Director’s Report to the
National Advisory Council on Drug Abuse

Nora D. Volkow, M.D.
Director
National Institute on Drug Abuse
September 13, 2022
## NIDA BUDGET
(all dollars are in $k)

<table>
<thead>
<tr>
<th></th>
<th>FY 2021 Final</th>
<th>FY 2022 Enacted</th>
<th>FY 2023 PB*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base</strong></td>
<td>$1,206,321</td>
<td>$1,250,828</td>
<td>$1,437,883</td>
</tr>
<tr>
<td><strong>HEAL</strong></td>
<td>$269,484</td>
<td>$345,295</td>
<td>$405,443</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,475,805</td>
<td>$1,596,123</td>
<td>$1,843,326</td>
</tr>
</tbody>
</table>

* The FY 23 President’s Budget proposal was released prior to the receipt of a full year FY 22 appropriation. The proposed budget included a $364m increase over the FY 22 Continuing Resolution level and contained a request for $196.3m in support of non-HEAL opioid and pain research.
FY 21 Funding Overview

Non-HEAL Research

- Therapeutics and Medical Consequences, 10%
- Epidemiology, Services & Prevention Research, 32%
- Neuroscience & Behavior, 46%
- Clinical Trials Network, 4%
- Office of the Director, 9%

HEAL Research*

- Epidemiology, Services & Prevention Research, 45%
- Clinical Trials Network, 18%
- Therapeutics and Medical Consequences, 26%
- Neuroscience & Behavior, 6%
- Office of the Director, 5%

*Includes all NIDA HEAL projects regardless of funding source
New FOAs

Next-Gen Non-invasive Imaging [due Oct 2022]
• RFA-EB-22-001: Transformative Brain Non-invasive Imaging Technology Development [UG3/UH3]

Quantifying Behavior [due Feb 2023]
• RFA-MH-22-240: Brain Behavior Quantification and Synchronization [R61/R33]

Recent Reissues

Brain Circuits [due Sept 2022]
• RFA-NS-22-039: Team-Research BRAIN Circuit Programs [U19] (Basic Experimental Studies with Humans Required)
• RFA-NS-22-040: Team-Research BRAIN Circuit Programs [U19] (Clinical Trial Not Allowed)
• RFA-NS-22-041: Research Opportunities Using Invasive Neural Recording and Stimulating Technologies in the Human Brain [U01] (Basic Experimental Studies with Humans Required)
Adolescent Brain Cognitive Development Study

98.0 Percent Retained

Publications Using ABCD Data
N=386

As of September 2022
HEALthy Brain and Child Development Study

10 sites ready to begin pilot testing

http://hbcdstudy.org
National Data on Substance Use Among Adults Ages 19-30 and 35-50, 1988-2021

**MARIJUANA**
Trends in 12 Month Prevalence Among Ages 19-30 and 35-50

**CIGARETTES**
Trends in 12 Month Prevalence Among Ages 19-30 and 35-50

Cannabis Legalization and Detection of THC in Injured Drivers

CONCLUSIONS

The percentage of moderately injured drivers who had THC levels above the legal limit more than doubled after cannabis legalization in Canada.


Rates of Hospitalization for Cannabis Poisoning in Children 0 to 9 Years of Age in Four Canadian Provinces, 2015–2021

Significant increases in ED visits due to cannabis exposures among children after legalization of recreational cannabis.

Myran DT et al., JAMA Network Open 2022.
Intersection Between COVID-19 and Substance Use Disorders
# Drug Overdose Deaths* Continue to Increase

<table>
<thead>
<tr>
<th></th>
<th>ALL DRUGS</th>
<th>HEROIN</th>
<th>NAT &amp; SEMI SYNTHETIC</th>
<th>METHADONE</th>
<th>SYNTHETIC OPIOIDS (mainly illicit fentanyl)</th>
<th>COCAINE</th>
<th>OTHER PSYCHO-STIMULANTS (mainly meth)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3/2021</strong>*</td>
<td>99,567</td>
<td>12,733</td>
<td>14,061</td>
<td>3,893</td>
<td>63,389</td>
<td>20,780</td>
<td>27,435</td>
</tr>
<tr>
<td><strong>9/2021</strong></td>
<td>105,654</td>
<td>10,227</td>
<td>14,023</td>
<td>3,733</td>
<td>68,880</td>
<td>23,127</td>
<td>31,647</td>
</tr>
<tr>
<td><strong>3/2022</strong>*</td>
<td>109,247</td>
<td>8,328</td>
<td>13,376</td>
<td>3,527</td>
<td>73,473</td>
<td>25,959</td>
<td>33,994</td>
</tr>
<tr>
<td><strong>Percent Change 3/21–3/22</strong></td>
<td><strong>9.7%</strong></td>
<td><strong>-34.6%</strong></td>
<td><strong>-4.9%</strong></td>
<td><strong>-9.4%</strong></td>
<td><strong>15.9%</strong></td>
<td><strong>24.9%</strong></td>
<td><strong>23.9%</strong></td>
</tr>
</tbody>
</table>

*NCHS Provisional drug-involved overdose death counts are PREDICTED VALUES, 12 months ending in select months.

Overdoses Before and During the COVID-19 Pandemic

Men aged 15-34

Women aged 15-34

Men aged 35-64

Women aged 35-64

NH: non-Hispanic.
AIAN: American Indian/Alaska Native.

Han et al., unpublished
Mortality from Alcohol and Drugs Increased Sharply in Pregnant Women Between 2015 and 2019

Jeffrey et al., JAMA326, no. 16 (2021): 1631–33

Data sources: National mortality and birth data. Pregnancy-associated death is defined as a maternal death attributable to a condition unaffected by the pregnancy per se and occurs while pregnant or within 12 months end of pregnancy.
Reduced Risk Overdose in Pregnant Women Given Medications for OUD

Reduced Risk

- 57% at 10 weeks of MOUD
- 82% at 20 weeks of MOUD
- 92% at 30 weeks of MOUD
- 97% at 40 weeks of MOUD

Characteristics Of Drug Overdose Deaths, Overall and By Race and Hispanic Origin — 25 States and The District Of Columbia, 2019–2020

Enhancing the National Drug Abuse Treatment Clinical Trials Network to Address Opioids: Expand research conducted by NIDA CTN to address emergent needs presented by the opioid crisis.

Justice Community Opioid Innovation Network Study: Quality care for OUD in justice populations. Help create partnerships between local and state justice systems and community-based treatment providers.

HEALing Communities Study: Investigating coordinated approaches for deploying evidence-based strategies to prevent and treat OUD in 67 communities in 4 states.
HEAL Harm Reduction Approaches to Reduce Overdose Deaths

Harm reduction approaches connect people who use drugs with services and resources they need (i.e., naloxone, SEP, fentanyl test strips). Research is to identify ways to enhance access and to measure effectiveness. Program will establish:

1) National network of research projects to improve effectiveness, implementation, and impact of existing and new harm reduction policies and practices, to be done in real-world settings with a diverse range of stakeholders to ensure strategies are sustainable and scalable.

2) Coordinating center to support the research projects by streamlining communication, supporting data needs, engaging community stakeholders, and translation of findings for use.

HEAL Recovery Research Networks

Recovery support services provide a variety of non-clinical services over the long-term to address loss of jobs, homes, relationships, or the effects of justice system involvement, but their effectiveness has not been adequately studied. Program will establish:

1) Multi-stakeholder networks (researchers, payors, providers, people in recovery) to build infrastructure to set research agendas; build tools, methods, and relationships; and train researchers. Will address peer recovery support, recovery community centers, active recovery communities, continuing care, or integrated networks. Support to prepare for clinical trials testing specific services.

2) Consortium on Addiction Recovery Science (CoARS), to coordinate cross-project activities
NIDA Division of Therapeutics and Medical Consequences Funding Opportunity Announcements


- Development of Medications to Prevent and Treat Opioid and/or Stimulant Use Disorders and OD (UG3/UH3 - Clinical Trial Optional; 3M direct q/y up to 5y)  [https://grants.nih.gov/grants/guide/pa-files/PAR-22-200.html](https://grants.nih.gov/grants/guide/pa-files/PAR-22-200.html)


- Device-Based Treatments for SUD (UG3/UH3, Clinical Trial Optional; 500k UG3 phase; no limit UH3)  [https://grants.nih.gov/grants/guide/pa-files/par-20-279.html](https://grants.nih.gov/grants/guide/pa-files/par-20-279.html)


For questions or additional information, please contact Dr. Ivan Montoya, Acting Director DTMC, at imontoya@nih.gov
Alternative Outcomes for Medication Development

*Reducing Craving Reduces Relapse Risk*

Significant prospective association of craving with drug use/relapse was found (OR, 2.05; 95% CI, 1.94-2.15)

Use of craving as a measurable variable to estimate risk of drug use/relapse across clinical settings and to serve as an outcome variable to evaluate medication for SUD.

*Vafaie N et al., JAMA Psychiatry 2022*
HIV Avenir Research

Jacqueline Linnes, PhD, Purdue University
Towards Acute HIV Infection Detection at the Point-of-Use

Ian Holloway, PhD, University of California, Los Angeles
uTECH: ML for HIV Prevention Among Men Who Have Sex With Men Who Use Substances

Gregg Gonsalves, PhD, Yale University
An Adaptive Approach to Active Surveillance for HIV (and SARS-CoV2)

Annick Bórquez, PhD, University of California, San Diego
Predicting drug-related epidemics in US

Brandon Marshall, PhD, Brown University
Agent-based modeling to estimate impact Of SSP on HIV transmission among PWID
NIDA Racial Equity Initiative Status Update

- The workplace workgroup mission will fall under the Racial and Ethnic Equity Plan (REEP) that all ICs are establishing as part of the UNITE initiative. Results from the second NIDA Climate Survey were presented to NIDA staff yesterday.

- **New** NIDA, NIMH, NINR, and NINDS Research Opportunities for New and "At-Risk" Investigators to Promote Workforce Diversity [PAR-22-181](#)

- Coordinated suite of [FOAs](#) have been released focused on:
  - Community-engaged research projects
  - HIV and substance use
  - Neurocognitive mechanisms of structural racism
  - Racial Equity Visionary Award Program
  - Coordinating Center

- RFI and listening session feedback are being synthesized to inform REI Action Plan

- [Virtual Meeting on the Neurocognitive Mechanisms of Structural Racism](#) held in May
  - Attended by more than 900 neuroscientists and psychiatrists
  - Interdisciplinary speakers explored how to be anti-racist as neuroscientists
NACDA Future of MERIT Awards Workgroup

**Charge:**
The working group will review the current criteria for the award and consider if changes are needed, if the criteria should remain the same, or if the MERIT award should be discontinued. Suggestions on the future of the award will be presented to the NACDA for consideration.

**Working Group Members:**
Sara Becker – Northwestern  
Debra Furr-Holden – NYU  
Brandon Henderson – Marshall University  
Paul Kenny (NACDA member) – Mount Sinai  
Melissa Walls (NACDA member) – Johns Hopkins University  
Sharon Walsh (NACDA member) – University of Kentucky
National Institutes of Health (NIH)/National Institute on Drug Abuse (NIDA) and Food and Drug Administration (FDA)/Center for Devices and Radiological Health (CDRH) Public Workshop: Diagnostic and Monitoring Medical Devices for Opioid Use

November 7, 2022 | 10:00 a.m. – 4:30 p.m. EST

Natcher Conference Center, Building 45
NIH Campus, Bethesda, MD

Welcome

Welcome to the Public Workshop: Diagnostic and Monitoring Medical Devices for Opioid Use, sponsored by the National Institute on Drug Abuse and the Food and Drug Administration. This is a hybrid Workshop. This is a hybrid Workshop to be held on November 7th. In-person attendance will be at the Natcher Auditorium on the National Institutes of Health main campus, and virtual attendance will be via the Zoom Meeting platform.

A second virtual workshop will be held on November 8th:

Food and Drug Administration (FDA)/Center for Devices and Radiological Health (CDRH) and National Institutes of Health (NIH)/National Institute on Drug Abuse (NIDA)
Public Workshop:
Risk Prediction Devices of Opioid Use and Opioid Use Disorder (OUD)- Opportunities and Challenges
November 8, 2022: 10 a.m. – 4 p.m. EST
Virtual Meeting

NIH National Institute on Drug Abuse
Advancing Addiction Science

FDA U.S. FOOD & DRUG ADMINISTRATION
Thank you!