

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

September 5, 2019

Nora D. Volkow, M.D., Director



National Institute
on Drug Abuse



@NIDAnews

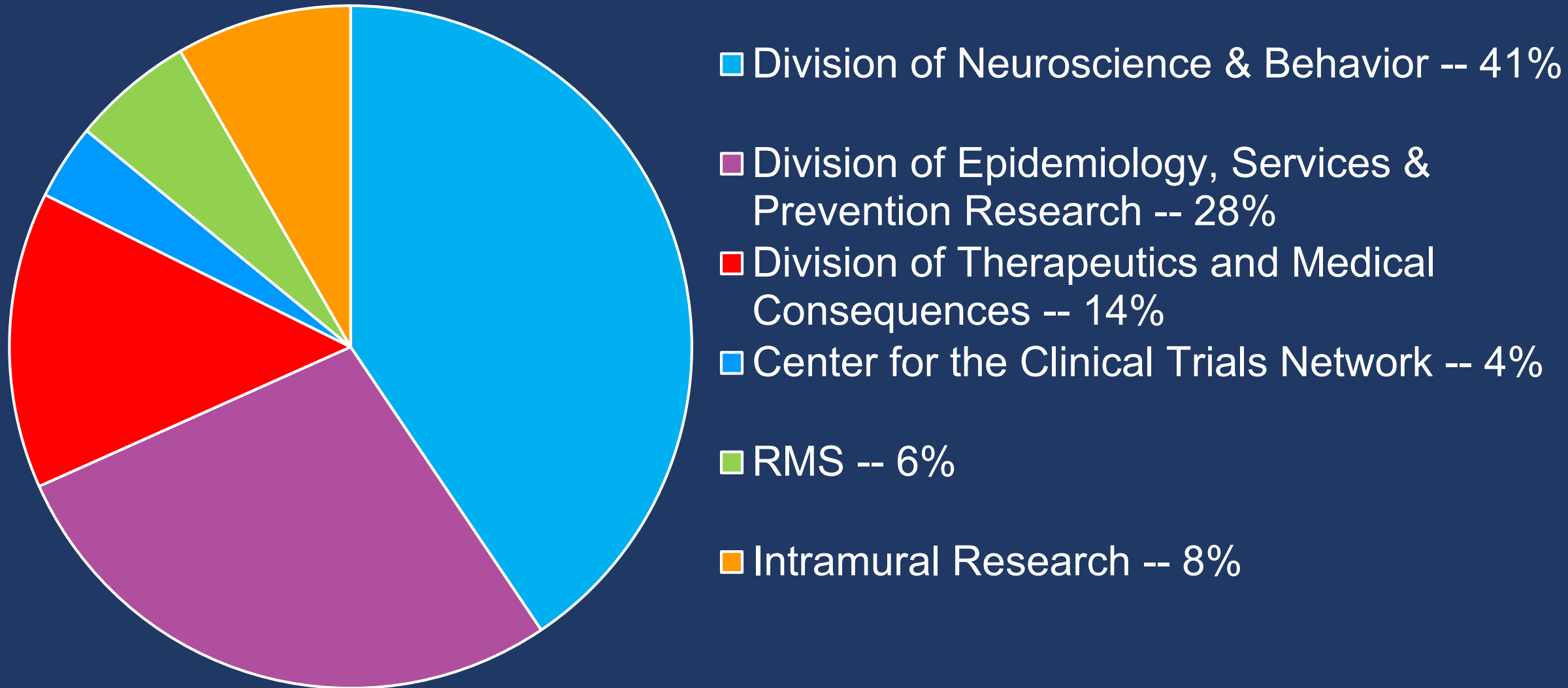
NIDA BUDGET

	FY 2018 Actuals	FY 2019 Enacted	FY 2020 PB
NonAIDS	\$854,609,000	\$893,402,000	
AIDS	\$269,765,000	\$264,814,000	
Total	\$1,124,374,000	\$1,158,216,000	\$796,379,000
HEAL	\$250,000,000	\$250,000,000	\$250,000,000

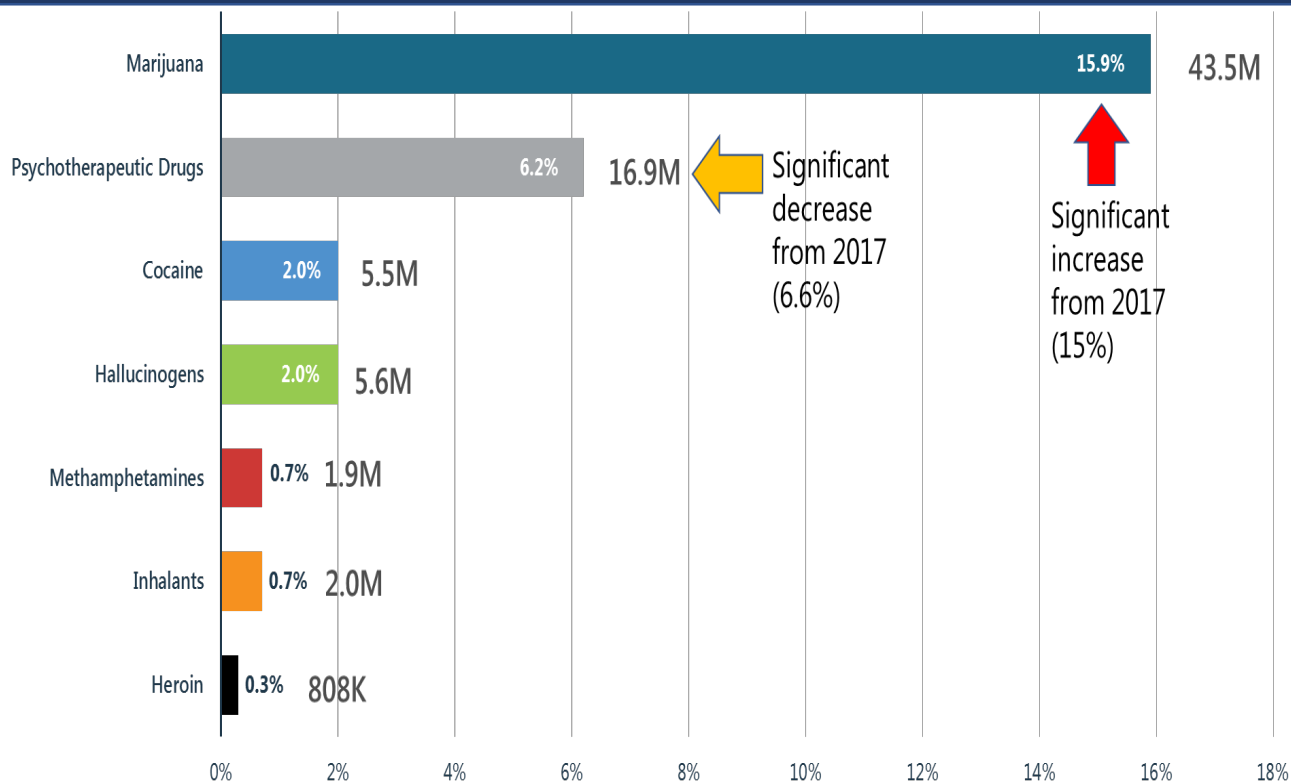
National Institute on Drug Abuse Portfolio

Annual Appropriation

FY 2018 Actual

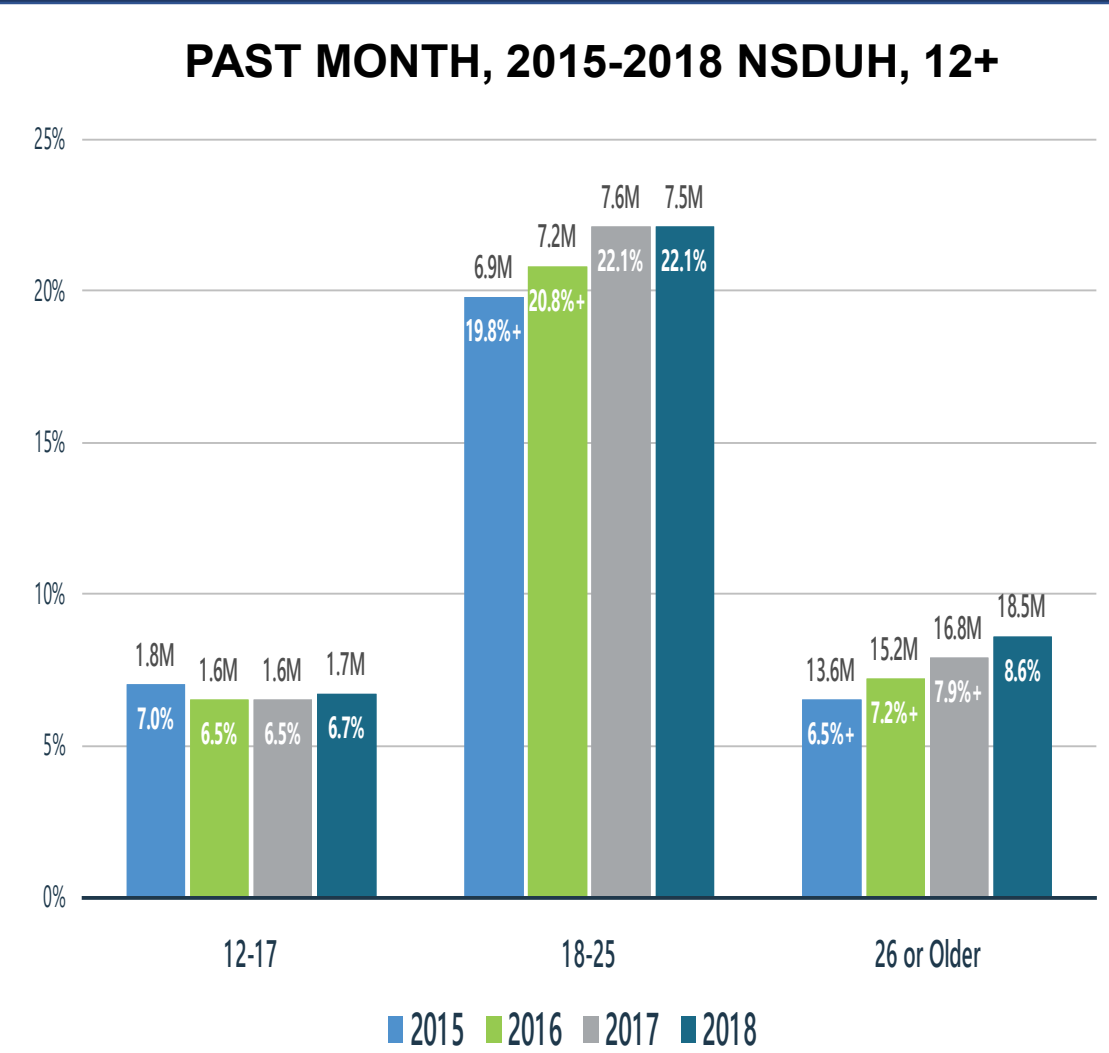


Illicit Drug Use

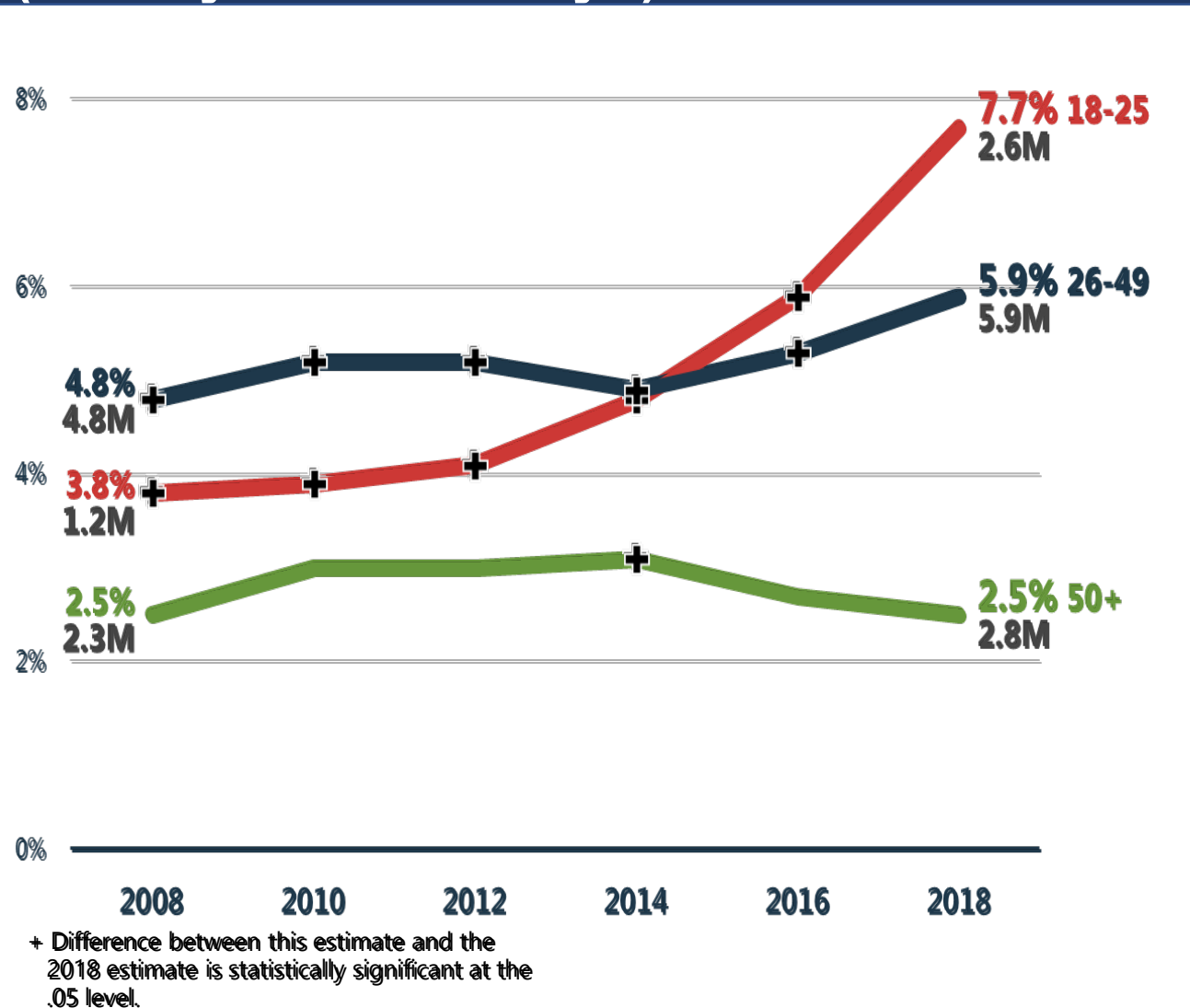


**PAST YEAR, 2018 NSDUH, 12+
SAMHSA**

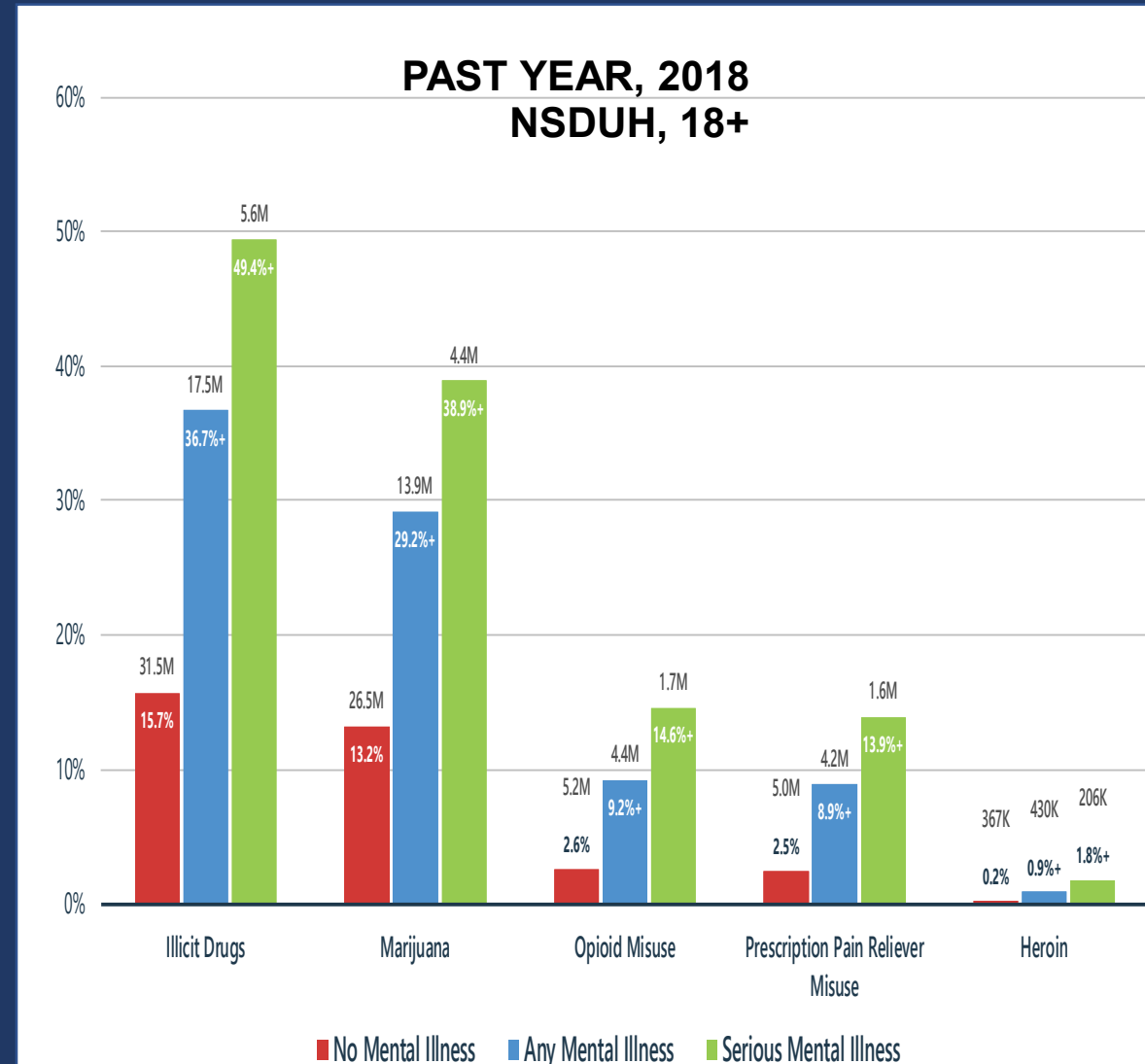
Marijuana Use Increasing



Serious Mental Illness in Adults (18-25 yo and 26-49 yo)

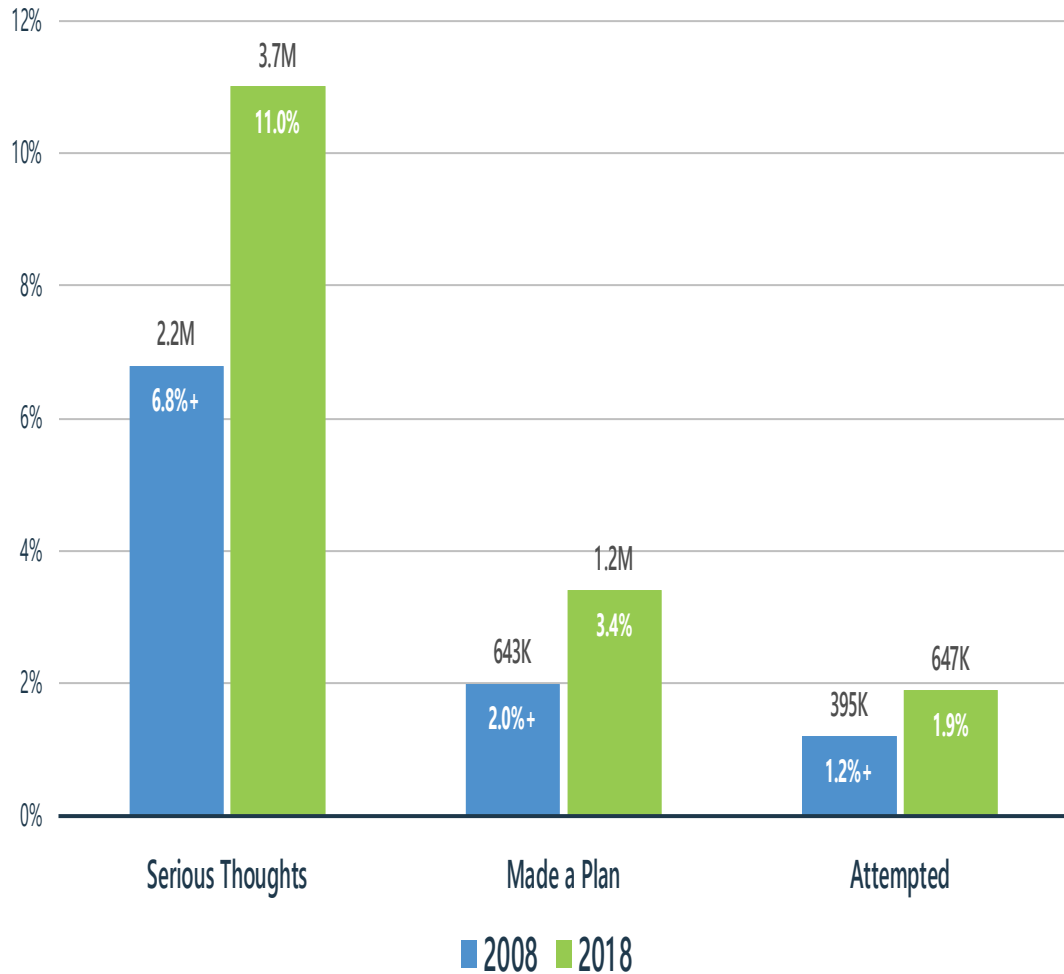


Substance Use Is More Frequent among the Mentally Ill



Suicidal Thoughts, Plans, and Attempts Increase for Young Adults (18-25 y.o)

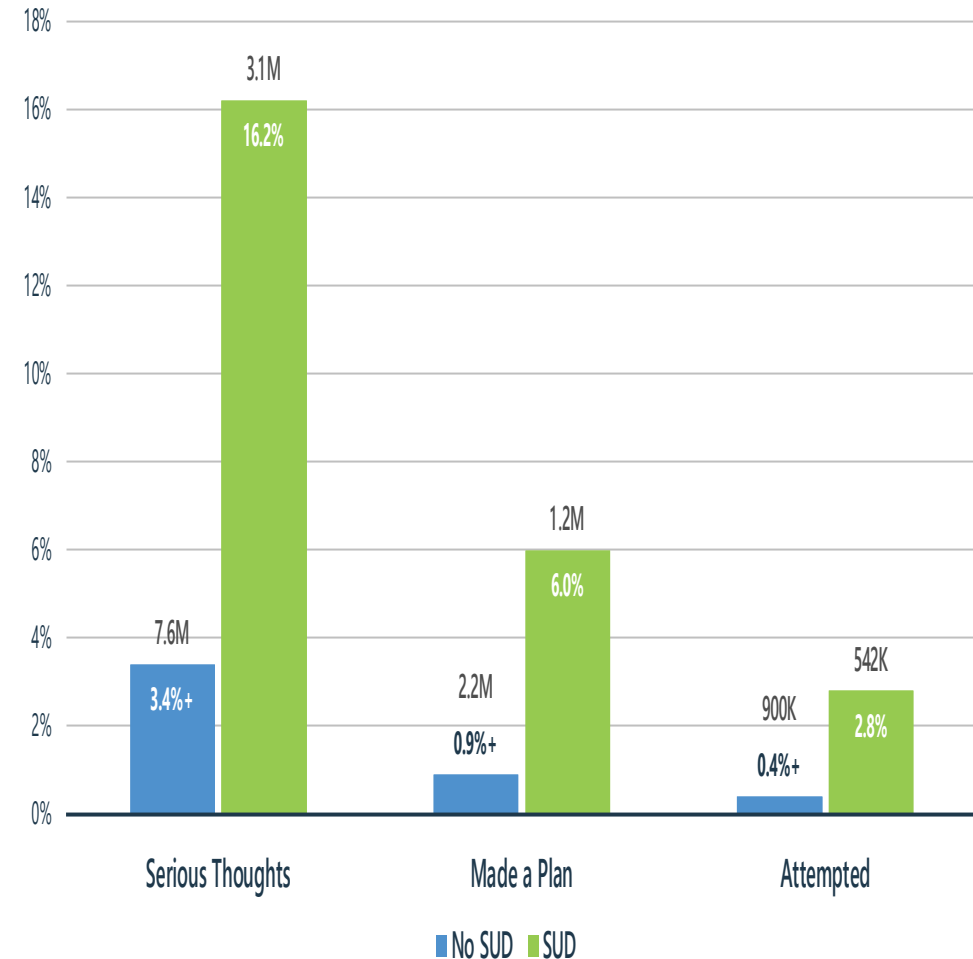
PAST YEAR, 2008 and 2018 NSDUH, 18-25



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

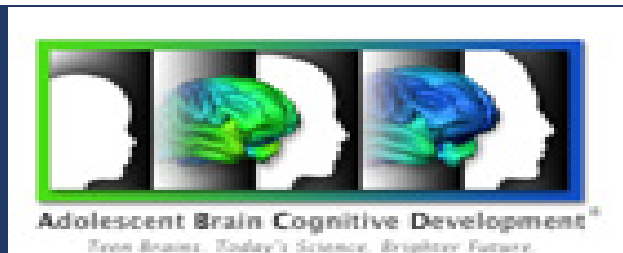
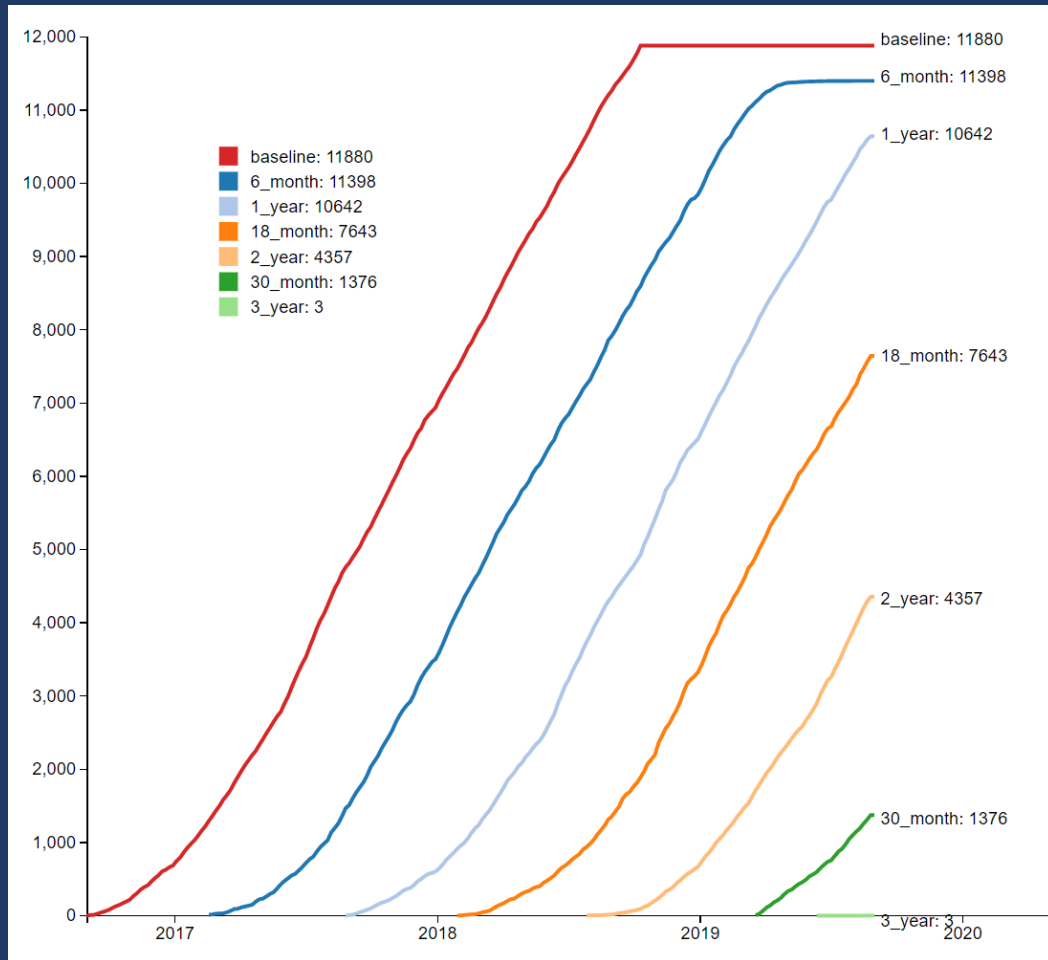
Co-Occurring SUD is Associated with Suicidal Thoughts, Plans, and Attempts among Adults >18 y.o.

PAST YEAR, 2018 NSDUH, 18+

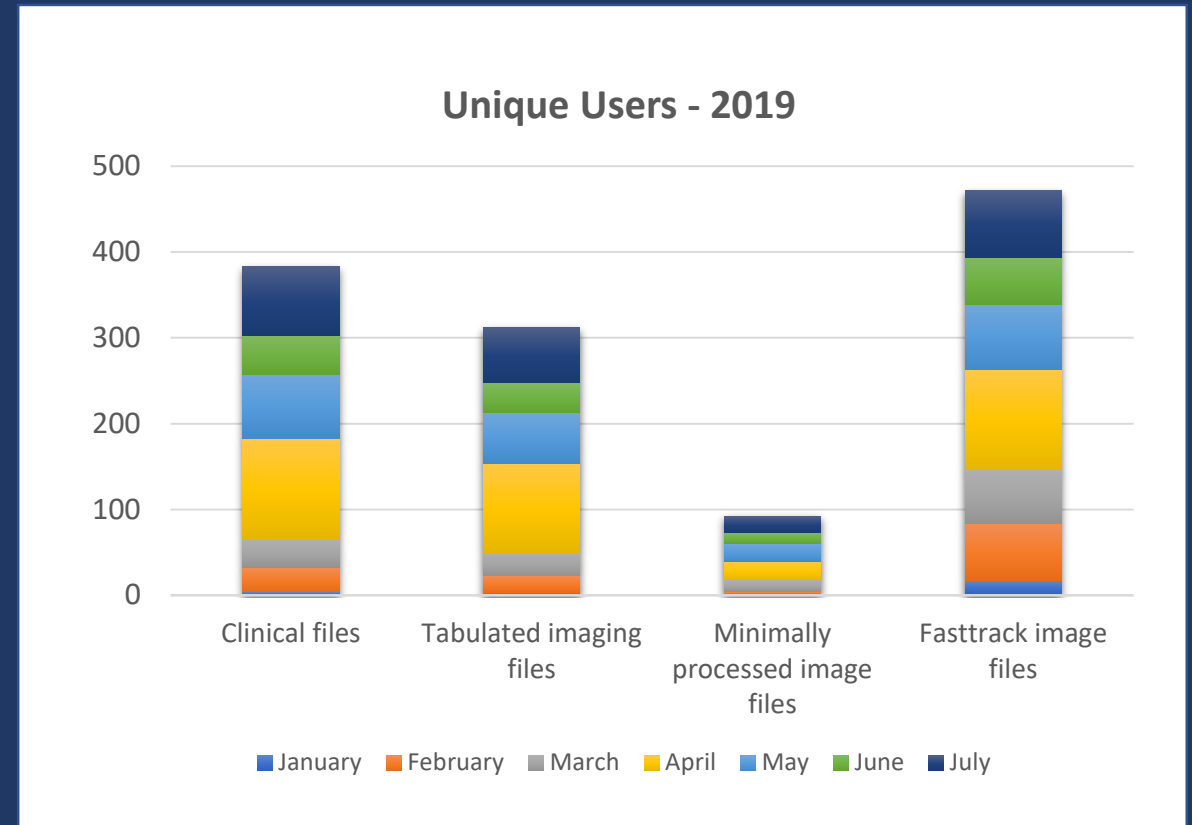


+ Difference between this estimate and the estimate for adults with SUD is statistically significant at the .05 level.

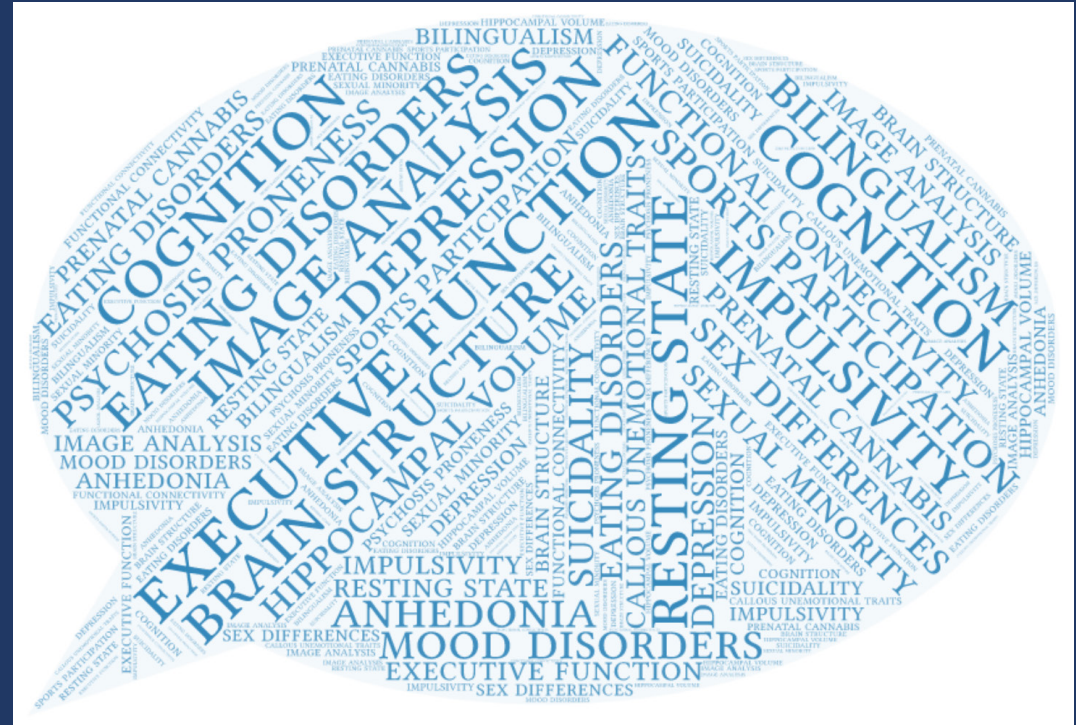
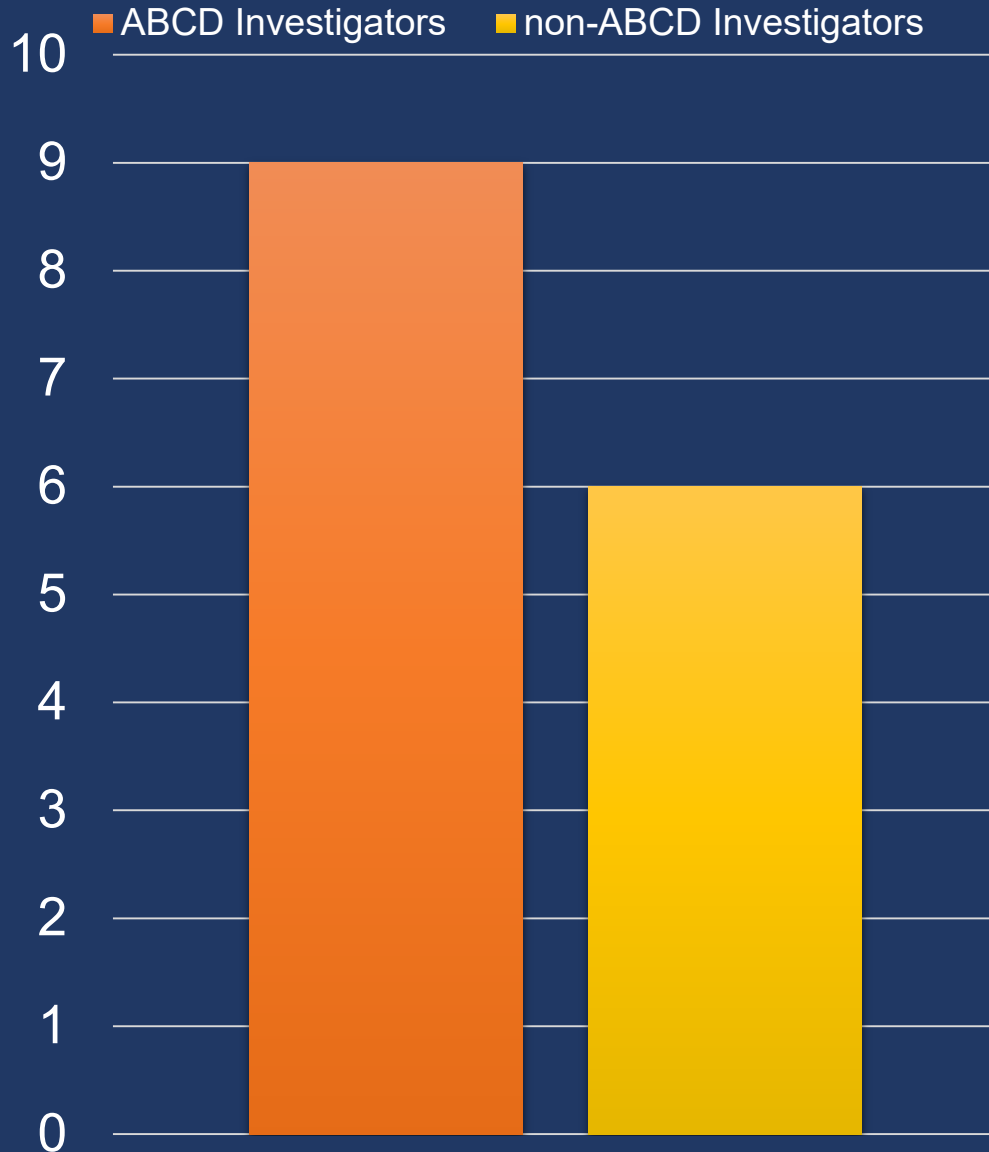
Adolescent Brain Cognitive Development (ABCD) Study



Full Baseline Curated Data Released April 2019
ABCD Data Release 2.0.1 available now



Publications Using ABCD Data



**Society for Neuroscience (SfN) Satellite:
Diving DEAP into ABCD Study Data - October
19, 2019 @ 6:30-9:30pm**

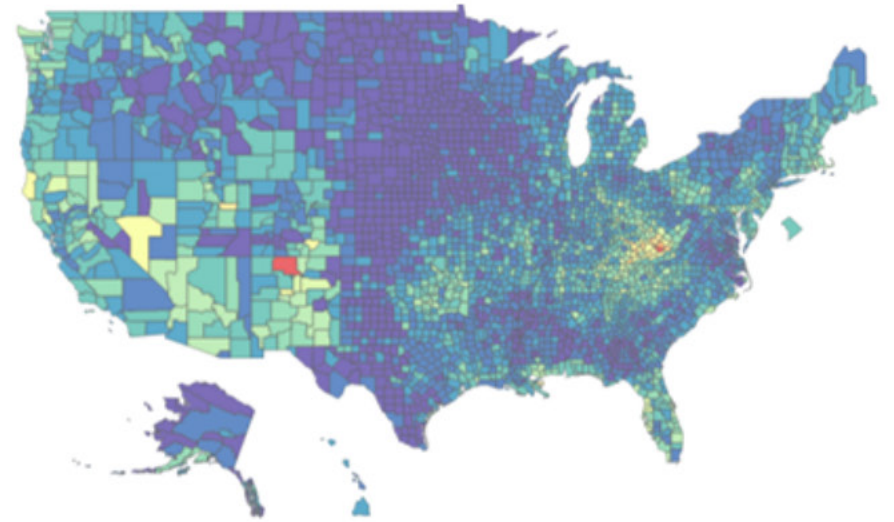
Register by emailing AdolescentBrain@nih.gov

THE CRISIS: NATIONAL OVERDOSE DEATH RATES

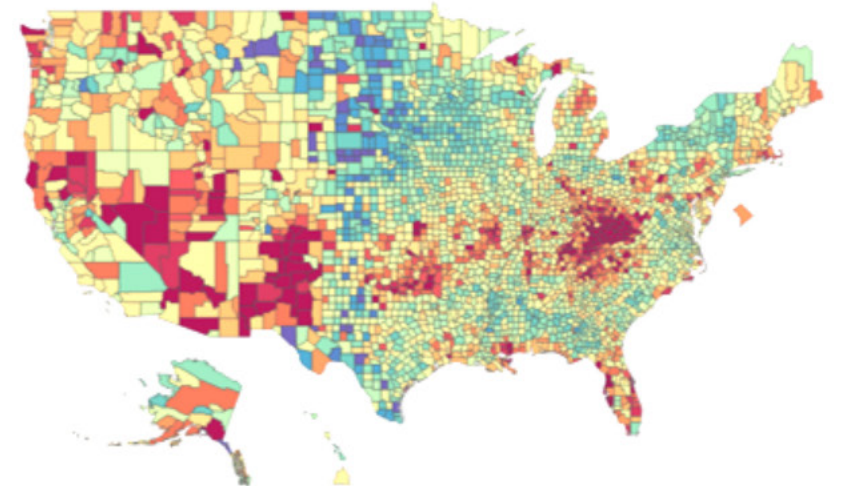
IN 2017, THERE WERE
70,237 OVERDOSE
DEATHS (9.6% HIGHER
THAN 2016)

388 opioid overdose deaths in **Oklahoma**
(10.2 per 100,000, vs 14.6 nationally).

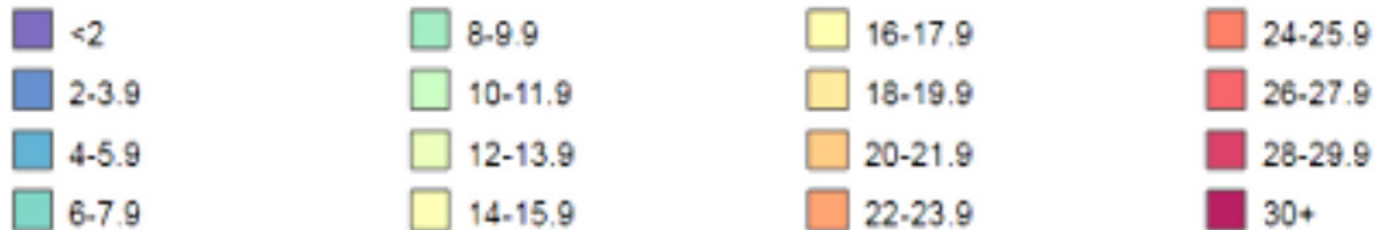
1999



2016

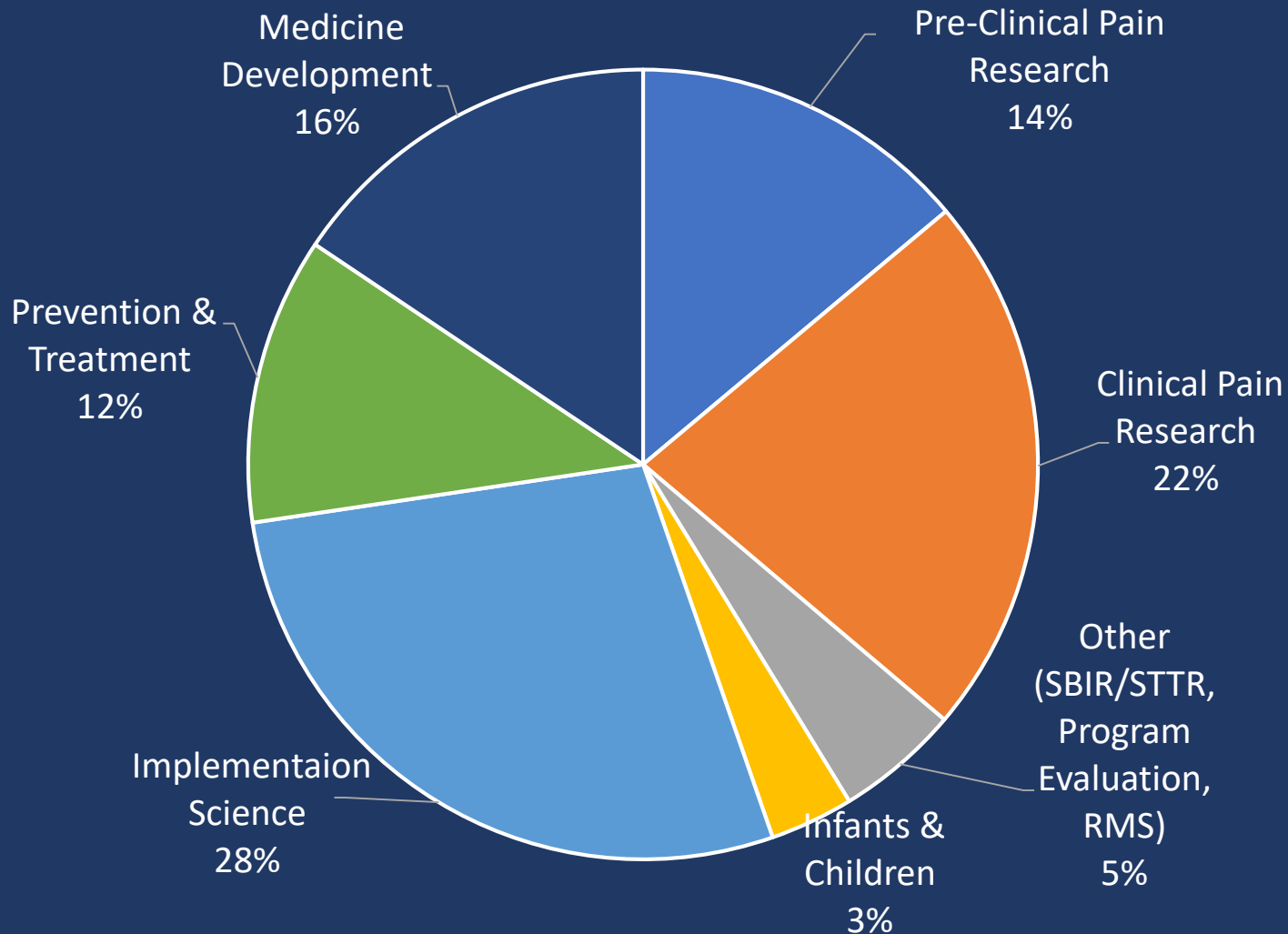


Legend for estimated age-adjusted death rate (per 100,000 population)



HEAL Focus Areas

FY 19 Tentative Spending Plan



FY 2019 total: ~\$930M

- HEAL launched in FY 2018 with funds for 2018-19
- OD invited all the ICs to propose plans for HEAL
- OD set overall research priorities
- RFAs released and reviewed in approved areas
- Presentations/discussion MDWG
- Final decisions by Executive Committee/Dr. Collins

CTN Node Expansion—June 2019



RFA-DA-19-008

- To enhance the CTN's scientific and clinical research capacities
- To expand to regions highly impacted by the opioid epidemic



Appalachian Node – Univ. of Pittsburgh & WV Univ.
Jane Liebschutz, M.D., Ph.D.
Judith Feinberg, M.D.

Great Lakes Node – Rush University
Niranjan Karnik, M.D., Ph.D.
Mark Pollack, M.D.

Greater Intermountain Node – Univ. of Utah
Adam Joseph Gordon, M.D.
Gerald Cochran, M.S.W., Ph.D.

Greater Southern California Node – UCLA
Yih-Ing Hser, Ph.D.
Larissa Mooney, M.D.

Southwest Node – Univ. of New Mexico
Kimberly Page, Ph.D., M.P.H., M.S.

CTN HEAL Proposed Studies (tentative)

Large, Multi-Site OUD Studies

1. Optimizing Retention, Duration and Discontinuation for MOUD Subthreshold OUD Trial
2. Emergency Department-Initiated Buprenorphine (ED-INNOVATION)
3. Medication Treatment for OUD Expecting Mothers (MOMS)
4. Rural Expansion of Medications for OUD
5. Hospital Initiation of MOUD
6. Rapid Initiation of ER-Naltrexone

Closing Treatment Gap

1. OUD Research Infrastructure Initiative (DC)
2. Culturally Centered MOUD in AI/AN
3. Development of a Pharmacy-based PDMP Risk Assessment Tool
4. Peer recovery Support: A Bridge to Treatment for Overdose Survivors
5. Survey of pharmacists and stakeholders for OUD interventions

Expansion Existing Studies

1. Economic Study of ED-Initiated Buprenorphine

Database Studies

1. Predictive Modeling of OUD Tx Responses (CTN Datasets)
2. Examine Patient Characteristics Associated with Buprenorphine Termination (VA Databases)
3. Compare Outcomes in Residential and Outpatient (Medicaid Databases)
4. Impact of Drug-focused Twelve Step Mutual Help Groups (VA Databases)

JCOIN

Individuals in the justice system (JS) with SUD should have access to evidence-based treatment

- Resource for researchers and practitioners
- Develop network of researchers and practitioners across JS to conduct research in JS
- Speed science-to-practice translation

9-12 Hubs

Each = Large Scale Project in 5+ Communities

Cascade of Care Focus

Must have a Justice & Treatment Partner

Diversity of Justice Setting, Geography, and Intervention

Novel Studies

STATE POLICY ROLLOUTS

LEVERAGING TECHNOLOGY

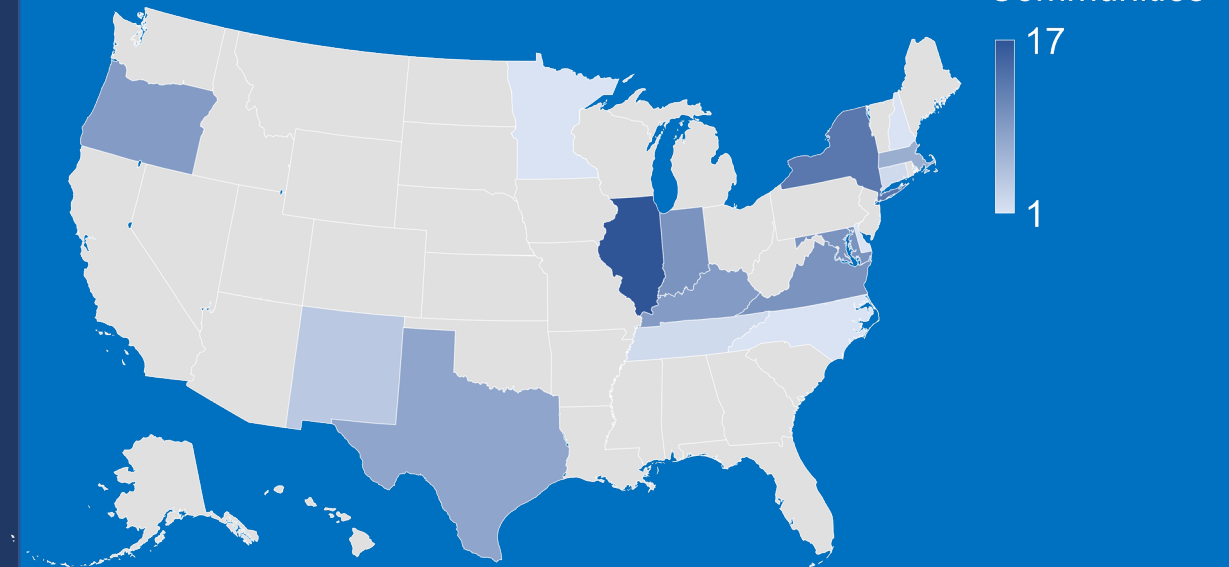
PEER NAVIGATION SUPPORT

INTER ORGANIZATIONAL LINKAGES

MOUD COMPARATIVE

EFFECTIVENESS

Communities



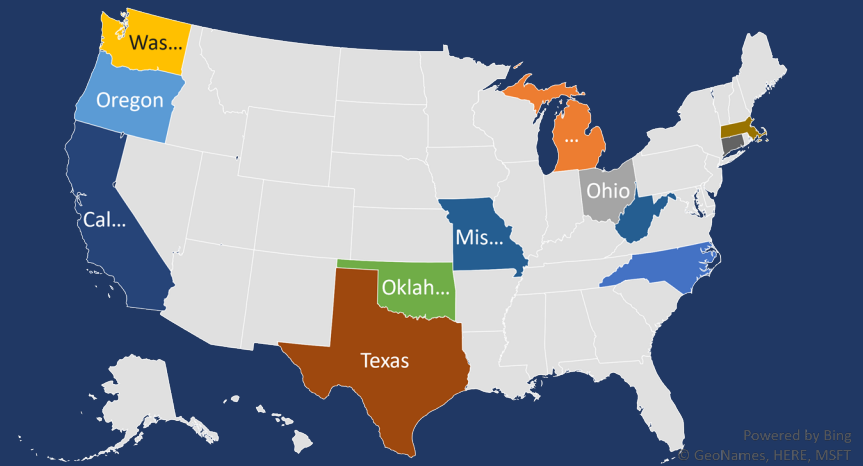
Coordination and Translation Center:

George Mason University

Methodology and Advanced Analytics Resource Center:

University of Chicago

Preventing Opioid Use Disorder in Older Adolescents and Young Adults (ages 16-30)



Vulnerable Populations

- AI/AN – Urban
- AI/AN - Rural
- Homeless youth –
- Child welfare involved families –
- Construction workers

Healthcare Systems

- ED screen and brief intervention by remote health coach
- Video game intervention delivered through school based health centers
- Treatment for psychopathology and SUD on development of OUD
- Evaluate WV state opiate prescribing policy changes on prescribing practices

Justice Settings

- Caring adult relational intervention for youth transitioning out of detention
- Adolescent Community Reinforcement Approach with Assertive Community Care for justice involved youth

Healthy Brain and Child Development (HBCD) Study

Large multi-site longitudinal study to examine brain, cognitive, **behavioral**, social and emotional development beginning prenatally and extending through childhood. Oversample for prenatal opioid exposure

Focus Areas for Reviewing Planning Grants (Phase I)

Legal and Ethical Issues

- State laws
- Mandatory reporting
- Access to treatment/care
- Privacy
- Recruitment & Retention

Recruitment & Retention

- Sampling strategies
- Assessment intervals
- Diverse population representation
- Retention of high risk participants

Imaging Technologies

- Movement corrections
- Fetal imaging capabilities
- fNIRS/EEG
- MRI
- Accessibility to imaging facility

Other Assessment Methodologies

- Social emotional assessments
- Environmental exposures
- Biospecimens
- Technology based, i.e., wearables



NIDA

NIMH

NIAAA

NICHD

NINDS

NIEHS

NIMHD

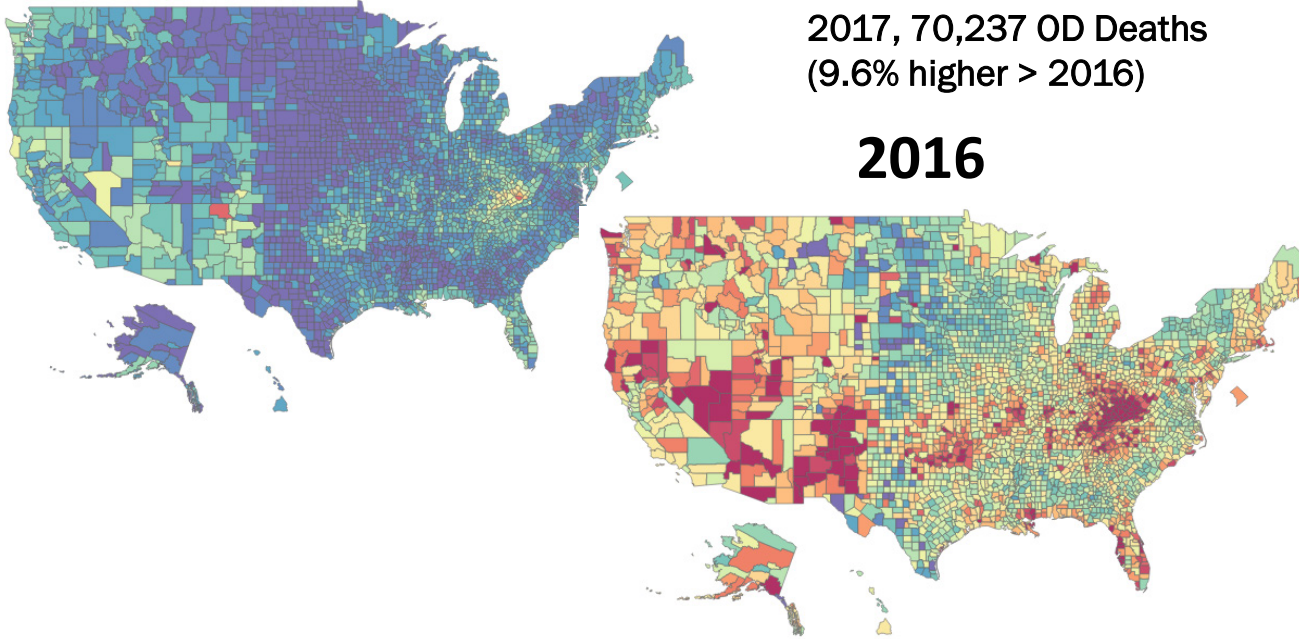
OBSSR

ORWH

OD/ECHO

US Opioid Epidemic has Increased Overdose Deaths and Prevalence of PWID

1999 Overdose Deaths

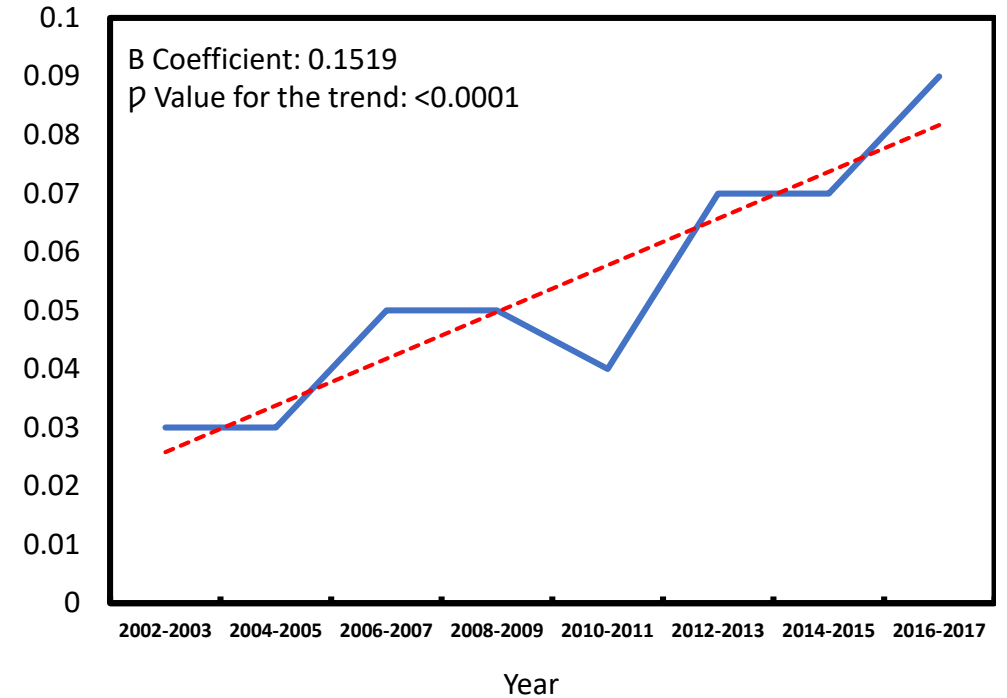


Legend for estimated age-adjusted death rate (per 100,000 population)



Prevalence of IDU in US has increased in past 15 years

Heroin IDU in US (12 or older, past-month use)



HIV Can Spread Rapidly Among People Who Inject Drugs

U.S. counties vulnerable to rapid spread of IDU-associated HIV

220 counties in 26 states

Van Handel et al., J Acquir Immune Defic Syndr. 2016

King County, WA.
27 HIV cases from
IDU in **2018**. (286%
from 2017)

Scott County, IN
215 HIV cases from
IDU in 2014-2015

Cabell County WV,
76 HIV Cases from
IDU in **2019**

Lowell and Lawrence, MA, 129
HIV cases in IDU from **2015-2018**
(2012-2014, entire Mass had 123
IDU cases).

Multnomah County, OR.
42 HIV cases mostly
IDU in **2018-2019**.
(200% increased from
2016-2017)

Philadelphia, PA, 59
HIV Cases from IDU
in **2018** (60%
increase from 2016)

Northern KY, 280%
increase in HIV cases
from IDU in **2017**



Estimates of HIV increases in IDU are from
local newspapers (search Volkow et al., 2019)

New NIDA HIV/AIDS Initiatives

Advancing Exceptional Research on HIV/AIDS and Substance Abuse
(Clinical Trial Optional) RFA-DA-18-022 (R01) Application Due Date: 8/21/20

Leveraging Big Data Science to Elucidate the Mechanisms of HIV Activity and Interaction with SUD (Clinical Trials Not Allowed) RFA-DA-20-008 (R01)/ RFA-DA-20-009 (R21) Application Due Date: 11/14/19

Avenir Award Program for Research on SUD and HIV/AIDS RFA-DA-18-004 (DP2) Application Due Date: 11/13/19

PrEP for HIV Prevention among SUD Populations (Clinical Trial Optional)
RFA-DA-20-013 (R01) Application Due Date: 11/8/19

Single Cell Opioid Responses in the Context of HIV (SCORCH) Program CNS Data Generation (Clinical Trial Not Allowed) RFA-DA-19-037 (UM1)
Application Due Date: 10/8/19

2019 NIDA-DNB PECASE Awardees Presidential Early Career Award for Scientists and Engineers



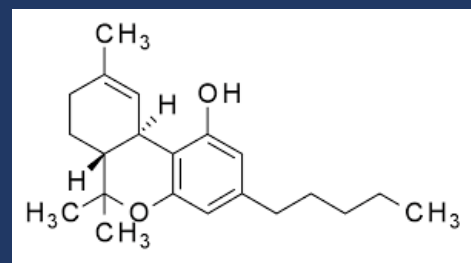
Amy Janes, Ph.D.
Harvard Medical School

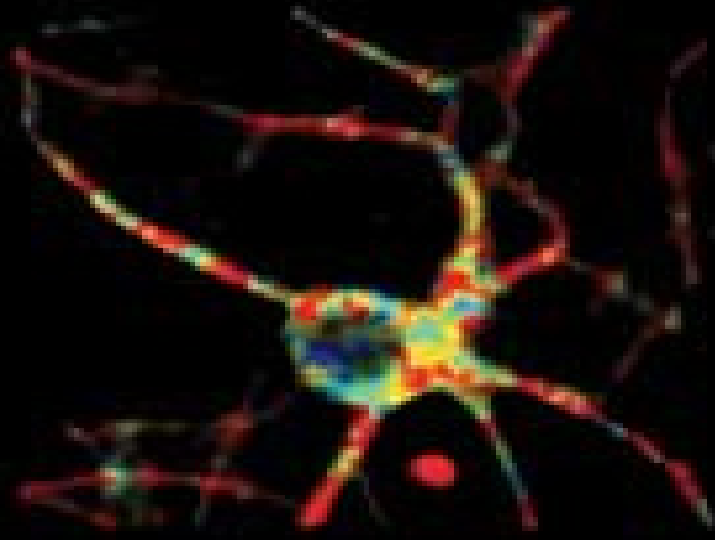


Donna Calu, Ph.D.
University of Maryland



Ian Maze, Ph.D.
Mt Sinai





FRONTIERS IN ADDICTION RESEARCH

**NIDA-NIAAA SfN Mini-
Convention, October 18**

Jacob P. Waletzky Memorial Award Recipient Keynote Lecture
Early Career Investigator Showcase [ECIS] presentations

Scientific sessions:

- 1) Sensing New Opportunities for Addiction Neuroscience
- 2) Novel Technologies & Approaches for Translational Research Targeting SUD
- 3) Rewriting Genes by CRISPR for SUD and Psychiatric Disorder Research