

Increasing Access to Medication-Assisted Treatment to Address the Opioid Epidemic: California's State Targeted Response

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Disclosures

Dr. Freese and Dr. Miele do not have relevant financial relationships with commercial interests.



Why do people take drugs?

To feel good

To have novel:

Feelings

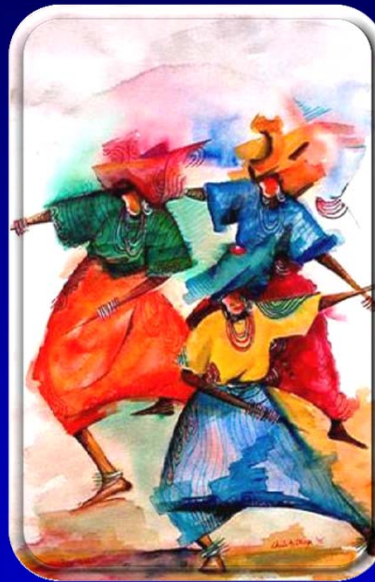
Sensations

Experiences

AND

To share

them



To feel better

To lessen:

Anxiety

Worries

Fears

Depression

Hopelessness

Withdrawal

In other words:

A Major Reason People Take a Drug is they Like What It ***Does to Their Brain***

Over time, this results in changes that lead to a disease process, but ***we have to change the message***

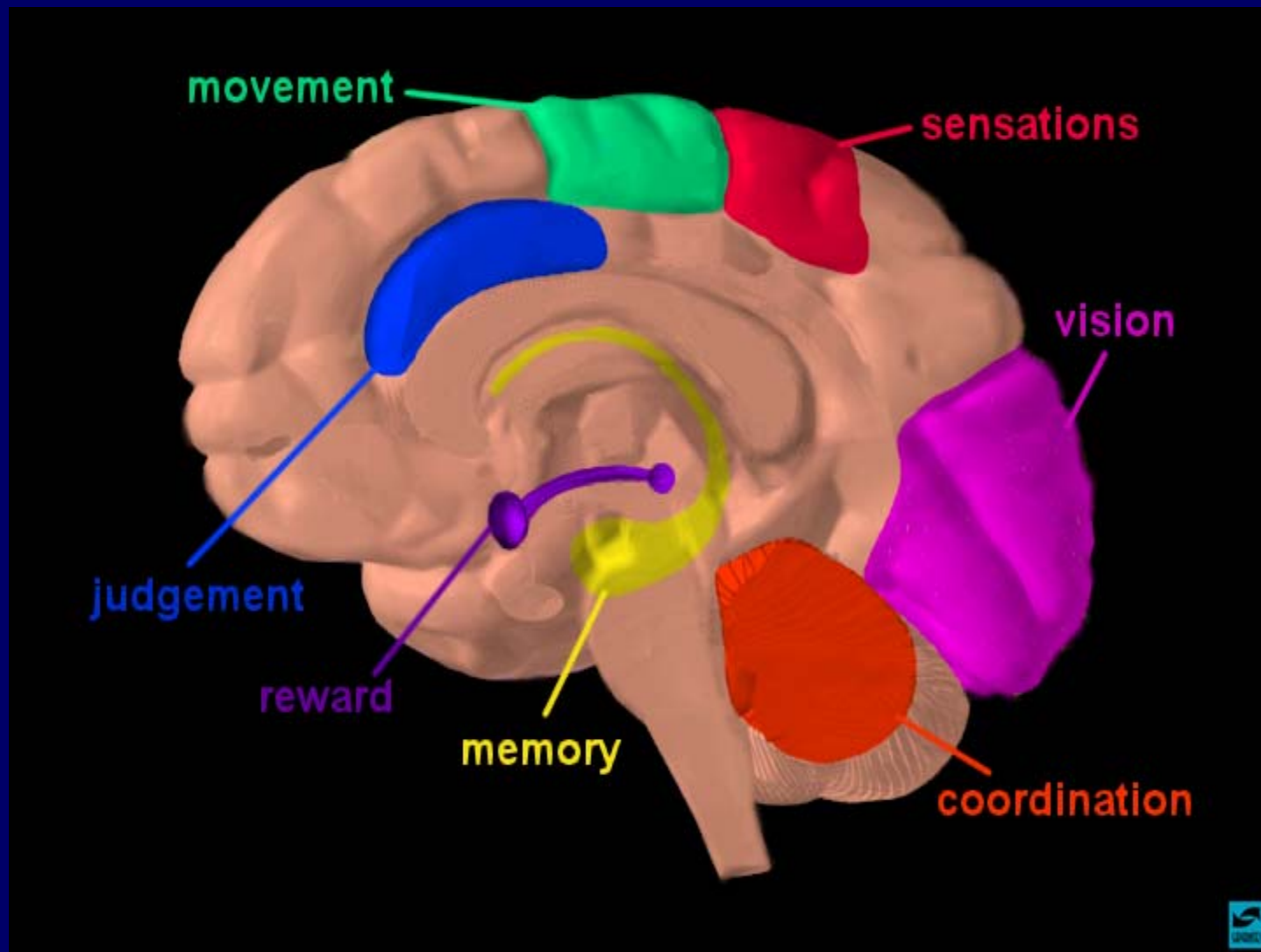
Substance Use Disorders, Like Other Diseases...

- Are preventable
- Are treatable
- Change biology
- If untreated, can last a lifetime

Science of Addiction

Advances in medicine and scientific techniques have given researchers a clearer idea of what substance use disorders are using:

- Magnetic resonance imaging (MRI)
- Positron emission tomography (PET) scan
- Advanced genetic research

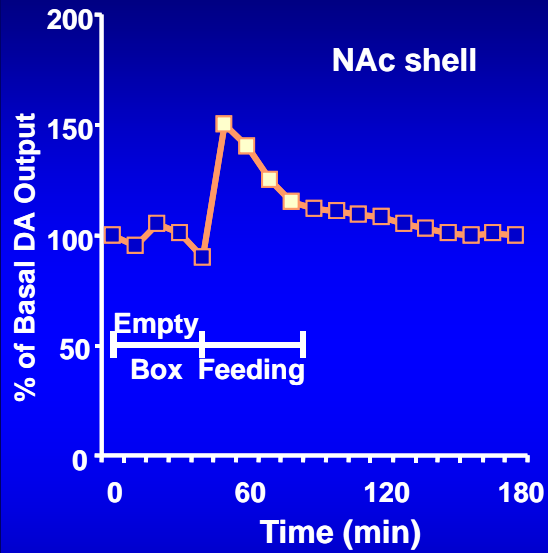


Major Neurotransmitters Involved in SUD

- Dopamine
- Serotonin
- Norepinephrine
- GABA
- Glutamate

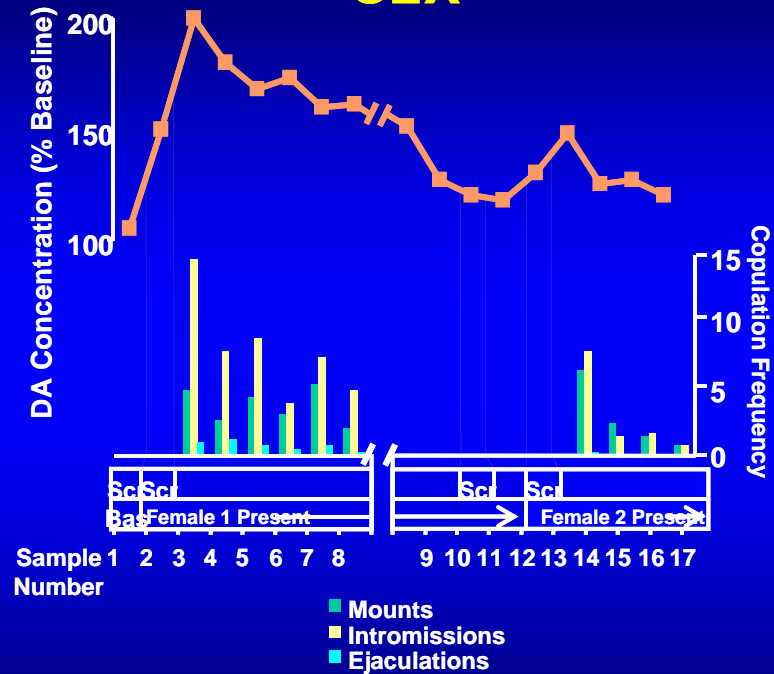
Natural Rewards Elevate Dopamine Levels

FOOD



Source: Di Chiara et al.

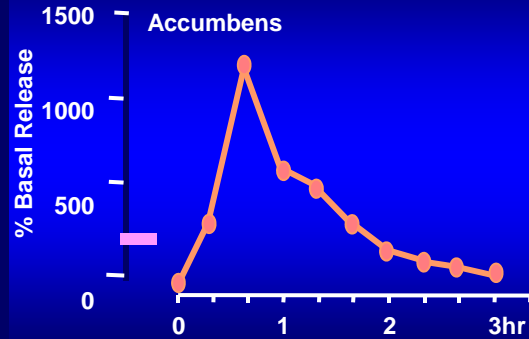
SEX



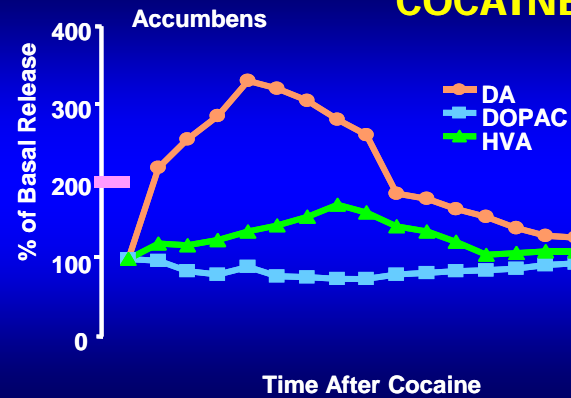
Source: Fiorino and Phillips

Effects of Drugs on Dopamine Release

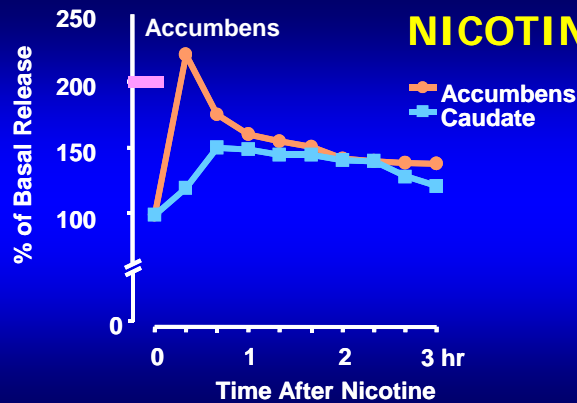
METHAMPHETAMINE



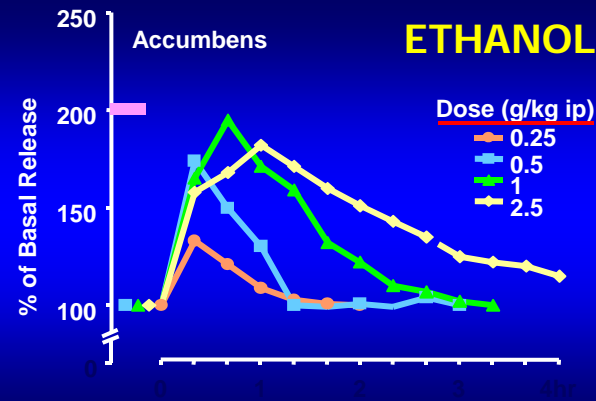
COCAINE



NICOTINE



ETHANOL



Source: Shoblock and Sullivan; Di Chiara and Imperato

A 3D digital illustration of a neural network. Several neurons are depicted with their cell bodies and branching dendrites. The connections between neurons, known as synapses, are highlighted with bright, glowing light effects in shades of blue, purple, and pink, suggesting electrical activity or neurotransmission. The background is a soft, hazy blue.

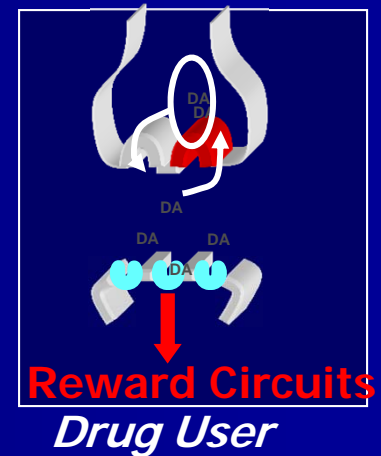
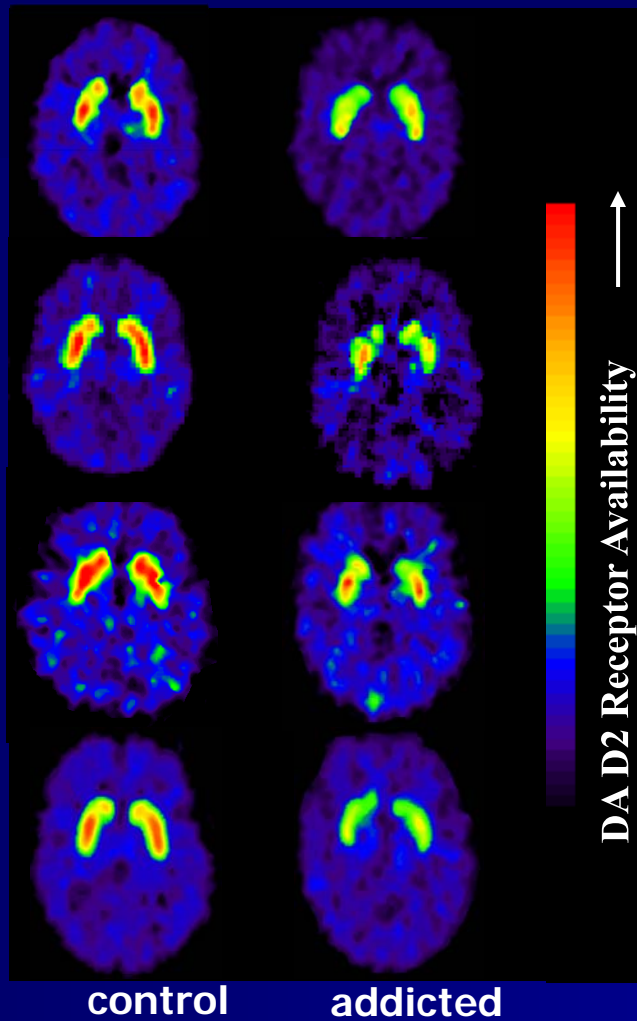
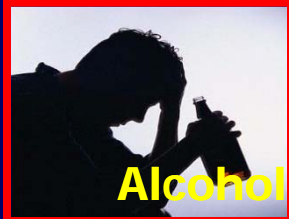
Prolonged Drug Use Changes The Brain In Fundamental and Long-Lasting Ways



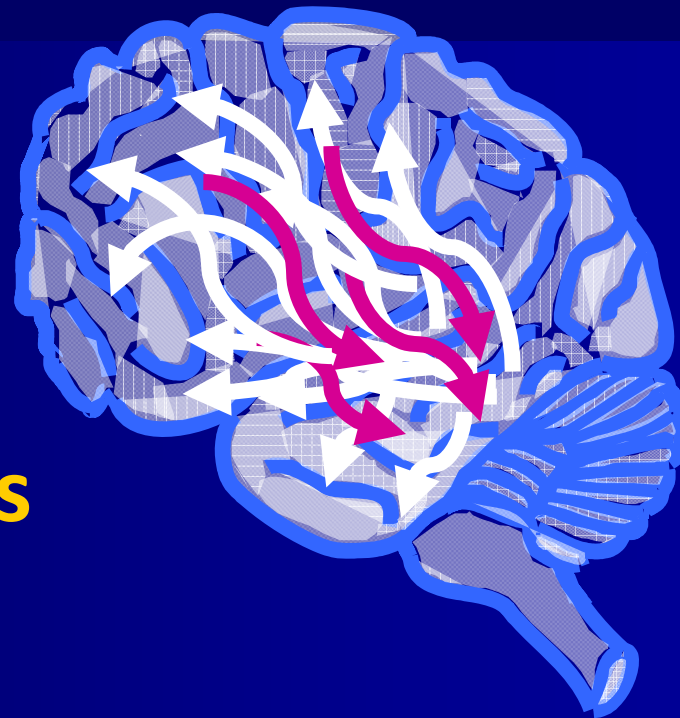
AND...

We Have Evidence That
These Changes Can Be Both
Structural and Functional

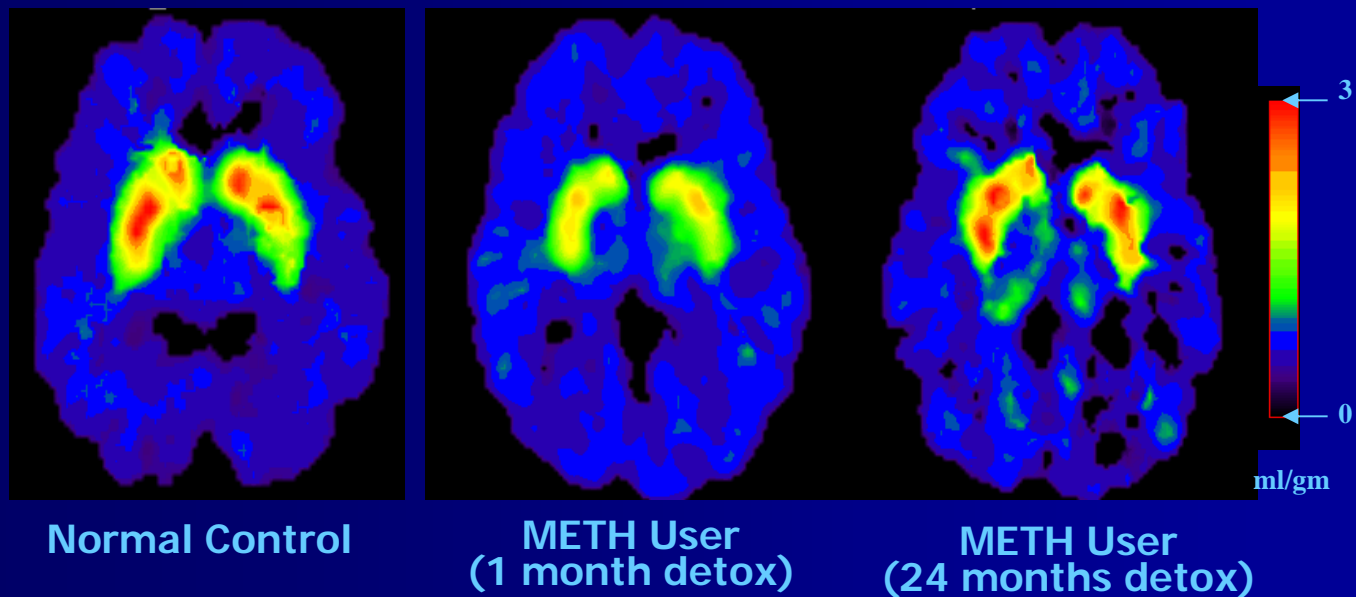
Dopamine D2 Receptors are Lower in Addiction



Cognitive and Memory Effects



Partial Recovery of Brain Dopamine Transporters in Methamphetamine User After Protracted Abstinence



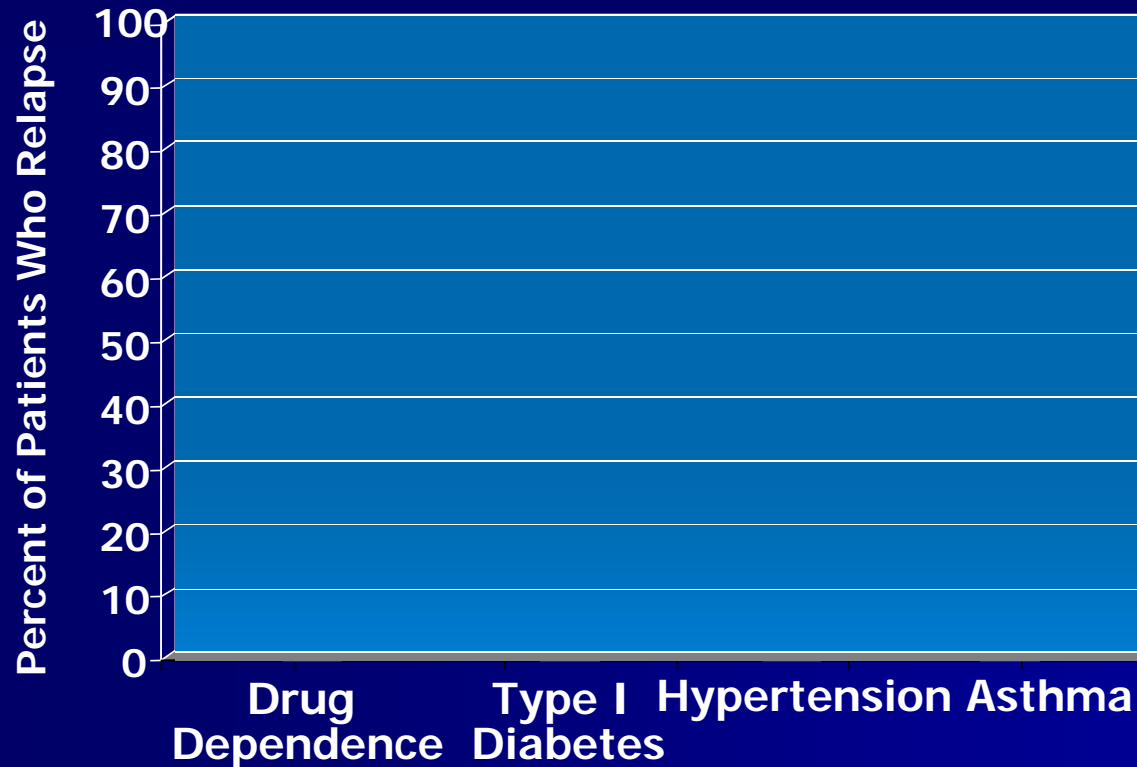
Source: Volkow, ND et al., *Journal of Neuroscience* 21, 9414-9418, 2001.

Substance Use Disorder is a chronic relapsing disorder similar to other chronic diseases such as **diabetes, asthma, arthritis and cardiovascular disease.**

Why are we comparing SUD to these particular illnesses?

- No Doubt They Are Illnesses
- All **Chronic** Conditions
- Influenced by **Genetic, Metabolic, Environmental** and **Behavioral Factors**
- **No Cures** - But Effective Treatments Are Available

Relapse Rates Are Similar for Drug Dependence and Other Chronic Illnesses



Source: McLellan, A.T. et al.,
JAMA, Vol 284(13), October 4, 2000.

Lessons from Chronic Care

- Patient **retention** is critical
- Make treatment attractive
- Offer **options/alternatives**
- Increase monitoring/management



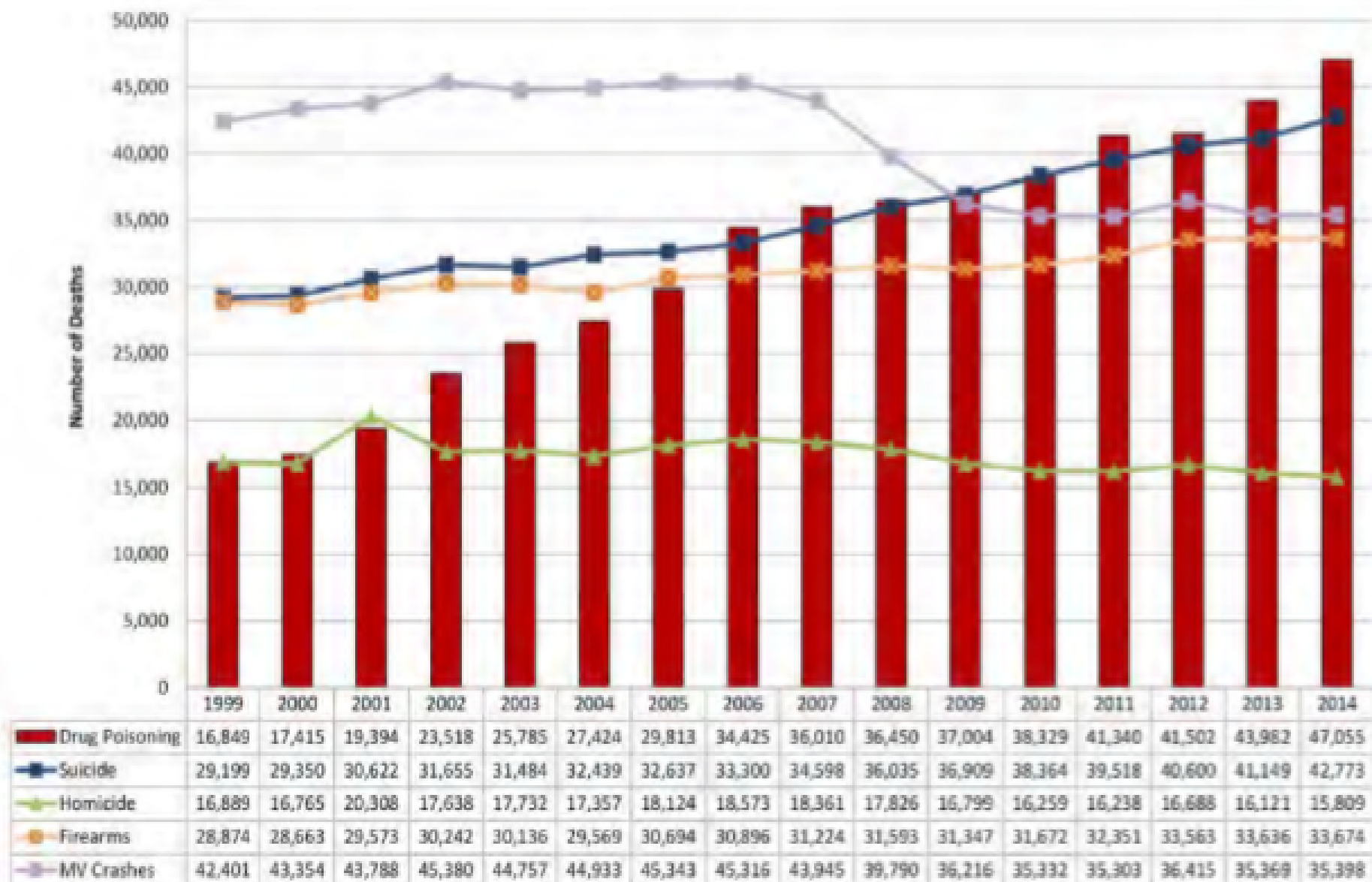
Every 20 minutes!!!



91
AMERICANS

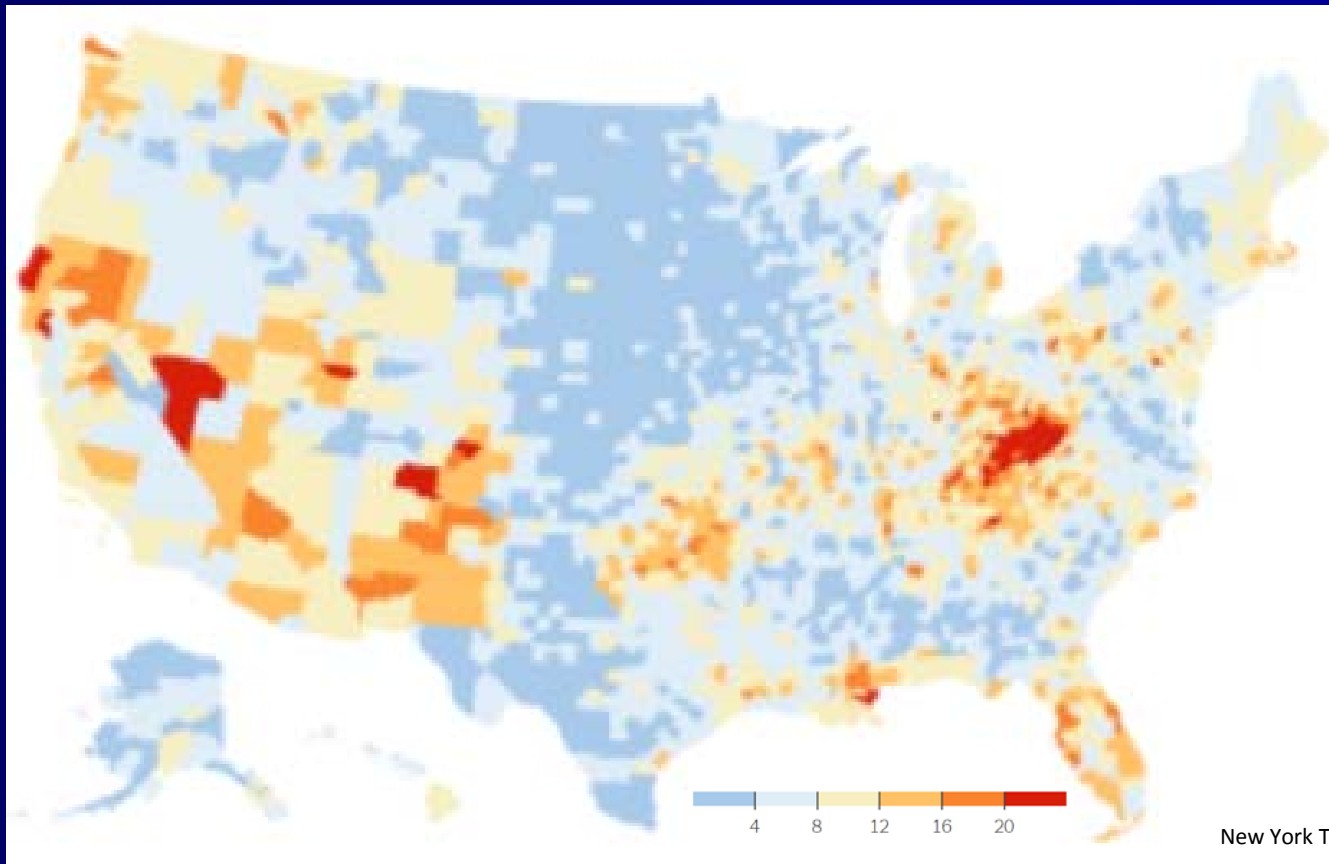
die every day from
an **opioid overdose**
(that includes prescription
opioids and heroin).

Figure 1. Number of Injury Deaths by Drug Poisoning, Suicide, Homicide, Firearms, and Motor Vehicle Crashes in the United States, 1999-2014^{a,b}



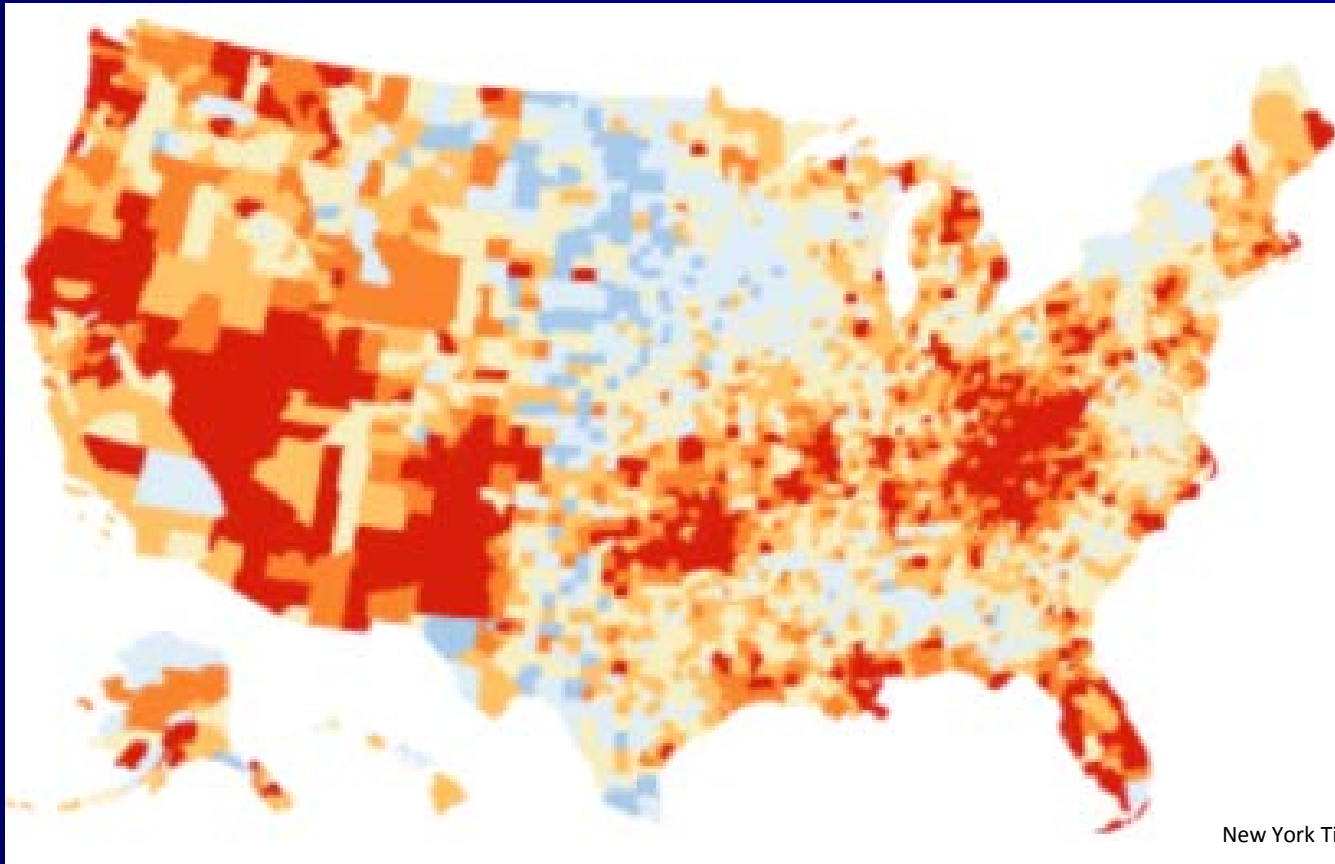
Source: Centers for Disease Control Prevention

Overdose Deaths per 100,000 2003



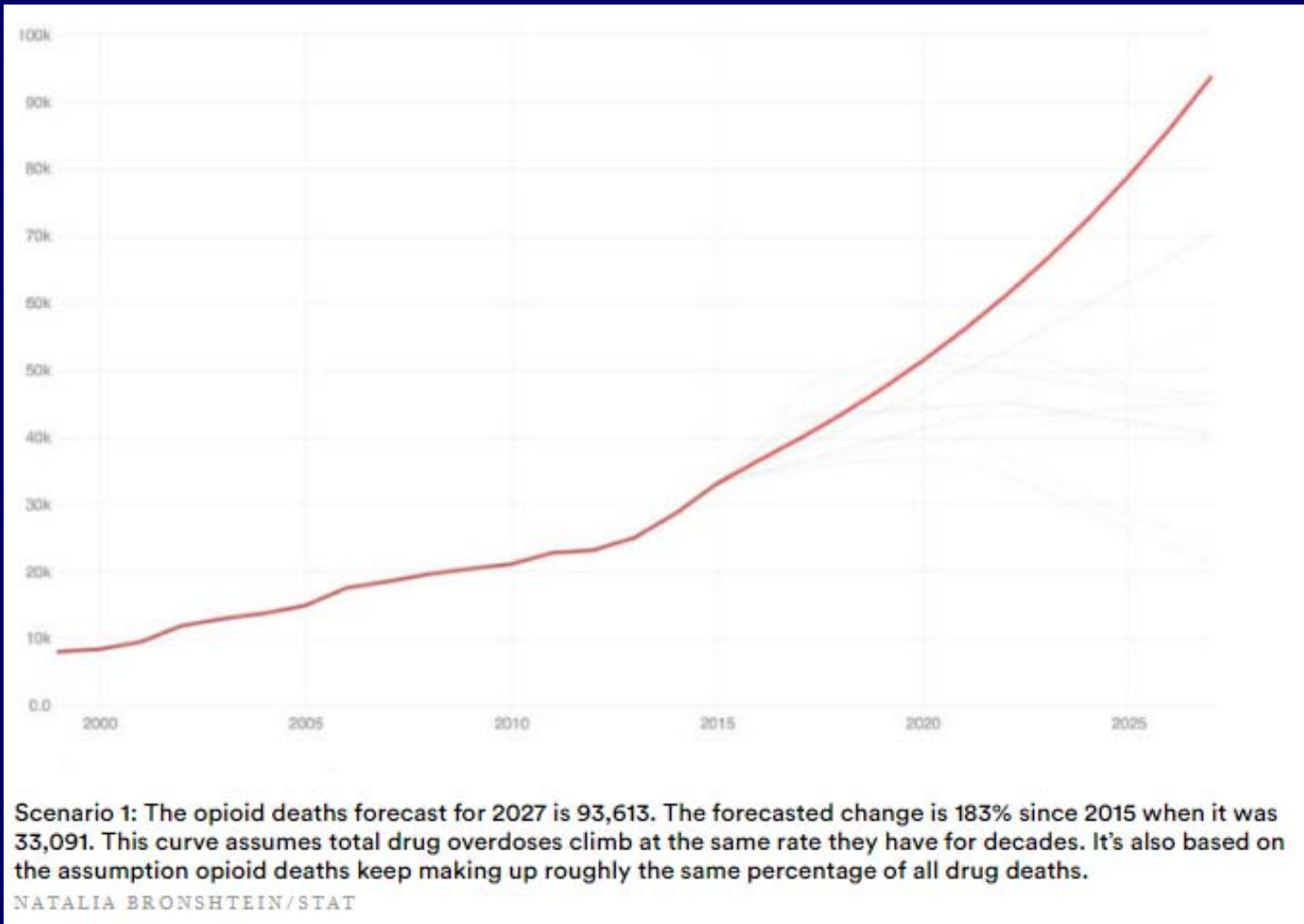
New York Times <https://nyti.ms/2jVUIKb>

Overdose Deaths per 100,000 2014

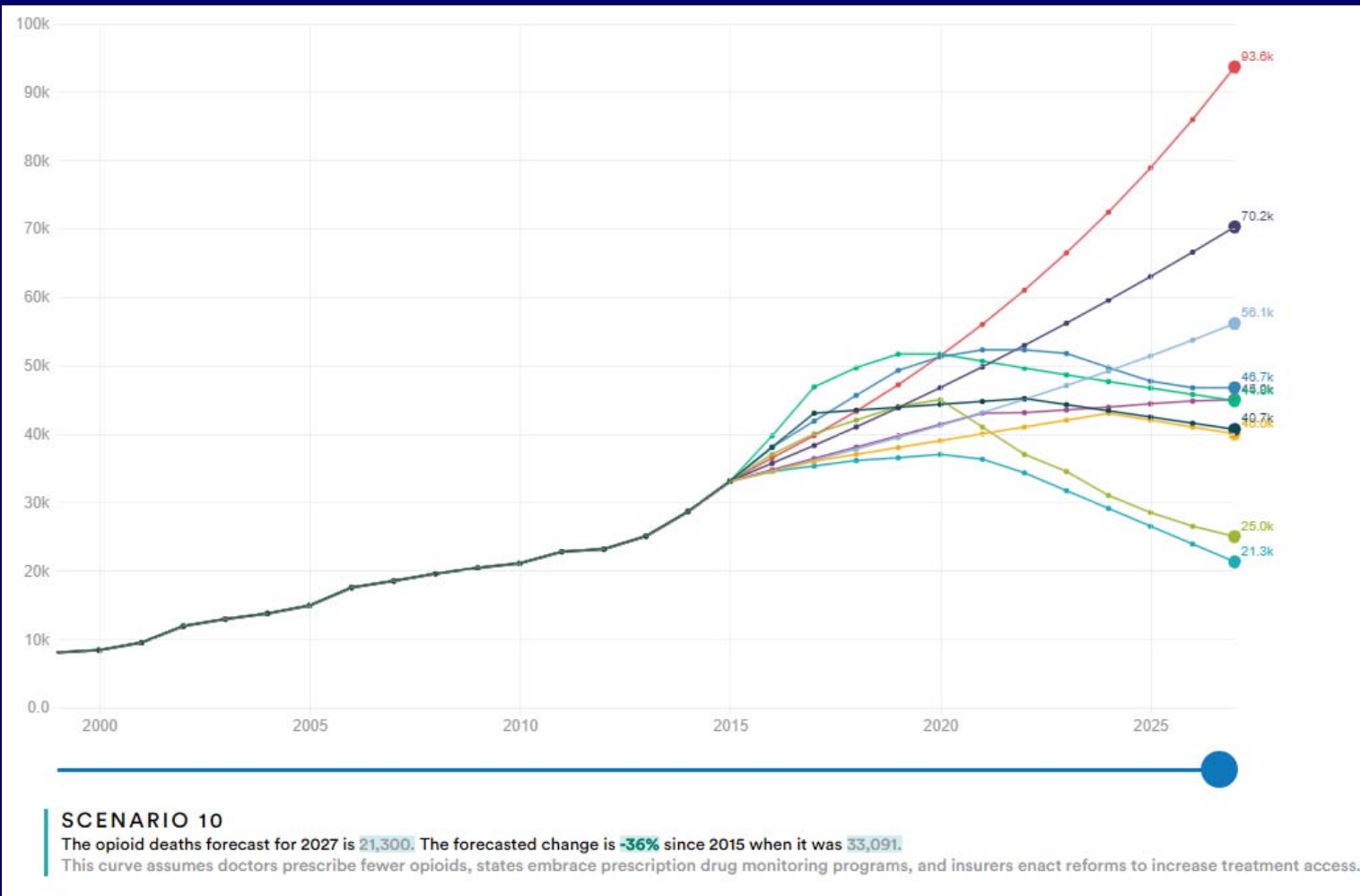


New York Times <https://nyti.ms/2jVUIKb>

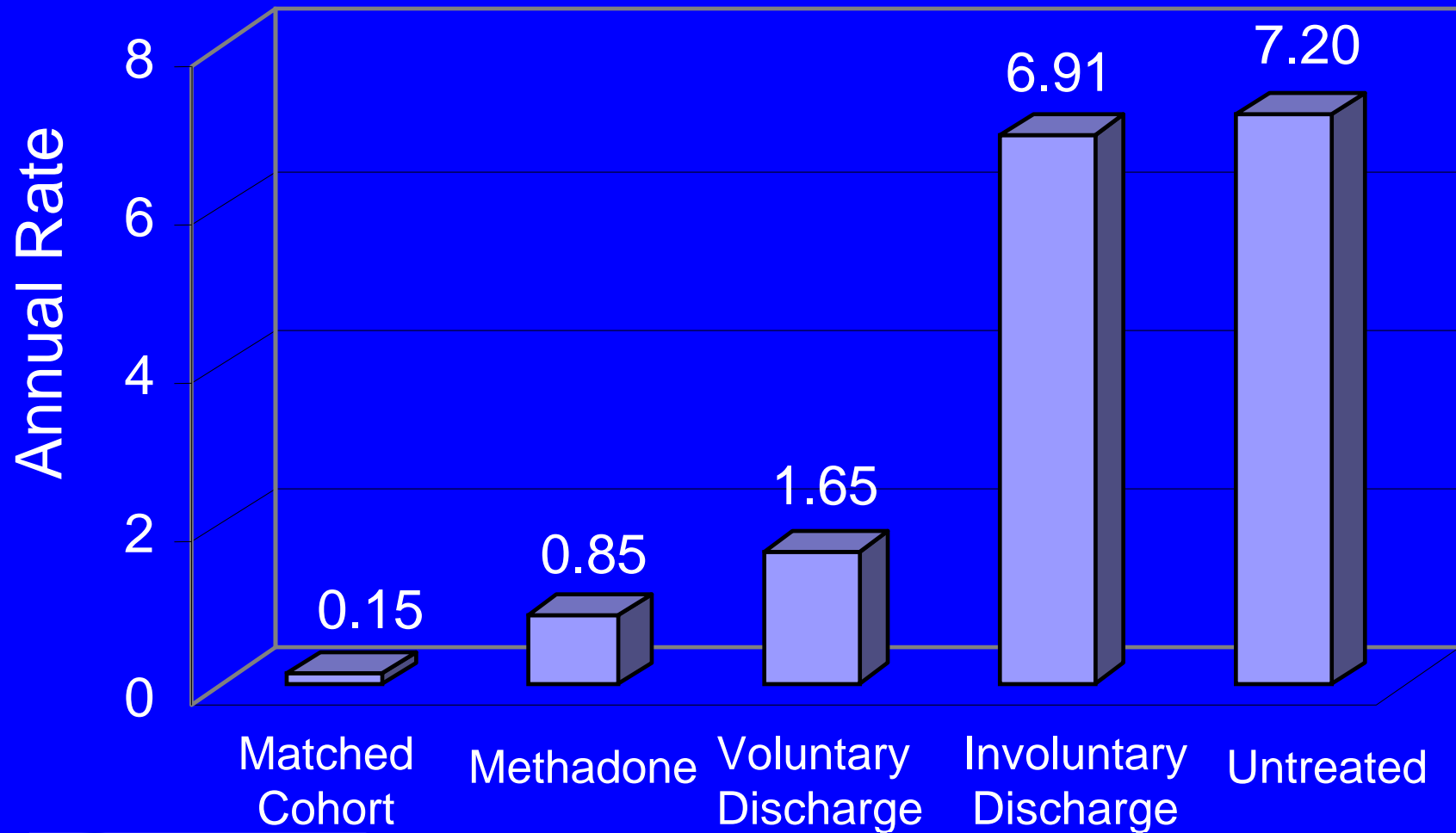
Opioid overdose deaths: Worst Case Scenario



Opioid overdose deaths: 10 projected scenarios.



Death Rates in Treated and Untreated Heroin Addicts



Pharmacotherapies for addiction

- **Methadone** (agonist)
- **Buprenorphine** (partial agonist)
- **Naltrexone** (antagonist)

Meanwhile, in Rhode Island

Screening and MAT in prison

61 % post-incarceration deaths

12 % reduction in overdose
deaths in the state's general
population

Green, et al., JAMA Psychiatry. 2018;75(4):405-407



HELP
THOSE IN NEED



GIVE
OVERDOSE RESCUE



HOPE
FOR A LIFE SAVED

Save a Life

Learn how to respond to an overdose emergency

Get Naloxone Now is an online resource to train people to respond effectively to an opioid-associated overdose emergency. Get Naloxone Now advocates for widespread access to overdose education and training in how to administer naloxone, the life-saving antidote for opioid-associated overdose. Get Naloxone Now seeks to increase the number of lives saved by bystanders and professional first responders (police officers, firefighters and EMTs). Find out how you can contribute to reducing overdose deaths by accessing our online training modules.

INDIVIDUALS-GET TRAINED!

INSTITUTIONAL PROGRAM

HOW CAN YOU HELP

CA Hub and Spoke MAT Expansion Project



UCLA

What is the MAT Expansion Project?

- Two-year grant
- Projected to serve **20,892** Californians
- Focuses on three specific projects:
 1. California Hub & Spoke System (CA H&SS)
 2. Tribal MAT Project
 3. California Society of Addiction Medicine (CSAM) Prevention and Treatment Activities

Short-Term Project Goals

- Increase statewide utilization of buprenorphine
- Improve access to Narcotic Treatment Programs (NTPs) through the CA H&SS
- Increase MAT utilization in American Indian and Alaskan Native Tribal Communities through the Tribal MAT Project

Long-Term Project Goals

- Save lives & foster recovery
- Address stigma and discrimination surrounding addiction
- Integrate addiction care into the greater health care system
- Development of innovative and sustainable practices, processes, and relationships

California Hub & Spoke System



UCLA

No Wrong Door



CA Hub & Spoke System

- Based on the Vermont Hub & Spoke Model
- Harnesses the strengths of specialty methadone NTPs and skills of physicians and advanced practice clinicians who prescribe buprenorphine in office-based settings.
- NTPS are the only entities that are allowed by federal law to provide methadone treatment for an OUD.

Hubs

- NTPs act as “Hubs,” and serve as the regional consultants and subject matter experts on opioid dependence and treatment
- Provide care to clinically complex buprenorphine patients
- Manage buprenorphine inductions
- Support Spokes that need clinical or programmatic advice

Spokes

- Spokes may be (1) a federally waived prescriber, or (2) one or more federally waived prescribers and a MAT team.
- Provide ongoing care for patients with milder addiction (managing induction and maintenance) and for stable patients on transfer from a Hub
- Monitor adherence to treatment
- Coordinate access to recovery supports
- Provide counseling

Required Services

Professional medical, social work, & mental health services, onsite or by referral

Access to FDA approved MAT for an OUD

Access to subject matter expertise on opioid dependence and treatment for Spokes

HIV and HCV testing and referral to services

Case management

Counseling

Naloxone and training

Local access to maternal addiction treatment

Recovery and/or peer support services

Use of the OBOT Stability Index and the Treatment Need Questionnaire tool

Hub and Spoke MAT Team

Educator/Panel Manager

- **Responsible for:**
 - Prescription Management
 - Call back procedure, counting films, calling pharmacies
 - Management of drug testing
 - Coordination of medical services with buprenorphine prescriber
 - Help the physician manage the panel of patients and education

Case Manager

- **Responsible for:**
 - Brief counseling or referral to more intensive services
 - Group counseling
 - Some clinical case management
 - Intake of stable patients from Hub to Spoke
 - Referrals to Hub for unstable patients
 - Coaching to prescribers in managing patients' clinical stability

Hub and Spoke Interaction

- Patients can move between the Hub and Spoke based on clinical severity and need
- If patients begin services at a Spoke and need more care, they can transition to the Hub. If the patient starts at the Hub and needs less care, they can transition to the Spoke

HUB ↔ SPOKE

CA H&SS Implementation

- \$78 million allocated to CA H&SS treatment services
- 19 Hubs
- Over 85 Spokes covering 30+ counties. This includes 7 of the 10 counties with highest opioid overdose rates

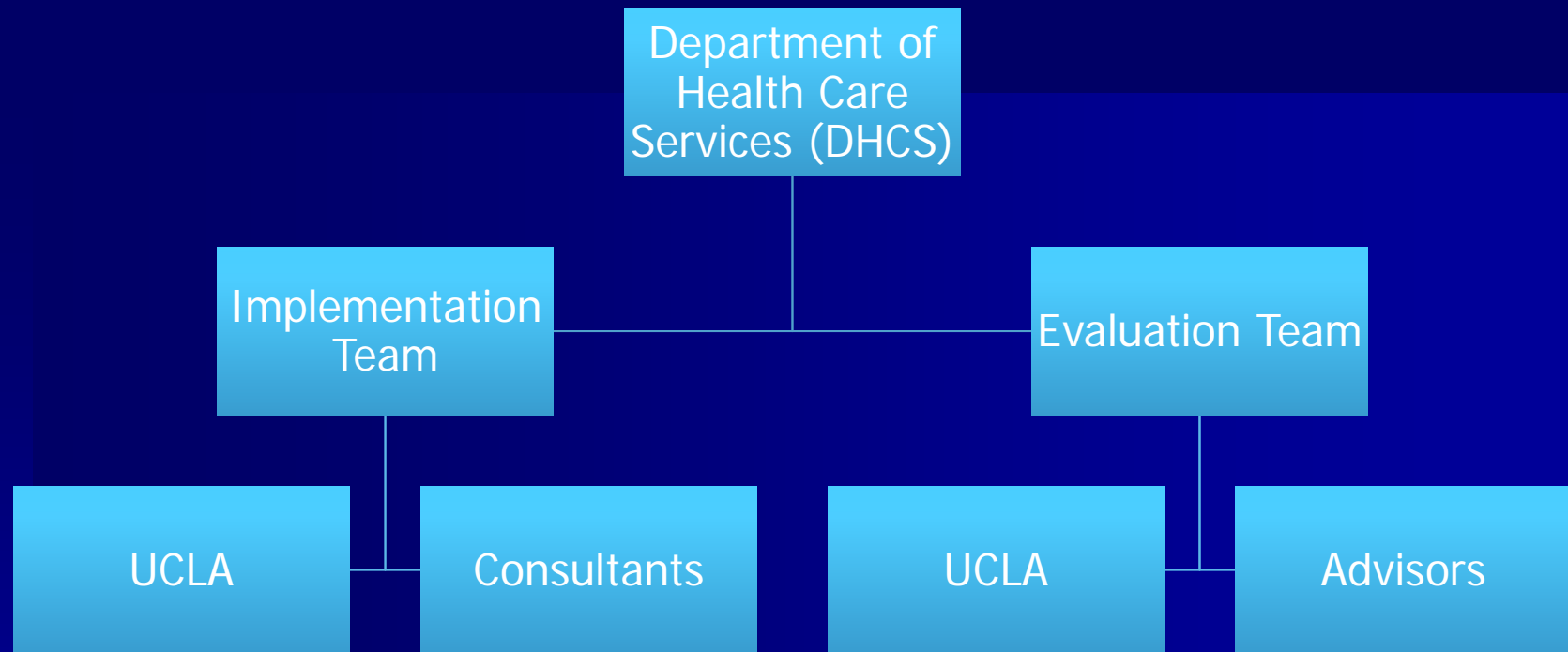


Hubs & Spokes

http://www.dhcs.ca.gov/individuals/Documents/CA_HSS_Awards_7.21.17.pdf



CA H&SS Governance and Partners



Advisory Group: Implementation & evaluation experts, CA H&SS participants, community members, DHCS representatives, CSAM, California Health Care Foundation (CHCF)

CA H&SS Results To Date

Successes

- Strong support from law enforcement
- Building relationships with local health plans
- Coordination with Opioid Coalitions
- Interest among community/stakeholders
- Over 100 spokes
- More buprenorphine prescribers

Challenges

- Hiring qualified providers/staff
- MD mentors and consultants
- Stigma against MAT
- Transportation for patients
- Providing services for the criminal justice population
- Finding spokes in rural areas

What's Next?

- Spoke development
- More providers, more treatment
- Pain and addiction conferences
- Prescriber facilitation – mentoring and consultation
- ED Bridge
- Preliminary data

Questions???

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Pacific Southwest ATTC: <http://www.psattc.org>

Hub and Spoke: <http://uclaisap.org/ca-hubandspoke>

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