

Drug Addiction and Overdose in Indian Country: *Concerns and Solutions*

Wilson M. Compton, M.D., M.P.E.

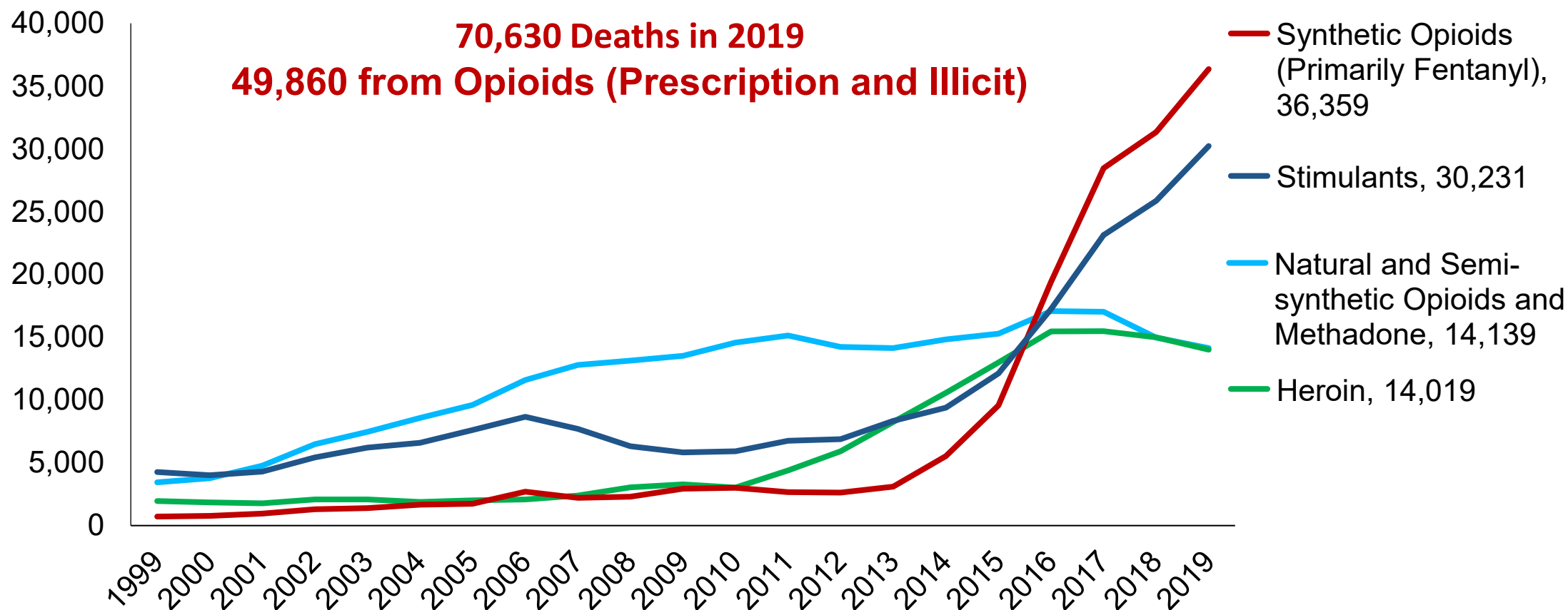
Deputy Director

National Institute on Drug Abuse



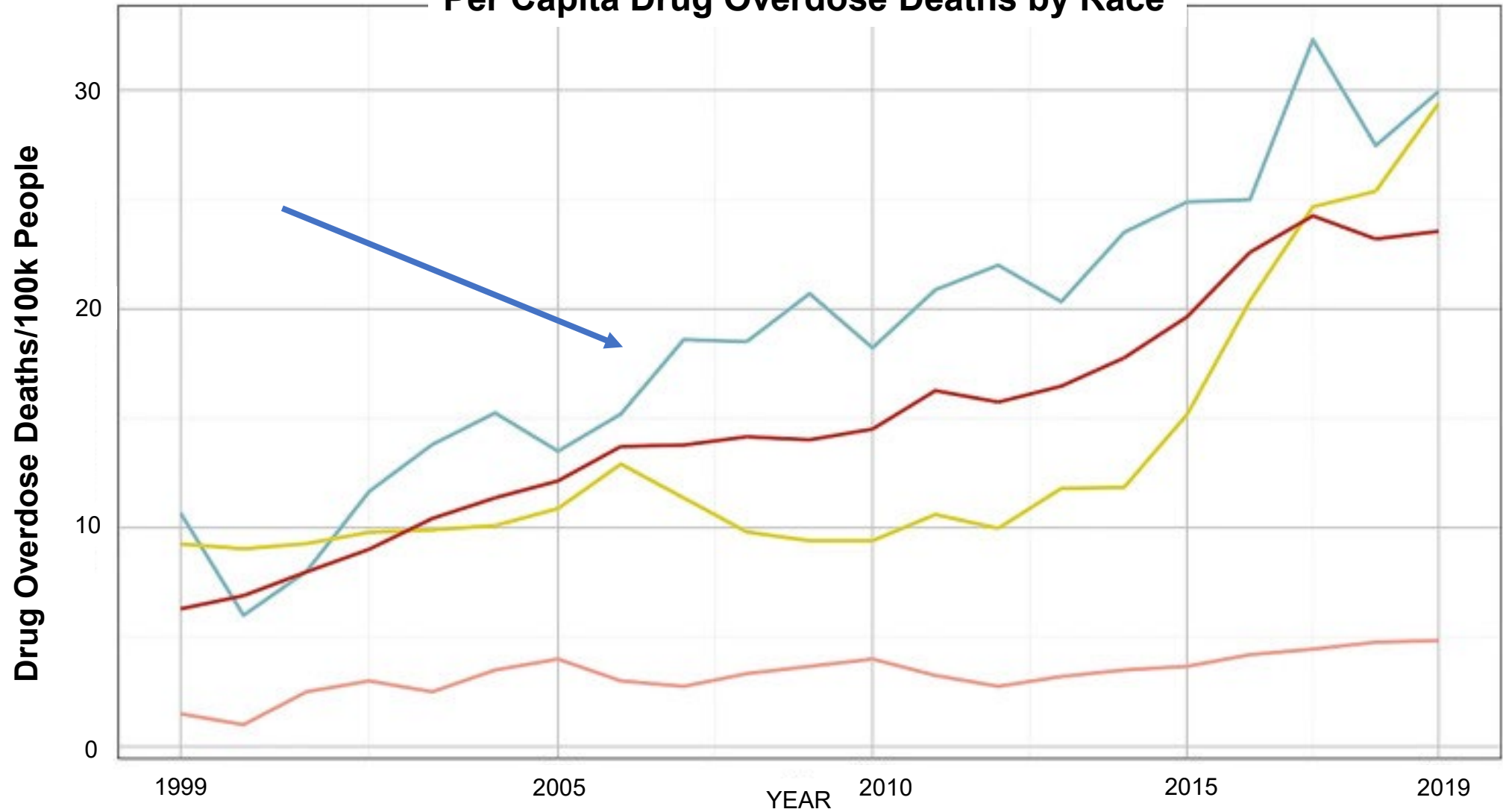
Evolution of Drivers of Overdose Deaths, All Ages

Analgesics → Heroin → Fentanyl → Stimulants



Source: The Multiple Cause of Death data are produced by the Division of Vital Statistics, National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), United States Department of Health and Human Services (US DHHS).

Per Capita Drug Overdose Deaths by Race



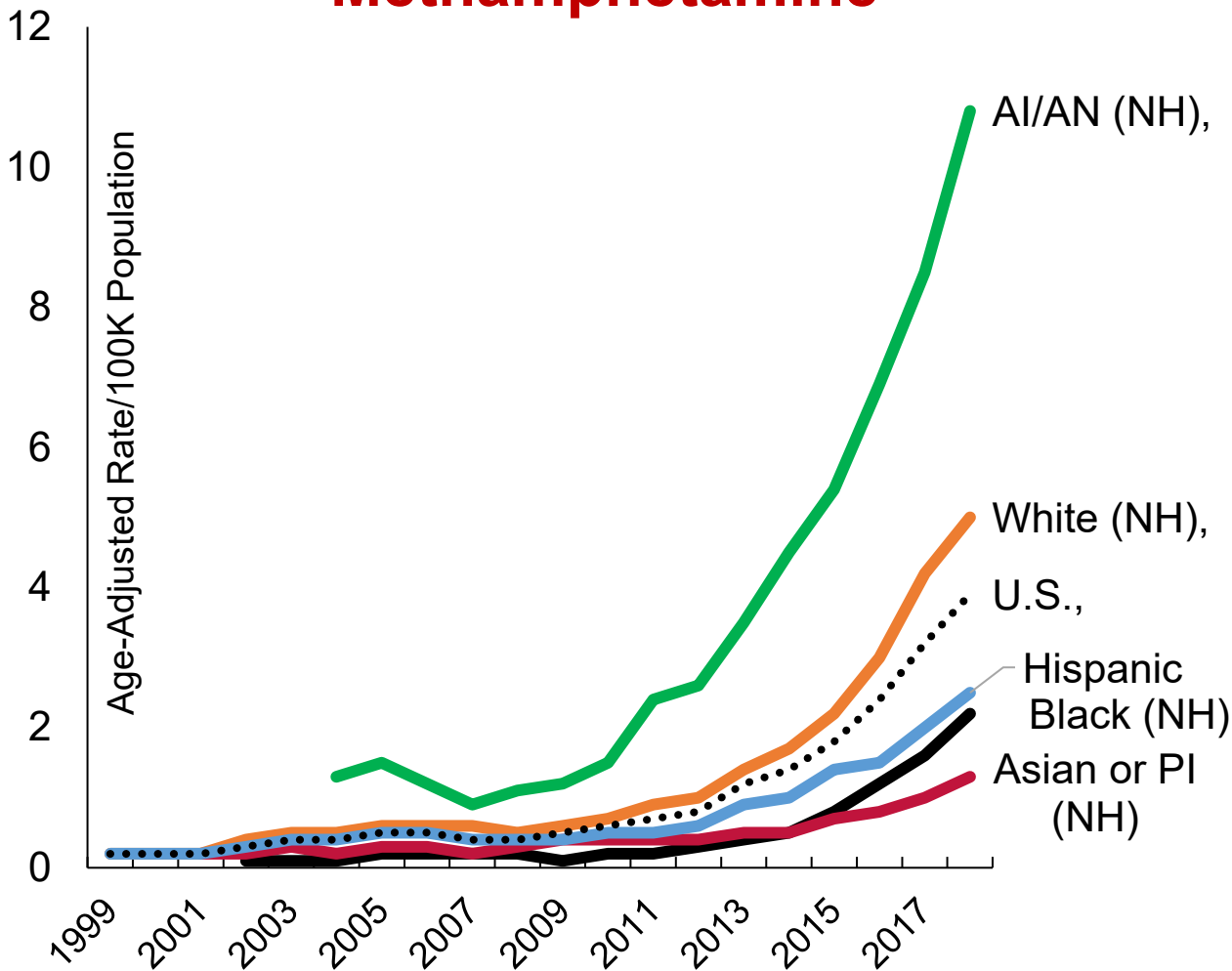
RACE — American Indian or Alaska Native — Asian or Pacific Islander — Black or African American — White

CDC Wonder Online Database (2020) Multiple Cause of Death Files, 1999–2019, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. [\[Ref list\]](#)

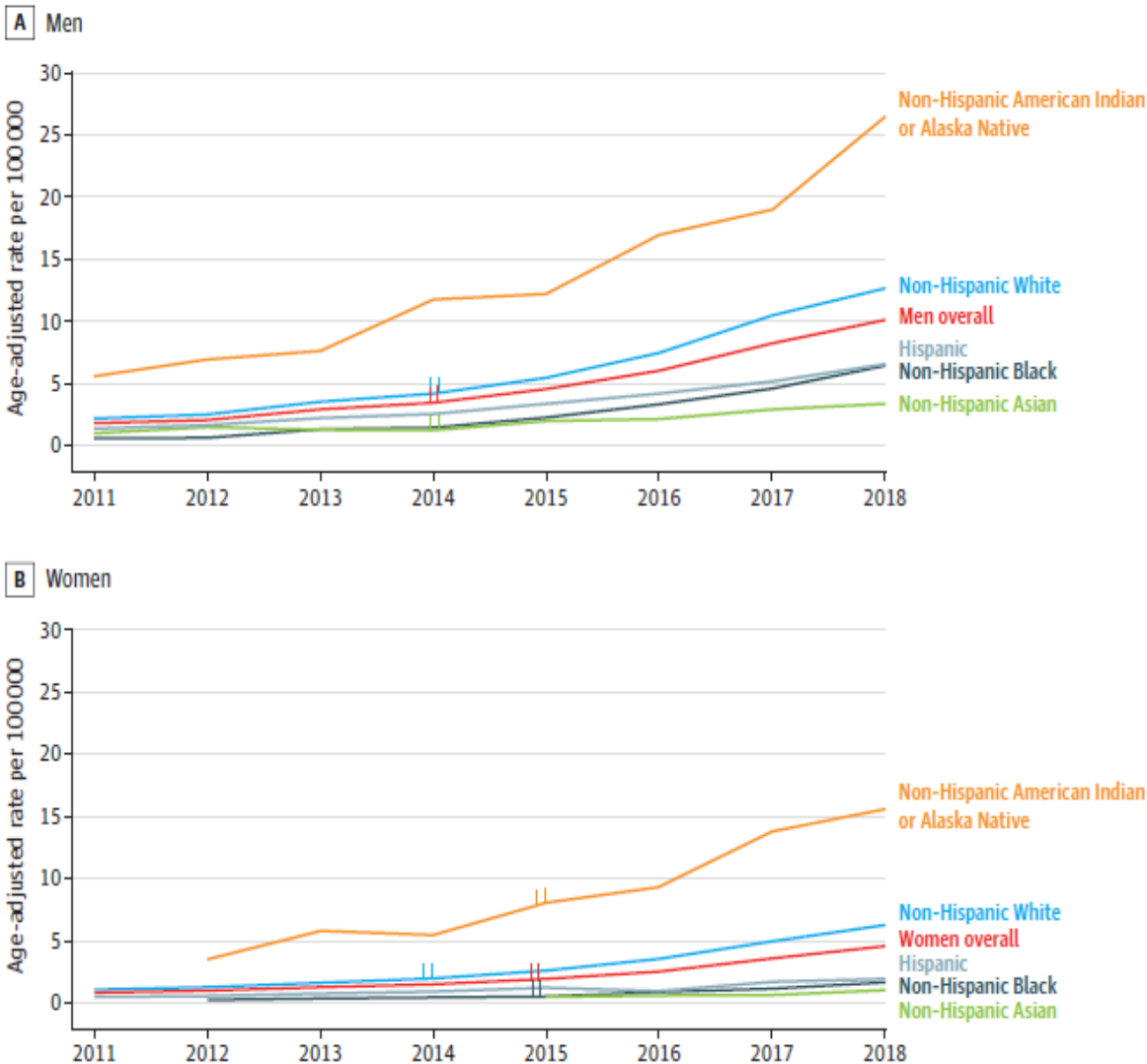
Age-adjusted Rates Of Drug Overdose Deaths Involving Methamphetamine By Race and Ethnicity: US, 2009–2018

Men and Women Aged 25-54

Methamphetamine



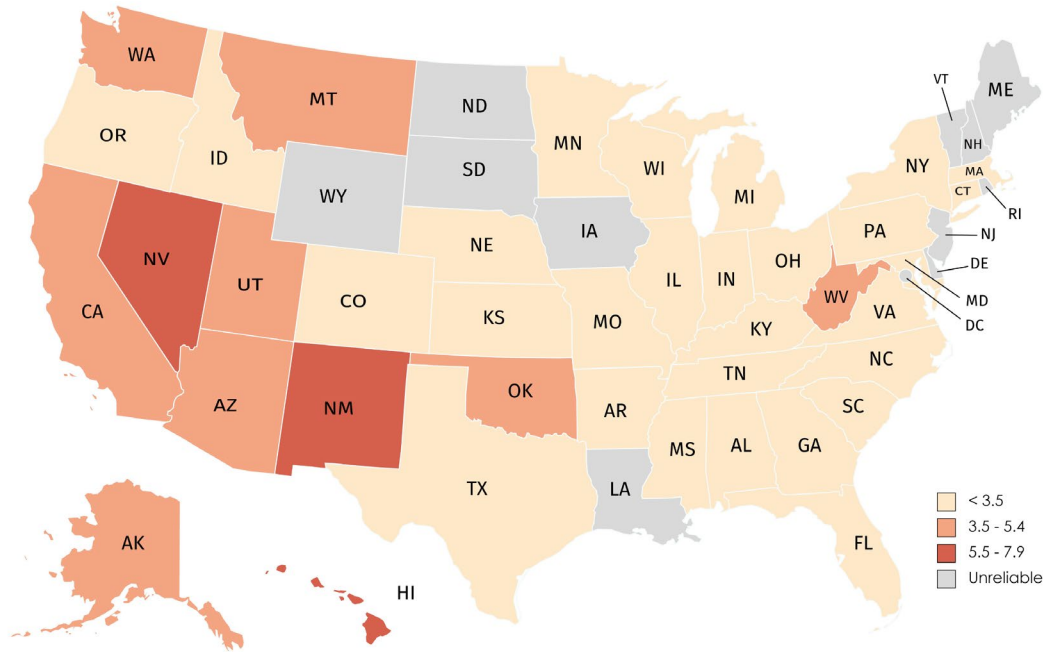
CDC, NCHS Data Brief No. 384, October 2020



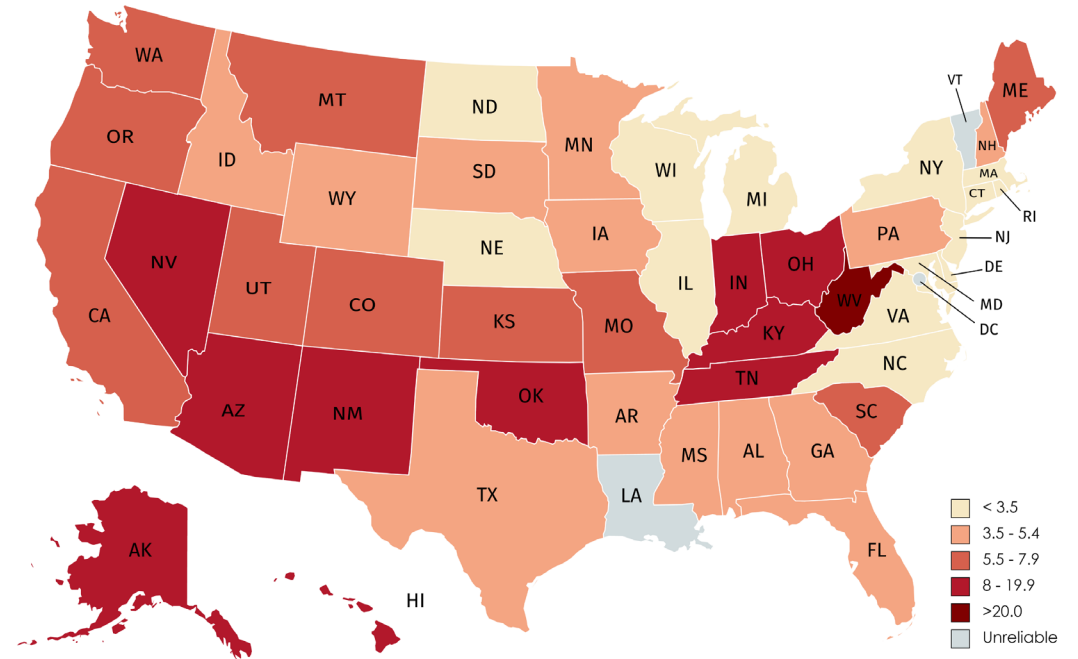
Han B et al., JAMA Psychiatry May 2021 Volume 78, Number 5.

U.S. overdose deaths involving methamphetamine* age-adjusted rates/100k persons

2015



2019



*Psychostimulants With Abuse Potential ICD-10 code (T43.6). This category is dominated by methamphetamine-involved overdose deaths. Source: CDC, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020.

'Opioid overdoses are skyrocketing': as Covid-19 sweeps across US an old epidemic returns

The pandemic is creating the social conditions - no jobs, isolation, despair - that helped enable the opioid crisis to emerge in the first place. Now it's back



'There was nothing to help me': how the pandemic has worsened opioid addiction

US treatment centers have shut down or turned away patients amid as they struggle to adhere to Covid-19 safety protocols



THE WALL STREET JOURNAL.

Opioid Use Hits Construction Industry as Overdoses Soar

Physically challenging work often leads laborers to turn to addictive painkillers, and Covid-19 makes treatment more difficult

I-TEAM

Drug overdose deaths spike amid COVID-19 pandemic

By Chuck Goudie and Barb Markoff, Christine Tressel, Ross Weidner, Jonathan Fagg
Wednesday, February 10, 2021

THE OTHER EMERGENCY

Covid-19 is undoing a decade of progress on the opioid epidemic



U.S.

The Opioid Crisis, Already Serious, Has Intensified During Coronavirus Pandemic

Overdose deaths rise as job losses and stress from Covid-19 destabilize people struggling with addiction

Drug-involved Overdose Deaths* Continue to Increase

	ALL DRUGS	HEROIN	NAT & SEMI SYNTHETIC	METHADONE	SYNTHETIC OPIOIDS (mainly illicit fentanyl)	COCAINE	OTHER PSYCHO- STIMULANTS (mainly meth)
2/2020*	74,234	14,172	12,288	2,791	39,361	17,000	17,434
8/2020*	88,598	14,495	13,451	3,436	52,561	19,868	22,287
2/2021*	96,801	12,859	13,806	3,770	60,857	20,231	26,128
Percent Change 2/20-2/21	30.3%	-9.3%	12.4%	35.1%	54.6%	19.0%	49.9%

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

<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

Structural and Social Challenges for SUD During COVID-19

- Stress and Stigma
- Limited medication access and limited peer-support groups/social connection
- Social distancing increases likelihood of opioid overdoses happening with no observers who can administer naloxone
- Job losses
- Housing instability/homelessness
- Incarceration (>50% of U.S prisoners have SUD) and prison populations are at greatest risk SARS-CoV-2 transmission



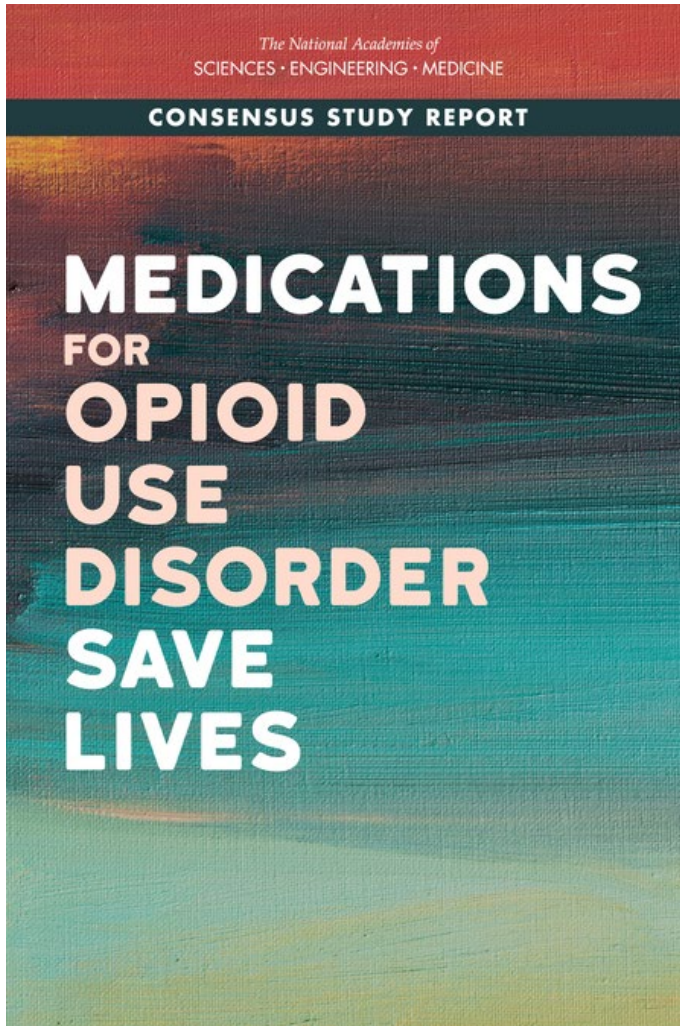
SUD Services Have Shifted During the Pandemic

- Increased use of telemedicine
- Establishment of mental health hot lines
- Deployment of virtual support meetings
- Expansion of take-home medicines for MOUD
- Buprenorphine prescribing via Telehealth
- Release of non-violent offenders with SUD from jails and prisons(might improve their outcomes)
- Development of web-based educational material that can be used to help in rehabilitation

A Collision of Public Health Crises: The Intersecting Impact of COVID-19 and Opioids/Substance Use for American Indian and Alaska Native Communities, Virtual Meeting, June 24, 2020

- Intersecting crises resulting in devastating consequences across American Indian and Alaska Native (AI/AN) communities.
 - Reported increases in overdose, relapse, drug substitution, mental health problems, suicide-related behaviors, and violence.
- Challenges with data sources and the collection of data needed to assess the magnitude of issues and allocate support.
- Community stakeholders reported a general increase in need for services, prompting many communities to prioritize the development of telehealth as substitutes for in-person care.
- ***Despite challenges, AI/AN communities have rallied together, using strength and cohesion to address the intersecting crises (e.g. high vaccination rates).***

<https://www.drugabuse.gov/news-events/meetings-events/2020/06/collision-public-health-crises-intersecting-impact-covid-19-opioidssubstance-use-american-indian>



March 20, 2019

FDA-Approved Medications

Methadone



In use since the 1960s, the slow-acting synthetic opioid agonist effectively treats moderate to severe heroin addiction. It is only available in heavily regulated clinics.

Buprenorphine/Suboxone



Approved in 2002, the long-acting opioid agonist relieves drug cravings with fewer side effects than other opioids and is available by prescription from certain doctors. Suboxone is designed to deter illicit use.

Naltrexone/Vivitrol



Approved in pill form in 1984, it has been available since 2010 as a 30-day time-release injectable medication called Vivitrol. Patients must be completely off all opioids for seven to 10 days. Both block the effect of opioids, do not activate the opioid receptor system, and do not cause physical dependence.

Naloxone



Approved in 1971, the short-acting medication, also known as Narcan and Evzio, reverses opioid overdoses but does not treat opioid addiction.

Note: Limited data on MOUD to treat fentanyl OUD but both methadone and buprenorphine are reported to be effective

HHS Releases New Buprenorphine Guidelines

The Practice Guidelines for the Administration of Buprenorphine for Treating Opioid Use Disorder provide an exemption from certain certification requirements under 21 U.S.C. § 823(g)(2)(B)(i)-(ii) of the Controlled Substances Act (CSA).

- practitioners, defined as physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives, who are licensed under state law, and who possesses a valid DEA registration, **may be exempt from the certification requirements related to training, counseling and other ancillary services.**
- limited to treating no more than 30 patients at any one time.

Treating Methamphetamine Use Disorder and Overdoses

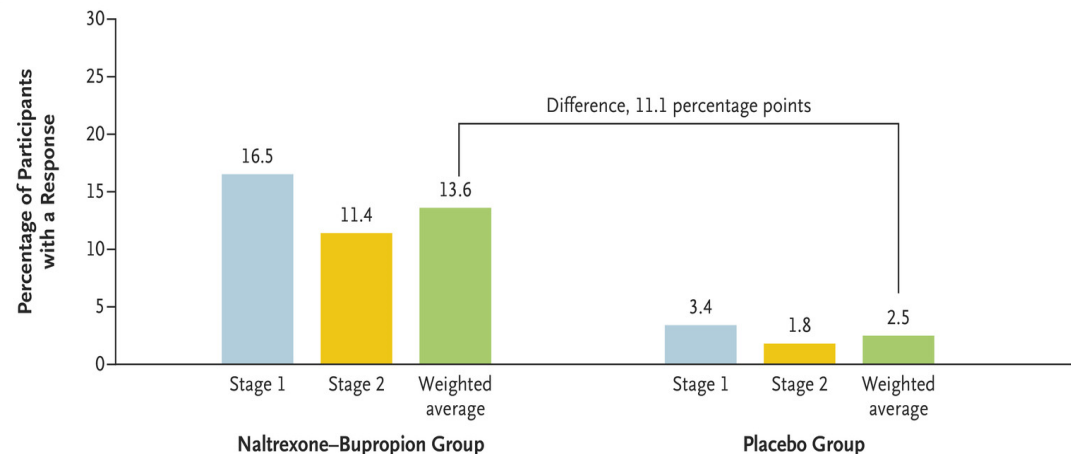
- No FDA approved medications
- Behavioral therapies: contingency management combined with a community reinforcement approach (De Crescenzo et al., 2018).
- No overdoses reversal medications available

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Bupropion and Naltrexone in Methamphetamine Use Disorder

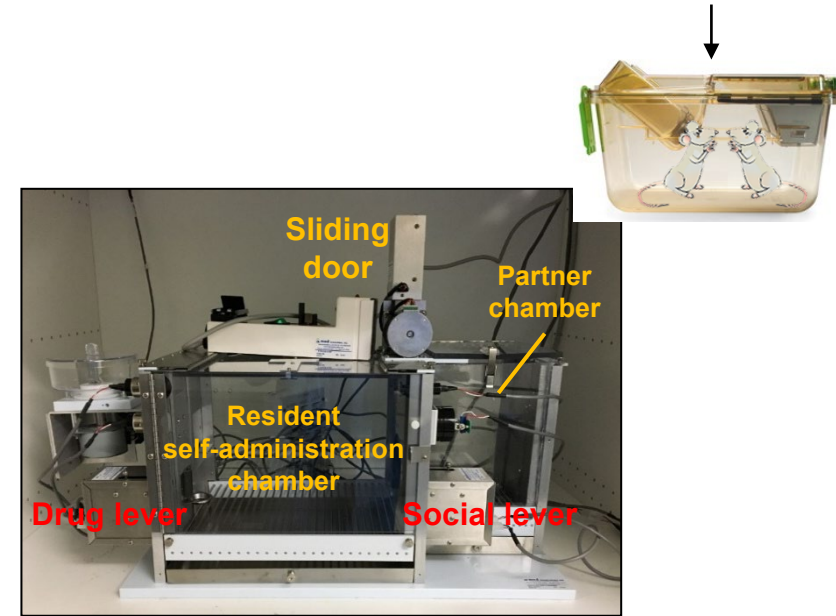
M.H. Trivedi, R. Walker, W. Ling, A. dela Cruz, G. Sharma, T. Carmody, U.E. Ghitza, A. Wahle, M. Kim, K. Shores-Wilson, S. Sparenborg, P. Coffin, J. Schmitz, K. Wiest, G. Bart, S.C. Sonne, S. Wakhlu, A.J. Rush, E.V. Nunes, and S. Shoptaw



Social Factors Influencing Drug Use

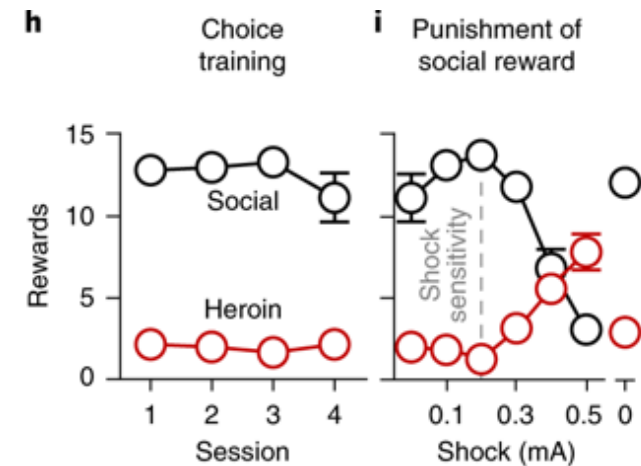


James Nachtwey. *TIME* Special Report



Venniro et al., 2018

HEROIN

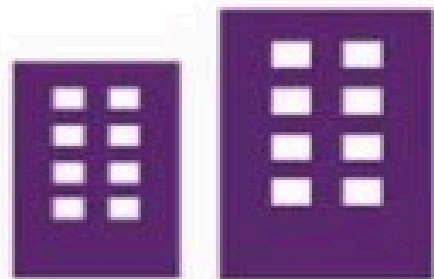


SOCIAL DETERMINANTS OF HEALTH

The social determinants of health are the conditions in which we are born, we grow and age, and in which we live and work. The factors below impact on our health and wellbeing.



Childhood experiences



Housing



Education



Social support



Family income



Employment



Our communities

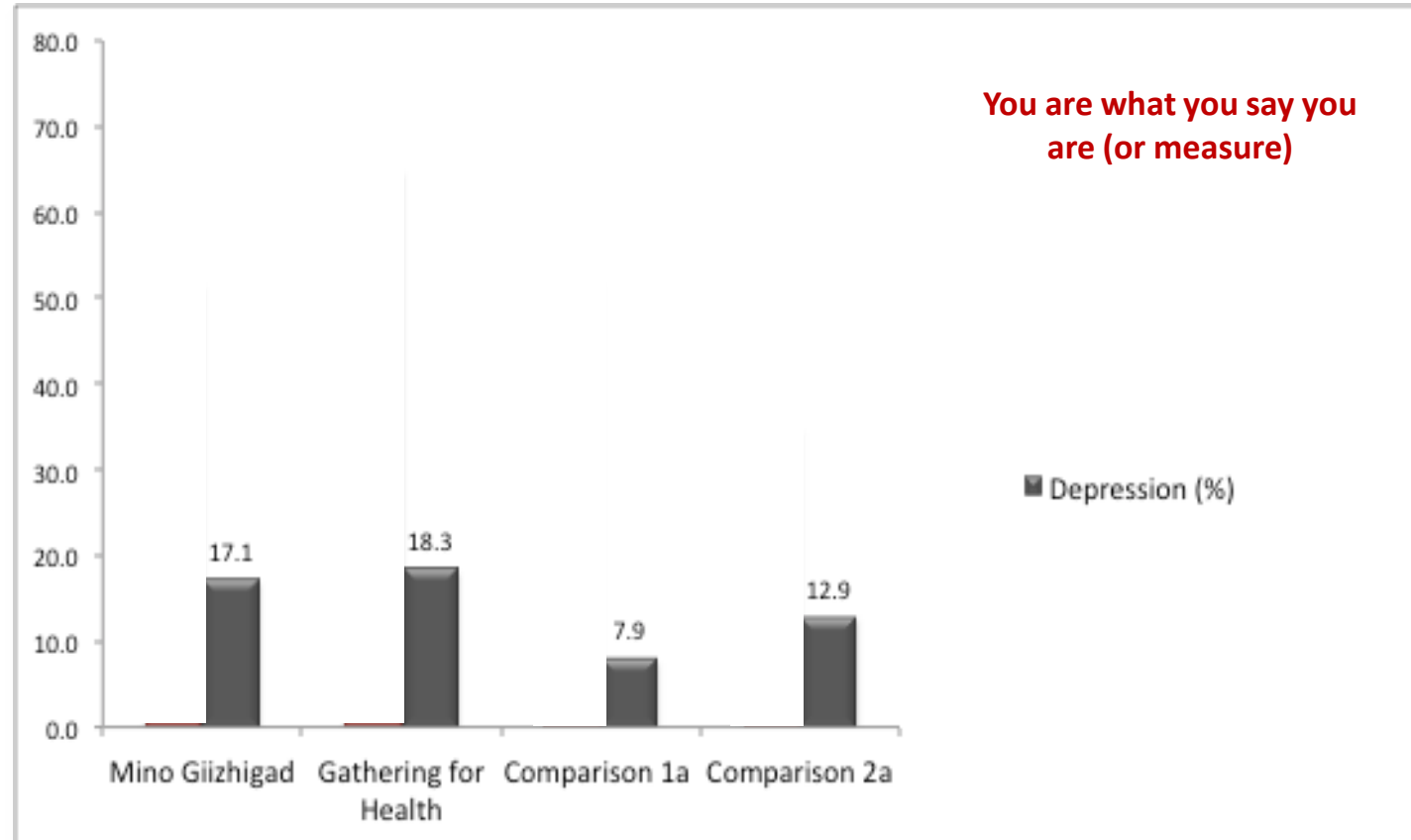


Access to health services

Source: NHS ***The wider set of forces/systems shaping the conditions of daily life***

Pathology vs. Strength Based Factors

Depressive Symptoms and Positive Mental Health



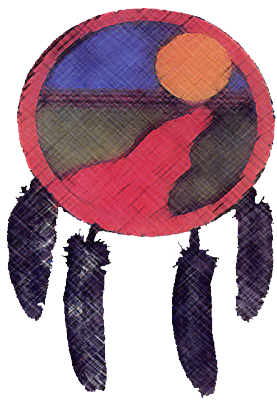
Note: Depression rates are rough estimates due to measurement variability across studies.

Mino Giizhigad: Study of mental health and diabetes in upper midwest (Ojibwe), n=214 (see: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5619867/>)

Gathering for Health: Expansion of Mino Giizhigad to 5 additional Great Lakes tribal areas, n=194.

1a. Keyes, C. L. M., Eisenberg, D., Perry, G. S., Dube, S. R., Kroenke, K., and Dhingra, S. S. (2012). The Relationship of Level of Positive Mental Health With Current Mental Disorders in Predicting Suicidal Behavior and Academic Impairment in College Students. *Journal of American College Health* 60:2, 126-133.

2a. Westerhof, G.J. and Keyes C.L.M. 2009. "Mental Illness and Mental Health: The Two Continua Model Across the Lifespan." *Journal of Adult Development* August 2009.



Empirical Evidence of Direct Associations/Effects Cultural Factors Linked to:

Youth

- ↑ Academic Success
- ↓ Suicidal Ideation.
- ↑ Resilience (e.g., lower substance use, more prosocial attitudes)

Adults

- ↑ Flourishing Mental Health
- ↓ Apathy , ↑ QoL and ↑ Blood Glucose Control
- ↑ Alcohol Cessation;
↓ Alcohol Abuse

↑ Physical/Mental
Health & Buffering
Effects on ACEs

“Family Spirit” Early Childhood Home-Visiting Intervention for Teen Mothers

- *Goal:* improve emotional, behavioral development of children; well-being of their teenage mothers, in at-risk AI communities
 - Developed in partnership with AI communities
- *Process:* trained AI paraprofessionals taught curriculum to at risk young mothers (pregnancy to 36 months postpartum)
 - At their homes, involving their families
 - Using cultural assets-based format, activities
- *Participants:* mean age, 18.1 years
 - 3% married
 - 32% elevated depression scores
 - Lifetime drug use: 84% alcohol, 79% marijuana, 28% meth



Family Spirit: Outcomes

- In a trial versus mothers receiving upgraded pediatric care alone, participants showed*
 - *Parenting*: increased knowledge, self-efficacy; reduced stress
 - *Mothers*: decreased depression, substance use; fewer risky behaviors
 - *Children*: improved developmental outcomes
- Achieved highest participant retention, outstanding evaluations
- Now a model, active in
 - 87 tribal communities (14 states)
 - 2 new non-Native communities:
 - ▶ Chicago, IL
 - ▶ St. Louis, MO

*After 36 months



THANK YOU!