		\$672
c. Paid days adjustment		\$19,837		\$20,565		-\$75
d. Differences attributable to change in FTE		\$19,837		\$20,565		\$0
e. Payment for centrally furnished services		\$9,483		\$9,673		\$190
non-recurring costs		\$28,923		\$29,483		\$540
Subtotal						\$1,458
2 Research Management and Support						
a Annualization of January 2022 nay increase & benefits		\$27 378		\$28 379		\$181
a. Annualization of sandary 2022 pay increase & benefits		\$27,576		\$20,577		\$101
b. January FY 2023 pay increase & benefits		\$27,378		\$28,379		\$925
c. Paid days adjustment		\$27,378		\$28,379		-\$104
a. Differences attributable to change in FTE		\$27,378 \$183		\$28,379 \$187		50 \$4
f Cost of laboratory supplies materials other expenses and		\$105		\$107		τψ
non-recurring costs		\$10,828		\$10,890		\$204
Subtotal						\$1,210
Subtotal, Built-in						\$2,668
	FY	2022 CR	FY 202	3 President's Budget	Program FY	Change from 2022 CR
CHANGES	No.	Amount	No.	Amount	No.	Amount
B. Program:						
1. Research Project Grants:						
a. Noncompeting	508	\$242,359	552	\$241,622	44	-\$737
b. Competing	128	\$60,533	140	\$65,772	12	\$5,240
c. SBIR/STIR Subtotal PPGa	18	\$12,847	21	\$14,065	50	\$1,218
Subtotal, Kr Os	0.54	\$515,755	/13	\$521,459	35	\$5,720
2. Research Centers	23	\$35,347	24	\$36,819	1	\$1,472
3. Other Research	183	\$47,537	191	\$49,037	8	\$1,500
4. Research Training	331	\$16,486	331	\$16,733	0	\$247
5. Research and development contracts	64	\$43,182	65	\$43,500	1	\$318
Subtotal, Extramural		\$458,290		\$467,547		\$9,257
6. Intramural Research	94	\$58,244	94	\$59,721	о	\$20
7. Research Management and Support	144	\$38,389	144	\$39,456	0	-\$143
8. Construction		\$0		\$0		\$0
<ol><li>Buildings and Facilities</li></ol>		\$0		\$0		\$0
Subtotal, Program	238	\$554,923	238	\$566,725	0	\$9,134
Total built-in and program changes						\$11,802

### **Budget Graphs**



#### History of Budget Authority and FTEs:

Distribution by Mechanism:



#### Change by Selected Mechanisms:





#### **Organization Chart**

NIAAA-14

#### **Budget Authority by Activity Table**

#### NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Effects and Alcohol-Associated Disorders

	FY 202	FY 2021 Final FY 2022 CR		FY 2023 President's Budget		FY 2023 +/- FY 2022 CR		
Extramural Research	FTE	Amount	FTE	Amount	<u>FTE</u>	Amount	FTE	Amount
Detail								
Embryo and Fetus		\$15,303		\$15,324		\$15,634		\$310
Youth/Adolescence		\$44,175		\$44,238		\$45,132		\$894
Young Adult		\$198,913		\$199,197		\$203,221		\$4,024
Mid-Life		\$144,433		\$144,639		\$147,560		\$2,922
Senior Adult		\$54,813		\$54,892		\$56,000		\$1,109
Subtotal, Extramural		\$457,637		\$458,290		\$467,547		\$9,257
Intramural Research	85	\$57,728	94	\$58,244	94	\$59,721	0	\$1,477
Research Management & Support	130	\$37,851	144	\$38,389	144	\$39,456	0	\$1,067
TOTAL	215	\$553,216	238	\$554,923	238	\$566,725	0	\$11,802

#### Budget Authority by Activity \* (Dollars in Thousands)

\* Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

#### **Justification of Budget Request**

#### National Institute on Alcohol Effects and Alcohol-Associated Disorders

Authorizing Legislation: Section 301 and Title IV of the Public Health Service Act, as amended. Budget Authority (BA):

		FY 2022	FY 2023	
	FY 2021	Continuing	President's	FY 2023 +/-
	Final	Resolution	Budget	FY 2022
BA	\$553,216,000	\$554,923,000	\$566,725,000	+\$11,802,000
FTE	215	238	238	0

Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

<u>Overall Budget Policy</u>: The FY 2023 President's Budget request for NIAAA is \$556.7 million, an increase of \$11.8 million or 2.1 percent compared to the FY 2022 CR level. NIAAA will continue to focus on generating and disseminating knowledge about the effects of alcohol misuse and improving the diagnosis, prevention, and treatment of alcohol-related problems, including AUD.

#### **Program Descriptions**

NIAAA's extramural programs are organized by stage of life to highlight the changes in biology, behavior, and environmental inputs over time that influence the emergence and progression of alcohol misuse and associated health consequences. Improvements in the diagnosis, prevention, and treatment of alcohol-related problems across the lifespan are integral to fulfilling NIAAA's mission; accordingly, key basic, translational, or clinical research advances in these areas have been highlighted within each program description.

#### **Embryo and Fetus**

Prenatal alcohol exposure can cause a spectrum of lifelong developmental, behavioral, and emotional deficits collectively termed fetal alcohol spectrum disorders (FASD). NIAAA has a coordinated FASD program that manages research on etiology, diagnosis, prevention, and treatment of FASD. To accelerate the translation of key research findings through research collaboration and coordination, NIAAA supports a multidisciplinary consortium, the Collaborative Initiative on Fetal Alcohol Spectrum Disorders (CIFASD). NIAAA also funds three alcohol research centers across the United States that emphasize research on developmental exposure to alcohol or prevention of prenatal alcohol exposure, ensuring ongoing opportunities for trainees in this research field.

Recent reports from NIAAA-funded researchers have applied machine learning, an artificial intelligence technique, to evaluate innovative approaches for identifying individuals exposed to alcohol prenatally. One study assessed the utility of the infant cardiac orienting response (heart rate change in response to a novel stimulus) as a neurophysiological marker of FASD. Investigators found that deviations in the cardiac orienting response elicited by visual stimuli were linked to a future diagnosis of FASD. Another study analyzed brain functional network connectivity data from adult rodents that were exposed to alcohol prenatally. Machine learning distinguished prenatal alcohol exposure among female rodents, suggesting the potential translational value of the approach as a novel, non-invasive technique for identification of FASD. In addition to supporting basic, translational, and clinical research on FASD, NIAAA sponsors and chairs the Interagency Coordinating Committee on FASD to foster improved communication, cooperation, and collaboration among federal agencies that address issues related to prenatal alcohol exposure.

<u>Budget Policy</u>: The FY 2023 President's Budget request for this research area is \$15.6 million, an increase of \$0.3 million or 2.0 percent compared to the FY 2022 CR level. In FY 2023, FASD will continue to be a focus for NIAAA.

#### Youth/Adolescence

Alcohol use is commonly initiated during adolescence. About 40 percent of 12 to 20-year-olds report having tried alcohol at least once, and about 11 percent report current binge drinking. Early alcohol use is linked to increased risk for future AUD, driving under the influence, alcohol-induced memory blackouts, and other short- and long-term consequences. Alcohol use can also alter developmental trajectories of the maturing adolescent brain. To better characterize predictors and consequences of adolescent alcohol consumption, NIAAA supports two multisite longitudinal studies that examine brain structure and function in youth before and after they begin using alcohol or other substances: the National Consortium on Alcohol and Neurodevelopment in Adolescence (NCANDA) and the Adolescent Brain Cognitive Development (ABCD) study. Data from NCANDA, for example, has demonstrated a relationship between early adverse experiences, brain development, and alcohol misuse, and suggest that interventions that target trauma may be beneficial in preventing future alcohol misuse and AUD. The longitudinal design of both NCANDA and ABCD also allows for assessment of adolescent alcohol use during the COVID-19 pandemic and data will be forthcoming.

In addition to supporting research to develop evidence-based behavioral interventions to prevent and reduce adolescent alcohol use, NIAAA also supports research focused on evaluation and implementation of alcohol screening and brief intervention for youth under age 18. A current project is exploring the impact of computer-facilitated screening and brief intervention to reduce underage drinking. Another study is examining the implementation of screening, brief intervention, and referral to treatment (SBIRT) in pediatric trauma centers.

#### How Digital Health and Telehealth Can Improve Access to Care

The COVID-19 pandemic has highlighted the value of telehealth approaches for treatment of alcohol use disorder (AUD) and other alcohol-related health conditions. Telehealth and digital health technology can support integration of screening and treatment of a broad range of alcohol-related conditions in primary care and other settings, increase access to care, and reduce health disparities.

NIAAA supports research that evaluates the use of digital health technology to advance screening, diagnosis, prevention, and treatment of alcoholrelated health problems. For example, a recent study assessed the utility of telemedicine for diagnosis of fetal alcohol spectrum disorders (FASD). Early diagnosis (before age six) offers the best chance for improved outcomes, but access to FASD specialists can be a barrier to care, particularly for underserved or rural areas. Investigators compared the diagnostic accuracy of face-to-face physical examinations to two different telemedicine systems (a specialized mobile assessment station and a secure video conferencing platform). Investigators demonstrated that telemedicine can be used to accurately distinguish between the physical features of fetal alcohol syndrome (FAS) or partial fetal alcohol syndrome and no FAS. This approach holds much promise for populations in underserved areas.

NIAAA-supported investigators also explored the utility of a mobile health app for healthcare workers in a low-income country with a shortage of specialty care providers. The mobile app was designed to enable non-specialists to deliver brief, evidencebased alcohol interventions, including screening, brief intervention and referral to treatment (SBIRT) and motivational interviewing, a behavioral intervention for alcohol misuse. Health workers found the app to be appropriate, acceptable and feasible, demonstrating the promise for the use of mobile health apps to expand access to alcohol intervention services in areas with limited resources.

Another NIAAA-supported study assessed the feasibility of addiction medicine video consultations in primary care, allowing primary care providers to introduce patients directly and immediately to an addiction specialist. By including the consultation directly in a primary care setting, common barriers of standard referral pathways were avoided. The study also suggested that patients receiving a consultation were more likely to receive a prescription for naltrexone and to initiate specialty addiction treatment. Together, these research advances demonstrate the potential of telehealth and digital health technologies in making health care more accessible and in overcoming known barriers to treatment. <u>Budget Policy</u>: The FY 2023 President's Budget request for this research area is \$45.1 million, an increase of \$0.9 million or 2.0 percent compared to the FY 2022 CR level. In FY 2023, researching effects of adolescent drinking, as well as prevention and reduction of adolescent drinking will continue to be a focus for NIAAA.

#### Young adult

During the transition from late adolescence to young adulthood (ages 18 to 29), multiple risk factors for alcohol misuse increase as alcohol becomes legally available at a time of transition away from parental oversight. Epidemiological research indicates that alcohol misuse peaks in the late teens and early twenties before declining. Evidence also indicates steadily increasing emergency department (ED) visits (ages 18-24) and alcohol-related deaths (ages 21-24) among the young adult age group.

Improving sleep may be an appropriate intervention for reducing alcohol misuse among young adults. A study of young adults with insomnia who reported at least one recent binge drinking episode demonstrated that cognitive behavioral therapy for insomnia resulted in improvements in measures of alcohol craving and executive function.

Although drinking among college-age individuals has gradually declined over the past two decades, around a quarter of this population reports recent binge drinking.<sup>5</sup> NIAAA developed the College Alcohol Intervention Matrix (CollegeAIM)<sup>6</sup> to assist colleges and universities in choosing from more than 60 college drinking interventions based on ratings of effectiveness, anticipated costs, and barriers to implementation. Since its release in 2015, the ratings of several interventions in CollegeAIM have been updated based on more recent scientific literature. Over the course of FY 2021, NIAAA partnered with the International Town and Gown Association to host a series of webinars designed to share information about CollegeAIM with colleges and communities. NIAAA also recognizes that many young adults do not attend college and may instead enter the workforce. NIAAA will continue to focus on research to intervene with alcohol misuse among young adults in various settings.

<u>Budget Policy</u>: The FY 2023 President's Budget request for this research area is \$203.2 million, an increase of \$4.0 million or 2.0 percent compared to the FY 2022 CR level. In FY 2023, research aimed at preventing, reducing, and treating alcohol misuse and its consequences, in addition to assisting colleges and universities, will continue to be a focus for NIAAA.

#### Mid-Life

People with AUD are most likely to seek treatment during midlife. In addition to AUD, alcohol misuse is linked with dysfunction and failure of many organs and systems including the liver, heart, pancreas, lung, bone, and skeletal muscle, as well as digestive, vascular, endocrine, and immune systems. Currently, there are only three medications approved by the U.S. Food and Drug Administration (FDA) for the treatment of AUD and no FDA-approved therapies for alcohol-related organ damage, making development of effective therapies to prevent and treat alcohol-associated conditions a major priority for NIAAA. The Institute has a robust medications

#### Drinking to Cope

Prior research has linked drinking alone and drinking to cope - two significant concerns during the pandemic - with future negative consequences. The pandemic has brought stress to many people's lives as a result of a wide range of factors, such as uncertainty about the future and feelings of isolation while physically distancing. Research has associated higher levels of stress during the pandemic with increases in alcohol use among adults in several countries, indicating a potential increase in drinking to cope. A similar pattern has been reported for college students, with multiple reports describing a shift from drinking to socialize or celebrate towards drinking to cope with depression or other stress during the pandemic. Another study found that drinking to cope with pandemic-related stress was associated with more frequent and heavier alcohol use.

To advance research on the impact of social context on alcohol misuse and consequences, NIAAA participates in a trans-NIH initiative on biopsychosocial factors of social connectedness and isolation on health, wellbeing, illness, and recovery. One ongoing study is using a functional neuroimaging and computational modeling to test how sensitivity to social signals may protect against negative outcomes of social isolation or confer vulnerability despite social connectedness. The study will also evaluate the impact of physical distancing during the COVID-19 pandemic on social connectedness, negative affect, and alcohol use.

NIAAA-supported research is also focused on interventions for drinking to cope. In a recent study, researchers examined a culturally adapted version of motivational interviewing, an evidence-based behavioral treatment, to address social stressors (e.g., discrimination and cultural assimilation) among Latinx individuals. The intervention reduced the number of heavy drinking days and symptoms of anxiety and depression. These results highlight the importance of addressing social stressors in interventions for alcohol misuse.

The pandemic has shone a spotlight on drinking to cope with stress, a risk factor for developing alcohol use disorder and for relapse among individuals in recovery. NIAAA will continue to support research to better understand and intervene with drinking to cope.

<sup>&</sup>lt;sup>5</sup> monitoringthefuture.org/pubs/monographs/mtf-vol2 2020.pdf

<sup>&</sup>lt;sup>6</sup> https://www.collegedrinkingprevention.gov/collegeaim/

development program that includes the NIAAA Clinical Investigations Group (NCIG), a network of clinical sites that conducts proof-of-concept Phase II clinical trials of promising AUD medications. To overcome a common challenge in medications development, i.e., the transition from preclinical to human testing (the "valley of death"), NIAAA supports a human laboratory program to efficiently screen compounds for safety and effectiveness prior to clinical trial testing.

Stress can promote alcohol misuse and relapse, and a number of NIAAA funded studies have identified anti-stress medications as potential treatments for AUD, including gabapentin and compounds that block receptors for stress-related hormones such as vasopressin and glucocorticoids. In addition, compounds that block mineralocorticoid receptors (MR), another type of hormone receptor, may represent a novel pharmacological treatment for AUD. A recent NIAAA-supported study has suggested the therapeutic potential of spironolactone, a compound that blocks MR and is widely used to treat hypertension, heart failure, nephrotic syndrome, and other conditions. Investigators found that patients who drank more than 7 drinks per week at baseline and who took spironolactone for 90 days or more, for any health indication, reported a reduction in weekly alcohol use. Such pharmacoepidemiological "back-translation" approaches, in which clinical observations form the basis of hypotheses that can be further explored in a laboratory setting, show great promise for future directed medications development.

NIAAA-funded investigators also analyzed electronic health records to identify factors associated with early and sustained cessation of heavy drinking among patients screened for alcohol use in primary care in a large healthcare system. Nearly two-thirds of the patients achieved early and sustained cessation of heavy drinking, and routine primary care and receiving addiction treatment were among the strongest predictors of heavy drinking cessation.

<u>Budget Policy</u>: The FY 2023 President's Budget request for this research area is \$147.6 million, an increase of \$2.9 million or 2.0 percent compared to the FY 2022 CR level. In FY 2023, research aimed at preventing, reducing, and treating alcohol misuse and its consequences will continue to be a focus for NIAAA.

#### Senior Adult

Over the past two decades, alcohol use has steadily increased in adults age 65 and older, especially among women. National surveys indicate that approximately 20 percent of adults aged 60-64 and around 11 percent over age 65 report current binge drinking. Alcohol misuse in this population contributes to accelerated aging in some brain regions, reductions in brain volumes in multiple cortical regions, and impaired cognitive function, learning, memory, and motor function.

An NIAAA-supported study that assessed the additive effects of HIV and binge drinking on neurocognitive functioning found that older adults were most vulnerable to these effects. The findings support the need for alcohol interventions that focus on older adults with HIV. In 2020, NIAAA and the National Institute on Aging (NIA) issued a funding opportunity announcement to encourage research on the impact of alcohol misuse on the onset and progression of Alzheimer's Disease and related dementias. Awarded projects are exploring potential mediators

of alcohol-related neurodegeneration, including neuroinflammation, the liver-brain axis (a series of communication pathways whereby liver inflammation can influence activity in the brain), genetic biomarkers, activity of the serotonin and noradrenergic neurotransmitter systems, and early developmental exposure to alcohol.

<u>Budget Policy</u>: The FY 2023 President's Budget request for this research area is \$56.0 million, an increase of \$1.1 million or 2.0 percent compared to the FY 2022 CR level. In FY 2023, research aimed at preventing, reducing, and treating alcohol misuse and its consequences will continue to be a focus for NIAAA.

### **Intramural Research Program**

NIAAA's Intramural Research Program (IRP) plans, develops, and conducts a high-caliber, innovative program of basic, translational, and clinical investigations on multiple determinants and processes of AUD and other alcohol-related problems. The IRP operates a clinical research facility on the NIH main campus that includes an outpatient clinic for participant screening and evaluation and an inpatient unit for treatment and research. The NIAAA IRP also has a robust training program and provides opportunities for basic, translational, and clinical alcohol researchers and trainees to collaborate on studies investigating a broad range of alcohol-related topics across NIH.

Basic research conducted by the NIAAA IRP has identified multiple targets that may regulate alcohol misuse and be useful for development of novel treatments—including the gut, neuroimmune system, endocannabinoid system, and brain circuit neuroadaptations. These research findings frequently have relevance to conditions beyond AUD. For example, investigators in the NIAAA IRP developed a novel compound, MRI-1891, that blocks cannabinoid CB1 receptors and provided preclinical evidence that the compound may treat metabolic conditions. Development of this compound is significant because traditional CB1 receptor antagonists act in the central nervous system and produce neuropsychiatric side effects, such as anxiety, that limit clinical viability. MRI-1891, however, was designed to act largely outside of the central nervous system. The compound was recently licensed by Inversago Pharma<sup>7</sup> as INV-202 and has moved to phase I clinical trials to evaluate safety, tolerability, and the time course of absorption, distribution, metabolism, and clearance from the body.

For individuals who experience trauma or have trauma-related disorders such as post-traumatic stress disorder (PTSD), fear responses to threats associated with trauma can be debilitating. Using an animal model, NIAAA-supported researchers identified two clusters of neurons in the amygdala (the brain's hub for processing emotions) that either promote or extinguish a fear response. The cell clusters have long-range connections to known fear-regulating regions in the brain (the midbrain and prefrontal cortex), revealing a neural circuit that orchestrates activity across a broad brain network to influence the switch between high and low fear states. The circuit may contribute to susceptibility to various psychiatric conditions and may have implications for understanding the neuropathological basis for PTSD, and the high co-morbidity of PTSD with AUD.

<sup>&</sup>lt;sup>7</sup> <u>inversago.com/en/2021/inversago-pharma-initiates-a-phase-1-clinical-trial-on-inv-202-a-next-generation-peripherally-acting-cb1-blocker/</u>

<u>Budget Policy</u>: The FY 2023 President's Budget request for NIAAA intramural research is \$59.7 million, an increase of \$1.5 million or 2.5 percent compared to the FY 2022 CR level.

#### **Research Management and Support**

Research Management and Support (RMS) provides for administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of grants, training awards, and contracts; strategic planning, coordination, and evaluation of the NIAAA's programs; regulatory compliance; and liaison with other Federal agencies, Congress, and the public.

<u>Budget Policy</u>: The FY 2023 President's Budget request for RMS at NIAAA is \$39.5 million, an increase of \$1.1 million or 2.8 percent compared to the FY 2022 CR level.

## **Appropriations History**

## NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Effects and Alcohol-Associated Disorders

Ficeal Veen	<b>Budget Estimate</b>	House	Senate	Appropriation
riscal teal	to Congress	Allowance	Allowance	Appropriation
2014	\$463,848,000		\$460,765,000	\$446,025,000
Rescission				\$0
2015	\$446 017 000			\$447 408 000
Rescission	\$110,017,000			\$0
2016	\$459,833,000	\$456,012,000	\$469,355,000	\$467,700,000
Rescission				\$0
2017 <sup>1</sup>	\$467.445.000	\$480.330.000	\$488.782.000	\$483.363.000
Rescission	+ , ,	+	÷ · · · · · · · · · · · · · · · · · · ·	\$0
2019	¢261.256.000	\$400 706 000	¢500 401 000	¢500,572,000
2018 Rescission	\$301,330,000	\$490,796,000	\$500,491,000	\$309,373,000 \$0
				ψŪ
2019	\$469,109,000	\$515,658,000	\$525,867,000	\$525,591,000
Rescission				\$0
2020	\$452 419 000	\$551 278 000	\$556.010.000	\$545 373 000
Rescission	φ+32,+19,000	\$551,276,000	\$550,010,000	\$0
2021	\$497,346,000	\$550,063,000	\$564,498,000	\$554,923,000
Rescission				\$0
2022	\$570 165 000	\$582 422 000	\$569 633 000	\$554 923 000
Rescission	\$570,105,000	<i>\$502</i> , <i>122</i> ,000	<i>\$207,022,000</i>	\$0
				¢0
2023	\$566,725,000			

## **Appropriations History**

<sup>1</sup> Budget Estimate to Congress includes mandatory financing.



#### **Authorizing Legislation**

#### Amounts Available for Obligation

## NATIONAL INSTITUTES OF HEALTH

## National Institute on Alcohol Effects and Alcohol-Associated Disorders

## Amounts Available for Obligation<sup>1</sup>

(Dollars in Thousands)

			FY 2023
Source of Funding	FY 2021 Final	FY 2022 CR	<b>President's</b>
			Budget
Appropriation	\$554,923	\$554,923	\$566,725
Secretary's Transfer	-\$1,666	\$0	\$0
OAR HIV/AIDS Transfers	-\$41	\$0	\$0
Subtotal, adjusted budget authority	\$553,216	\$554,923	\$566,725
Unobligated balance, start of year	\$0	\$0	\$0
Unobligated balance, end of year (carryover)	\$0	\$0	\$0
Subtotal, adjusted budget authority	\$553,216	\$554,923	\$566,725
Unobligated balance lapsing	-\$15	\$0	\$0
Total obligations	\$553,201	\$554,923	\$566,725

<sup>1</sup> Excludes the following amounts (in thousands) for reimbursable activities carried out by this account: FY 2021 - \$5,222 FY 2022 - \$6,000 FY 2023 - \$6,000

## **Budget Authority by Object Class**

#### NATIONAL INSTITUTES OF HEALTH

#### National Institute on Alcohol Effects and Alcohol-Associated Disorders

#### Budget Authority by Object Class<sup>1</sup>

(Dollars in Thousands)

		FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
Total co	mpensable workyears:			
	Full-time equivalent	238	238	0
	Full-time equivalent of overtime and holiday hours	0	0	0
	Average ES salary	\$204	\$213	\$8
	Average GM/GS grade	13.0	13.0	0.0
	Average GM/GS salary	\$134	\$140	\$5
	Average salary, Commissioned Corps (42 U.S.C. 207)	\$118	\$123	\$4
	Average salary of ungraded positions	\$127	\$133	\$5
	OBJECT CLASSES	FY 2022 CR	FY 2023 President's Budget	FY 2023 +/- FY 2022
	Personnel Compensation			
11.1	Full-Time Permanent	\$22,594	\$23,440	\$845
11.3	Other Than Full-Time Permanent	\$8,194	\$8,500	\$307
11.5	Other Personnel Compensation	\$903	\$937	\$34
11.7	Military Personnel	\$121	\$125	\$5
11.8	Special Personnel Services Payments	\$3,541	\$3,674	\$133
11.9	Subtotal Personnel Compensation	\$35,354	\$36,676	\$1,323
12.1	Civilian Personnel Benefits	\$11,777	\$12,180	\$403
12.2	Military Personnel Benefits	\$85	\$88	\$3
13.0	Benefits to Former Personnel	\$0	\$0	\$0
	Subtotal Pay Costs	\$47,215	\$48,944	\$1,729
21.0	Travel & Transportation of Persons	\$10	\$10	\$0
22.0	Transportation of Things	\$49	\$48	-\$1
23.1	Rental Payments to GSA	\$0	\$0	\$0
23.2	Rental Payments to Others	\$0	\$0	\$0
23.3	Communications, Utilities & Misc. Charges	\$84	\$81	-\$3
24.0	Printing & Reproduction	\$0	\$0	\$0
25.1	Consulting Services	\$12,133	\$12,332	\$200
25.2	Other Services	\$4,822	\$4,609	-\$213
25.3	Purchase of Goods and Services from Government Accounts	\$42,894	\$45,015	\$2,121
25.4	Operation & Maintenance of Facilities	\$274	\$269	-\$5
25.5	R&D Contracts	\$24,485	\$23,742	-\$744
25.6	Medical Care	\$187	\$184	-\$3
25.7	Operation & Maintenance of Equipment	\$1.583	\$1,491	-\$92
25.8	Subsistence & Support of Persons	\$0	\$0	\$0
25.0	Subtotal Other Contractual Services	\$86.377	\$87.641	\$1.264
26.0	Supplies & Materials	\$4.150	\$4,077	-\$73
31.0	Equipment	\$1.798	\$1.747	-\$51
32.0	Land and Structures	\$126	\$124	-\$2
33.0	Investments & Loans	\$0	\$0	\$2 \$0
41.0	Grants, Subsidies & Contributions	\$415.108	\$424.047	\$8.939
42.0	Insurance Claims & Indemnities	\$0	\$0	\$0
43.0	Interest & Dividends	\$0 \$0	\$0	\$0
44.0	Refunds	\$0	\$0	\$0 \$0
	Subtotal Non-Pay Costs	\$507.708	\$517.781	\$10.073
	Total Budget Authority by Object Class	\$554,923	\$566,725	\$11,802

<sup>1</sup> Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

#### Salaries and Expenses

#### NATIONAL INSTITUTES OF HEALTH

#### National Institute on Alcohol Effects and Alcohol-Associated Disorders

#### Salaries and Expenses

(Dollars in Thousands)

Object Classes	FY 2022 CR	President's	FY 2023 +/- FY	
, , , , , , , , , , , , , , , , , , ,		Budget	2022	
Personnel Compensation		• /		
Full-Time Permanent (11.1)	\$22,594	\$23,440	\$845	
Other Than Full-Time Permanent (11.3)	\$8,194	\$8,500	\$307	
Other Personnel Compensation (11.5)	\$903	\$937	\$34	
Military Personnel (11.7)	\$121	\$125	\$5	
Special Personnel Services Payments (11.8)	\$3,541	\$3,674	\$133	
Subtotal, Personnel Compensation (11.9)	\$35,354	\$36,676	\$1,323	
Civilian Personnel Benefits (12.1)	\$11,777	\$12,180	\$403	
Military Personnel Benefits (12.2)	\$85	\$88	\$3	
Benefits to Former Personnel (13.0)	\$0	\$0	\$0	
Subtotal Pay Costs	\$47,215	\$48,944	\$1,729	
Travel & Transportation of Persons (21.0)	\$10	\$10	-\$0	
Transportation of Things (22.0)	\$49	\$48	-\$1	
Rental Payments to Others (23.2)	\$0	\$0	\$0	
Communications, Utilities & Misc. Charges	¢01	¢01	\$2	
(23.3)	<u>۵</u> 04	\$01	-\$3	
Printing & Reproduction (24.0)	\$0	\$0	\$0	
Other Contractual Services				
Consultant Services (25.1)	\$12,133	\$12,332	\$200	
Other Services (25.2)	\$4,822	\$4,609	-\$213	
Purchase of Goods and Services from	\$23,135	\$24 000	\$1 855	
Government Accounts (25.3)	\$25,155	\$24,770	φ1,055	
Operation & Maintenance of Facilities (25.4)	\$274	\$269	-\$5	
Operation & Maintenance of Equipment (25.7)	\$1,583	\$1,491	-\$92	
Subsistence & Support of Persons (25.8)	\$0	\$0	\$0	
Subtotal Other Contractual Services	\$41,946	\$43,690	\$1,744	
Supplies & Materials (26.0)	\$4,155	\$4,082	-\$73	
Subtotal Non-Pay Costs	\$46,244	\$47,911	\$1,667	
Total Administrative Costs	\$93,460	\$96,856	\$3,396	

## **Detail of Full-Time Equivalent Employment (FTE)**

#### NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Effects and Alcohol-Associated Disorders

0.00	FY 2021 Final FY 2022 CR FY 2023			FY 2021 Final FY 2022 CR FY 2023 President's Bud			s Budget		
Office	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Office of the Director				10		10	10		10
Direct:	9	-	9	10	-	10	10	-	10
Iotal:	9	-	9	10	-	10	10	-	10
Office of Extramural Activities									
Direct:	20	-	20	21	_	21	21	_	21
Total:	20	-	20	21	-	21	21	-	21
Office of Science Policy and Communications									
Direct:	16	-	16	18	_	18	18	_	18
Total:	16	-	16	18	-	18	18	-	18
Office of Bessence Management									
Direct	36		36	40		40	40		40
Total:	36	-	36	40	-	40 40	40	-	40
Division of Epidemiology and Prevention Research									
Direct:	16	-	16	18	-	18	18	- 1	18
Total:	16	-	16	18	-	18	18	-	18
Division of Metabolism and Health Effects									
Direct:	8	-	8	9	_	9	9		9
Total:	8	-	8	9	-	9	9	-	9
Division of Neuroscience and Behavior									
Direct:	15	_	15	16	_	16	16	_	16
Total:	15	-	15	16	-	16	16	-	16
Division of Treatment and Recovery									
Direct:	10	-	10	12	-	12	12		12
Total:	10	-	10	12	-	12	12		12
Division of Intramural Research Program									
Direct:	76	1	77	85	1	86	85	1	86
Reimbursable:	8	-	8	8	-	8	8	- 1	8
Total:	84	1	85	93	1	94	93	1	94
Total	214	1	215	237	1	238	237	1	238
Includes FTEs whose payroll obligations are supported	d by the N	IH Commo	on Fund.						
FTEs supported by funds from Cooperative Research	0	0	0	0	0	0	0	0	0
and Development Agreements.	0	0	0	0	0	0	0	0	0
FISCAL YEAR	Average GS Grade								
2019	12.9								
2020	13.0								
2021		13.0							
2022					13.0				
2023					13.0				

#### Detail of Full-Time Equivalent Employment (FTE)

#### **Detail of Positions**

#### NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Effects and Alcohol-Associated Disorders

GRADE	FY 2021 Final	FY 2022 CR	FY 2023
			President's Budget
Total, ES Positions	1	1	1
Total, ES Salary	\$199,300	\$203,834	\$213,210
General Schedule			
GM/GS-15	25	29	29
GM/GS-14	50	59	59
GM/GS-13	42	49	49
GS-12	18	21	21
GS-11	8	9	9
GS-10	1	1	1
GS-9	7	8	8
GS-8	2	2	2
GS-7	5	6	6
GS-6	0	0	0
GS-5	0	0	0
GS-4	0	0	0
GS-3	0	0	0
GS-2	0	0	0
GS-1	0	0	0
Subtotal	158	184	184
Commissioned Corps (42 U.S.C.			
207)			
Assistant Surgeon General	0	0	0
Director Grade	0	0	0
Senior Grade	1	1	1
Full Grade	0	0	0
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	1	1	1
Ungraded	69	69	69
Total permanent positions	162	185	185
Total positions, end of year	229	255	255
Total full-time equivalent (FTE)		220	220
employment, end of year	215	238	238
Average ES salary	\$199,300	\$203,834	\$213,210
Average GM/GS grade	13.0	13.0	13.0
Average GM/GS salary	\$130,871	\$133,848	\$140,005

#### **Detail of Positions**<sup>1</sup>

<sup>1</sup> Includes FTEs whose payroll obligations are supported by the NIH Common Fund.