

The Opioid Crisis by History

Benjamin Park, D.O., D.ABA, FASA



Disclosure

I have no financial conflicts of interest to disclose.



Opiate use

- Leading COD for Americans 20-50
- 105K deaths in 2022
- Unfortunately, a preventable cause of morbidity and mortality



Origins depends on point of view

- Many drug epidemics over the course of history
- Opium and alcohol were very early drugs of abuse
- Peaks and resurgence over time



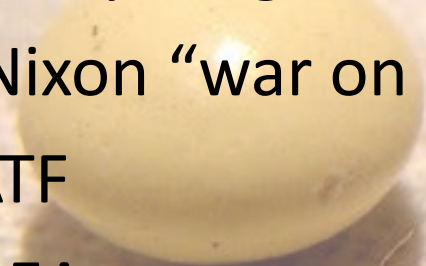
- 1600-1800 opium was adjuvant
- Recreational smoking in opium den
- 1806 Alkaloid isolated from opium
- 1927 Merck began producing morphine



- Civil war opium administered 1861-1865
 - “army disease”
- Bayer 1890’s heroin developed for respiratory ailments
- Stable abuse until mid 1900’s



- Heroin abuse was increasing worldwide in 1900s
- US lagged behind, until Vietnam war 1965-1973
- 1970 more young adults died of heroin than any other cause
- 1971 – Nixon “war on drugs”
- 1972 - ATF
- 1973 - DEA



1980 NEJM editorial

- Brief 5 sentence letter to editor
- Cited several hundred times since
- Boston University 39,946 hospitalized medical patients
- 11,882 did receive an opioid of some form
- 4 cases of addiction in patients with no prior history
 - 2 meperidine, 1 hydromorphone, 1 oxycodone/ASA
- “despite widespread use of narcotics . . . Addiction is rare in medical patients without prior history.”

ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients¹ who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

JANE PORTER

HERSHEL JICK, M.D.

Boston Collaborative Drug
Surveillance Program

Waltham, MA 02154

Boston University Medical Center

1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. *JAMA*. 1970; 213:1455-60.
 2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. *J Clin Pharmacol*. 1978; 18:180-8.
-

Then the 90's



Beginning of modern opioid epidemic



RISE IN OPIOID OVERDOSE DEATHS IN AMERICA

A Multi-Layered Problem in Three Distinct Waves

NEARLY
500,000
PEOPLE DIED FROM AN
OPIOID OVERDOSE
(1999-2019)

www.cdc.gov



1990s

mark a rise in prescription
opioid overdose deaths

Rx OPIOIDS

Include natural, semi-synthetic,
and methadone and can be
prescribed by doctors



2010

marks a rise in heroin
overdose deaths

HEROIN

An illegal opioid



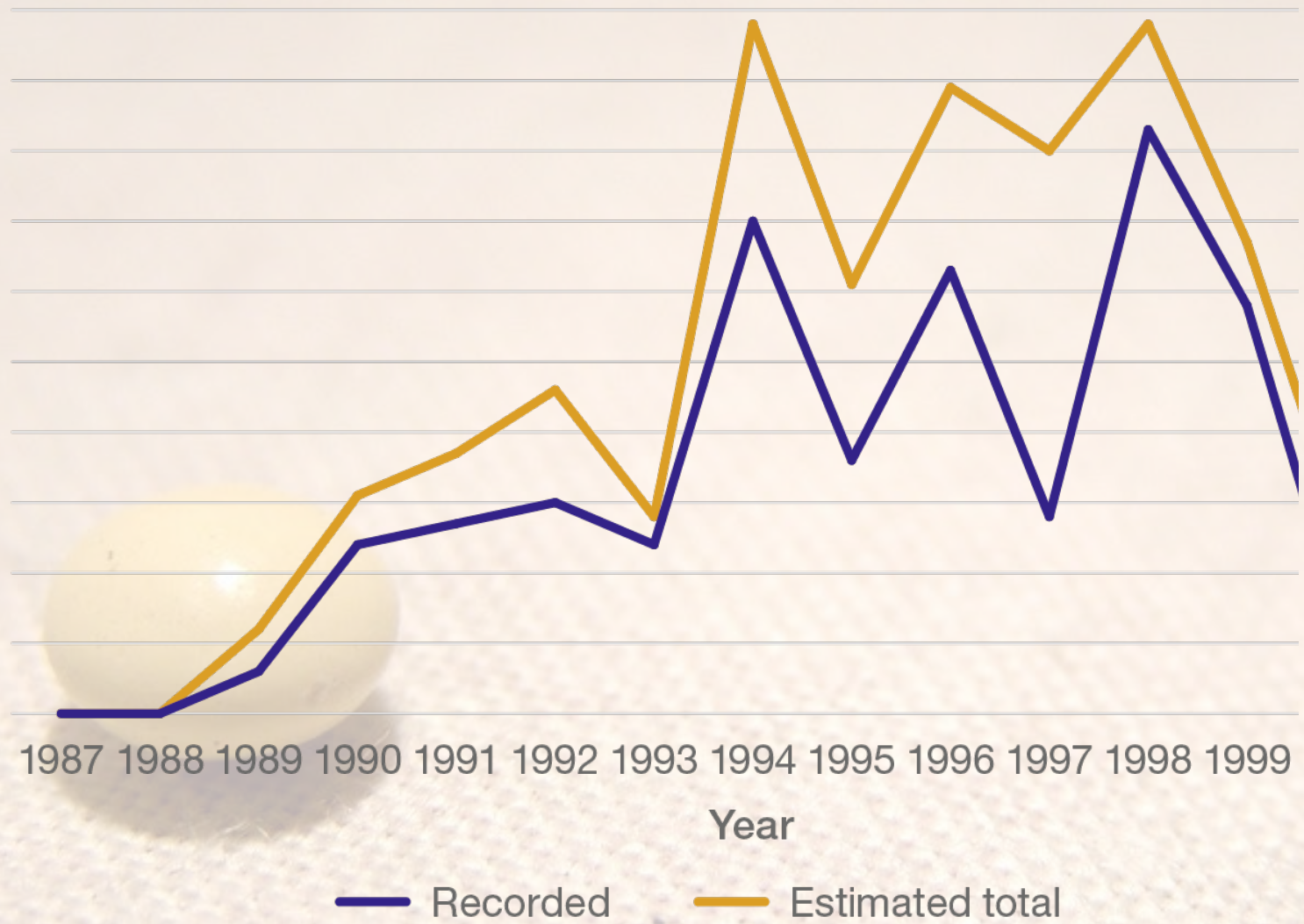
2013

marks a rise in synthetic
opioid overdose deaths

SYNTHETIC OPIOIDS

Include fentanyl and can
be illicitly made

Learn more about the evolving opioid overdose crisis: www.cdc.gov/drugoverdose



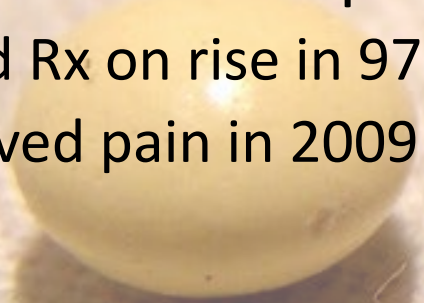
1990's begins our current opioid epidemic

- 1st epidemic to be driven by pharmaceutical companies
- 1995 – Oxycodone developed by Purdue
- Oxycodone q12 or QD dosing makes for easy prescribing



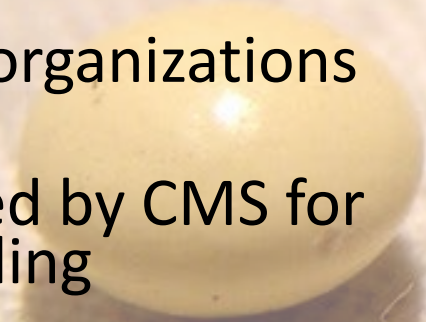
Additive factors

- 1996 – American Pain Society recommends pain to be checked with every vital sign check
- 2001 – The JC adds pain as the 5th vital sign
 - Opioid Rx on rise in 97-98
 - Removed pain in 2009



2001 JC statement

- Independent non-profit organization
- Accredits hospitals and healthcare organizations
- 20,500 + organizations
- Recognized by CMS for credentialing



- “the patient, and not the physician is the authority on pain”
- Pain is whatever the experiencing person says it is
- Some clinicians incorrectly assume that exposure to an addictive drug usually results in addiction.
- In general, patients in pain do not become addicted to opioids. Although the actual risk of addiction is unknown, it is thought to be quite low
- Long-acting and sustained-release opioids are useful for patients with continuous pain

Pill mills



PILL MILL UNCOVERED



- Few in late 80's and early 90's
- Late 1990's
- 2011 laws enacted
- 2012 – states have law and prescription monitoring
- 2016 – 378 physicians charged in Florida alone
- 2019 – 49 states have prescription laws

- One group was making \$300K/day
- 3 years prescribed 20 million pills
- Interested Documentaries
 - Oxycontin Express
 - American Greed
 - The Pharmacist



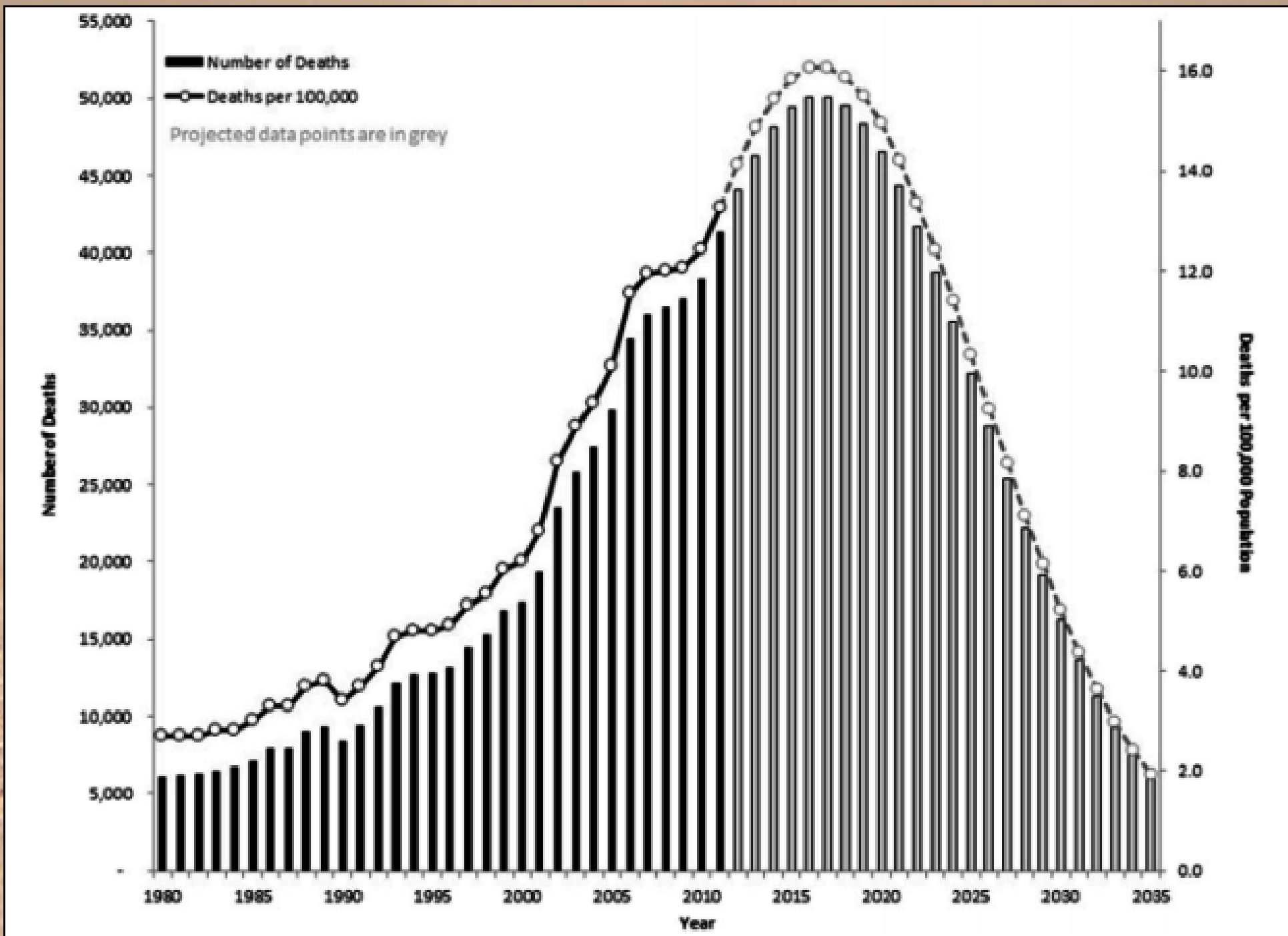
Here in PA too

- Pennsylvania alleged “pill mill”
- 2017
- 5.5 million opioid pills in 4 years
- Some regional pharmacies had stopped filling Rx



- 841,000 people have died since 1999 from opioid overdose
- Since 1999 there is a 6 times increase in death
- From 1999 increase Oxycodone Rx by 400 times

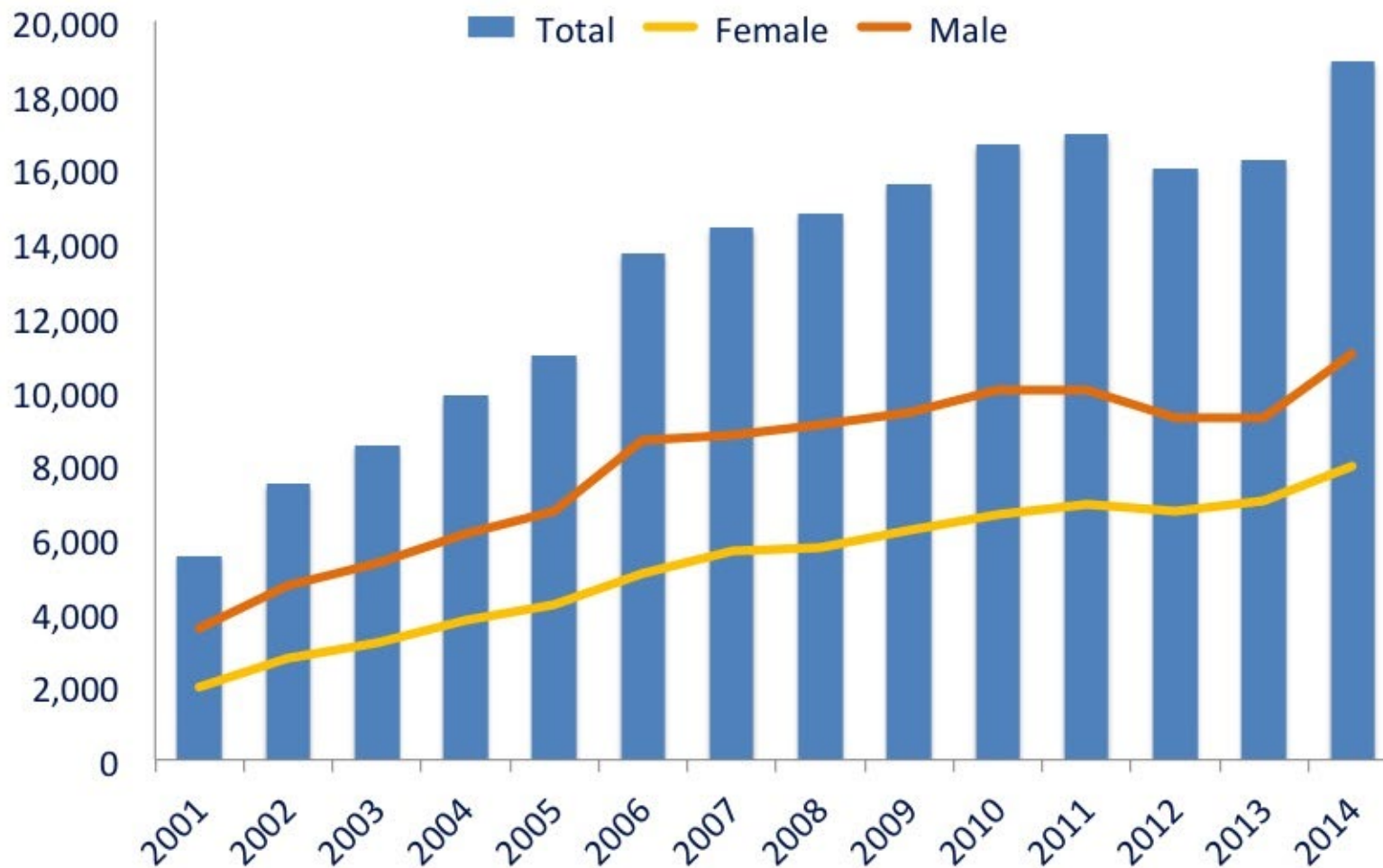






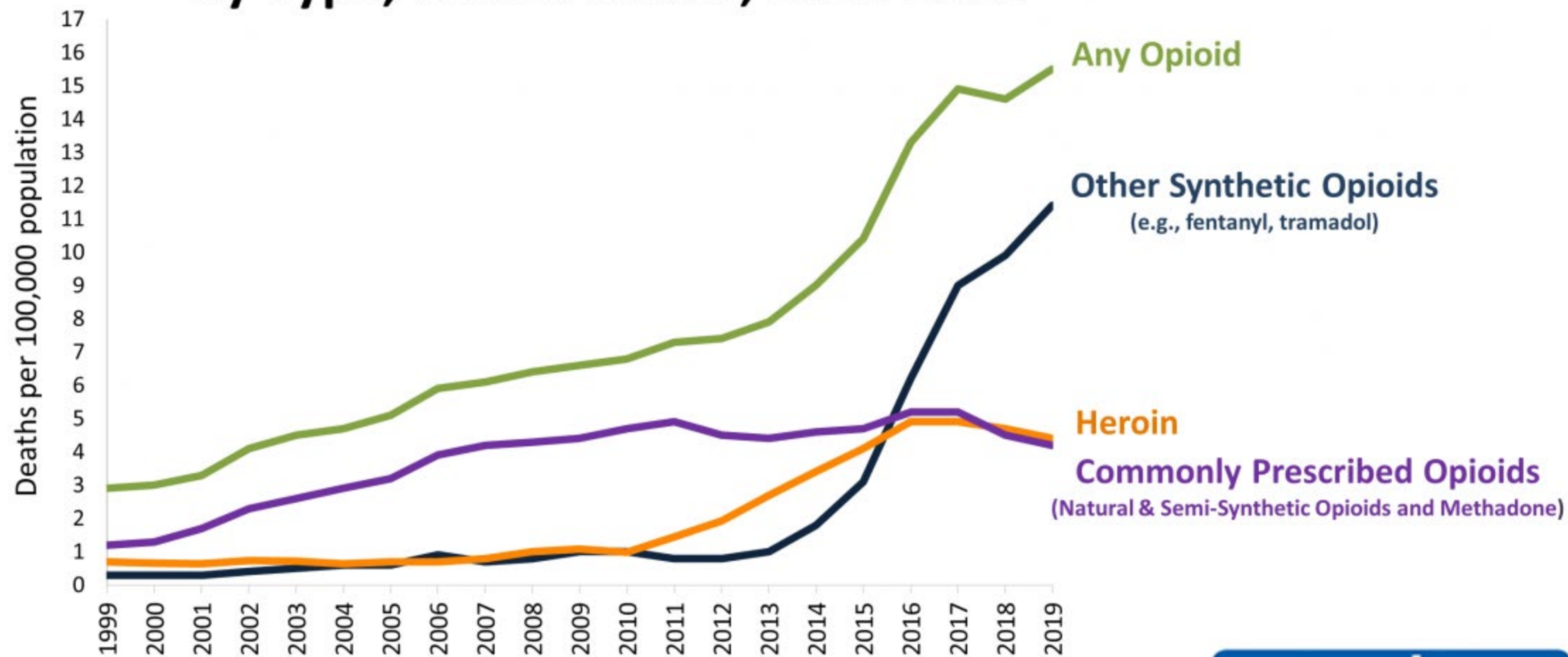
National Overdose Deaths

Number of Deaths from Prescription Opioid Pain Relievers



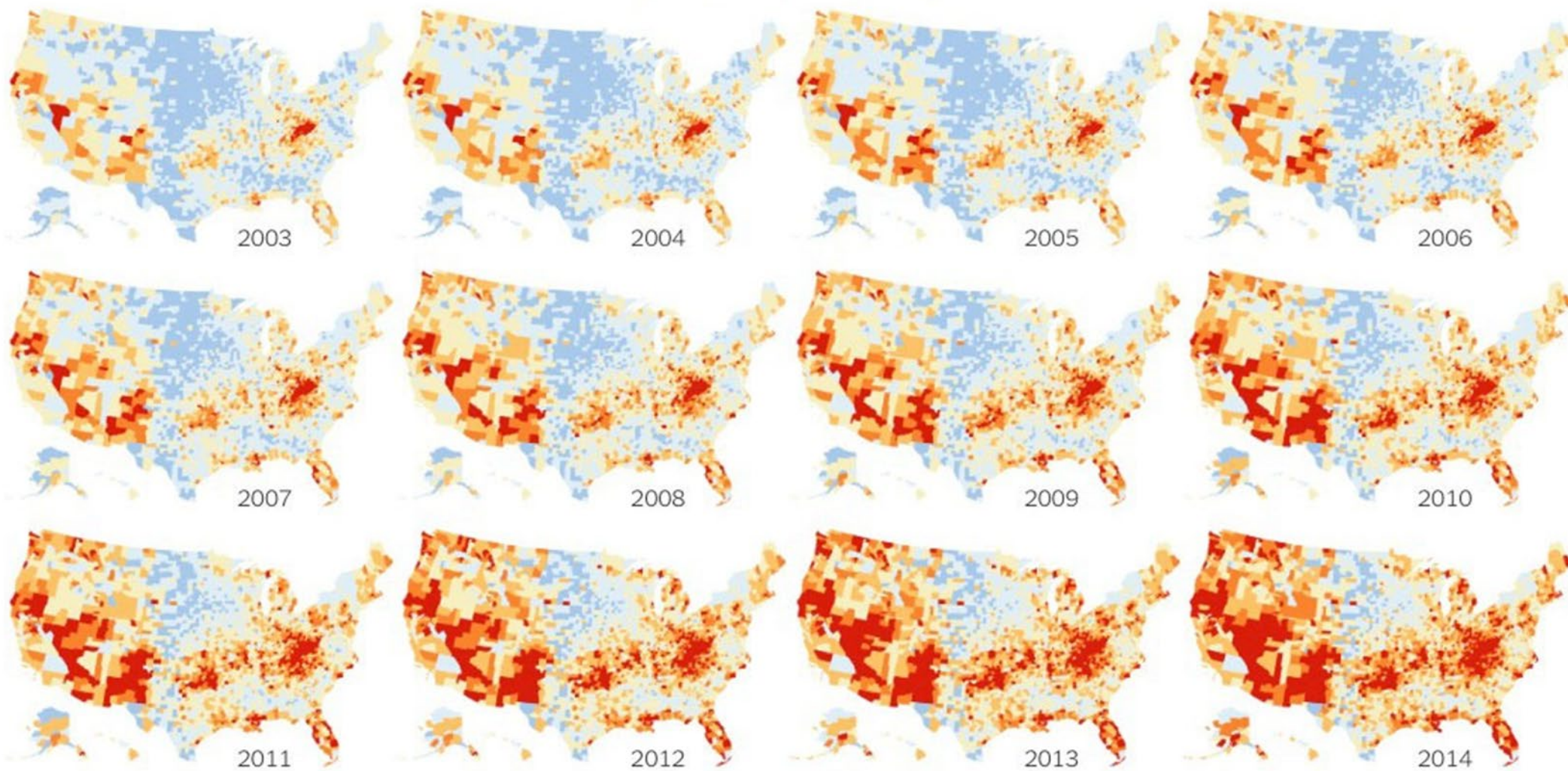
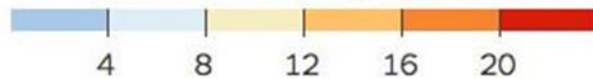
Source: National Center for Health Statistics, CDC Wonder

Overdose Death Rates Involving Opioids, by Type, United States, 1999-2019



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2020. <https://wonder.cdc.gov/>.

Overdose deaths per 100,000

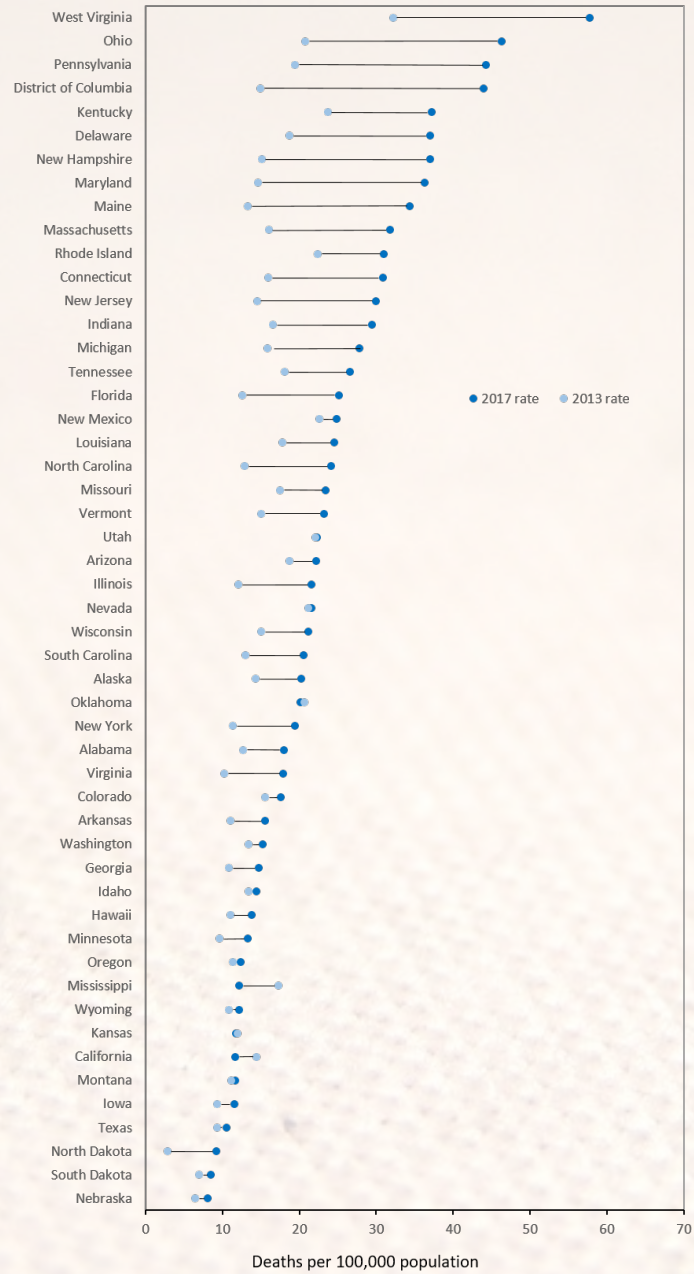


Oxycodone

- 2010 Reformulated
- 2015 FDA approval to age 11
- Polyethylene oxide
 - Harder to crush, dissolve, and inject
- FDA looked into claims
 - Still no data available
 - 2015



Age-adjusted rate* of drug overdose deaths†, by state—2013 and 2017§



Opioid epidemic declared

- 2017 national public health emergency
- 1.8 billion dollars allotted
- Increase in telemedicine
- Deaths increased 200% from 2013-2016



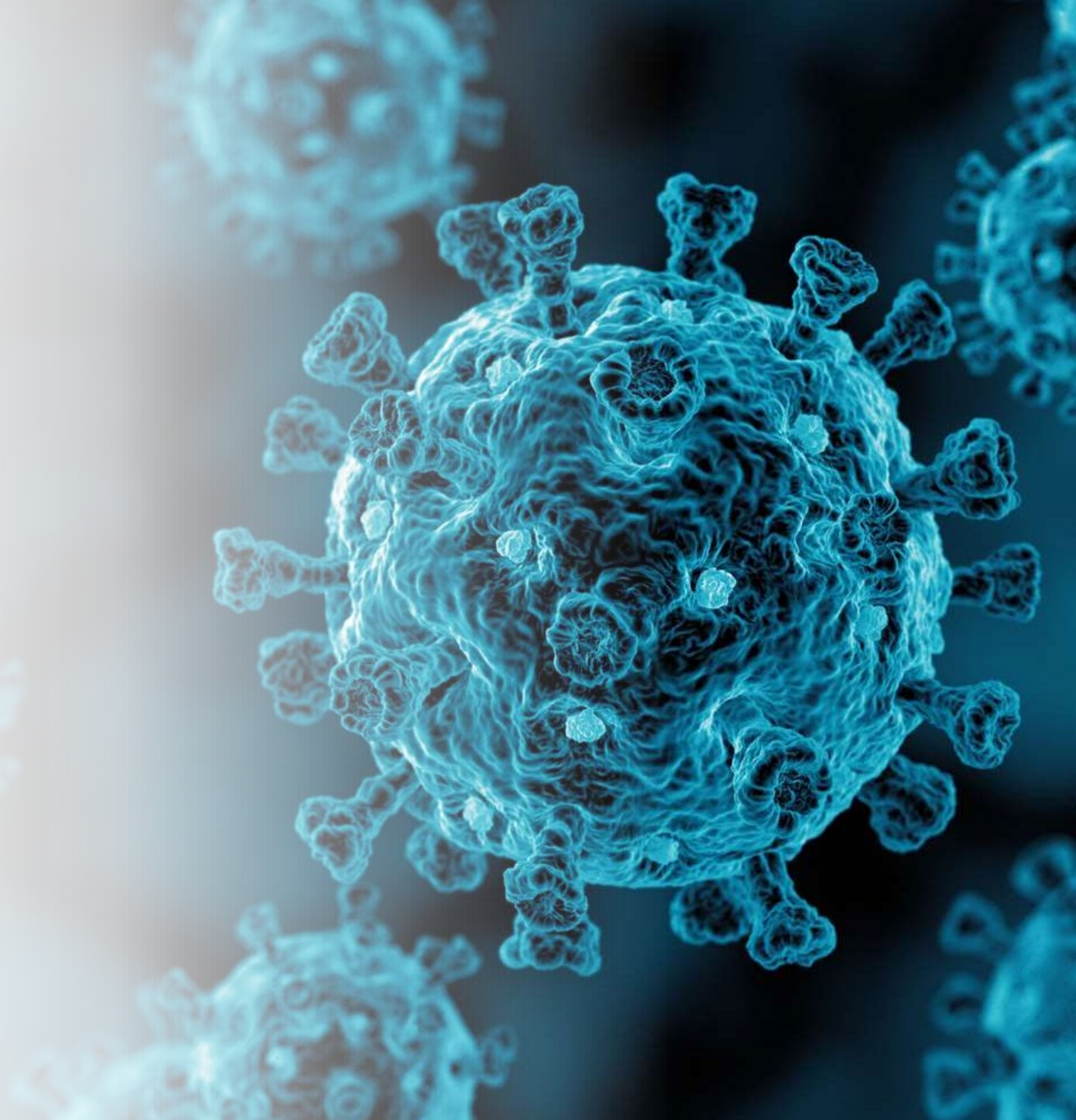
Puget sound

- 2018 Puget sound
- Mussels tested positive
- 3/17 locations
- Trace levels but +





COVID - 19

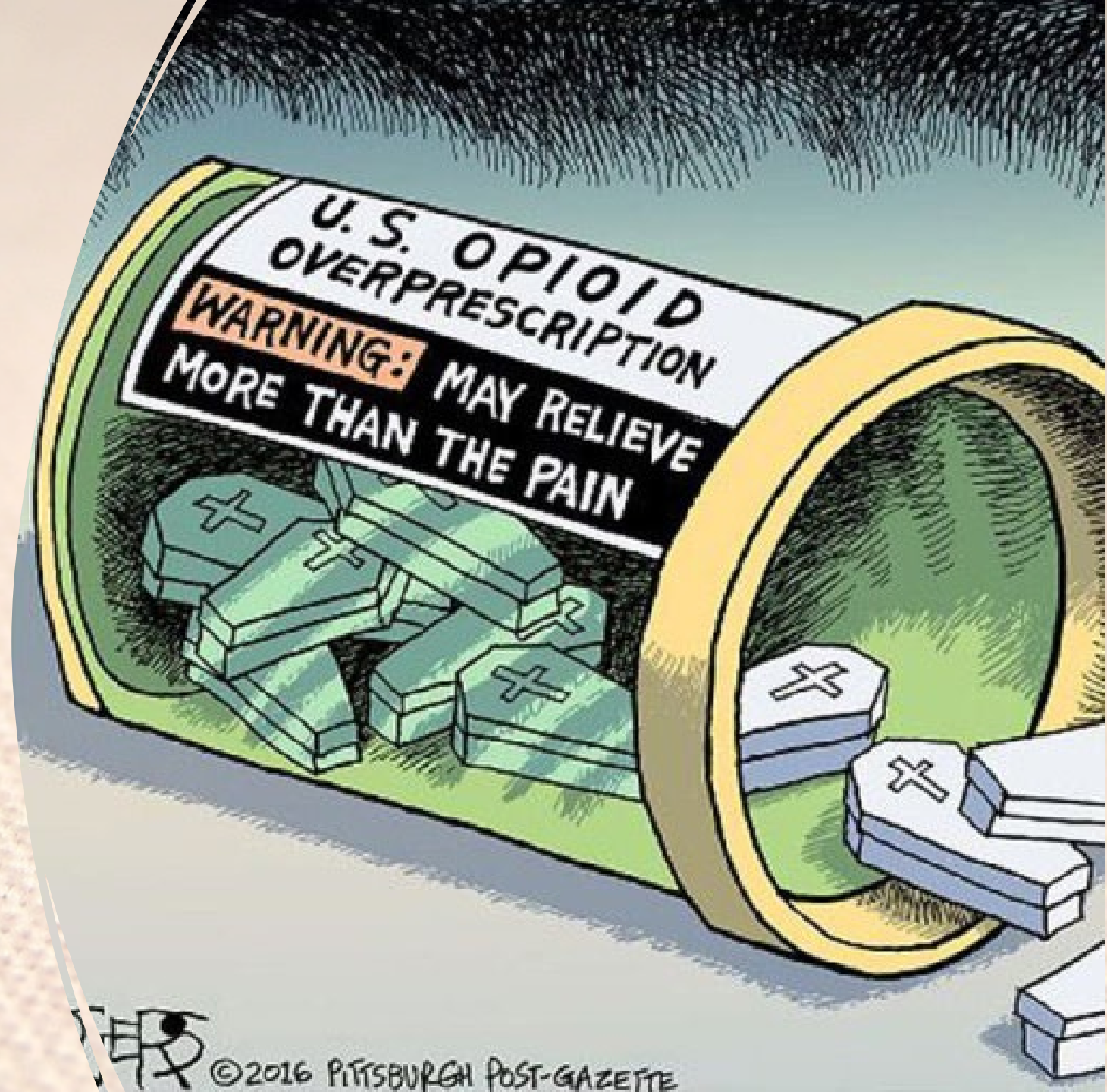


- Isolation
- Clinics and Hospitals limited services
- Less Access to care
- Change in funding



- Increased Telemedicine
- Increase in access to treatment Buprenorphine*
- Increased access to suboxone

-
- Over 700K people used Heroin in 2020
 - Over 50K for the first time
 - 1.6 million people misused prescription opioids
 - 130 people die each day from opioid related death
 - <20% of people with OUD get treatment





Lawsuits

Lawsuits settled

- JNJ settled (Jansen) WV lawsuit for \$99 million – \$26 billion
- Purdue 2018 \$634 million for misleading and promotion
- Purdue settled lawsuit for misbranding \$4.5 billion bankruptcy settlement
- Michigan \$800 million
- Utah \$200 million
- Ohio sues CVS, Walmart, Walgreens for \$878 million



- 2021 number not in but . . . On track . . . 105K deaths
 - 107,600 deaths
 - 2020 – 93K deaths – May
 - 42K – 2016
 - 64K – 2017
 - 70.5K – 2019
- 

Fentanyl Awareness Day



May 10, 2022

1st annual

DEA

References

- Ayoo, Kennedy. Et. Al “The opioid crisis in North America: facts and future lessons for Europe.” *Anaesthesiol Intensive Ther* 2020; 52, 2: 139–147.
- Baker, D. “Clarification of April 13, 2016, statement on pain management.” The Joint Commission. April 2016.
- Beauge, John. “‘Pill mill’ doctor renews bid to withdraw guilty plea to drug prescription charges.” PennLive. April 2022.
- Bebinger, Martha. “Mass. Men Hit Particularly Hard By Opioid Crisis, New Data Show.” WBUR. Jan 2016.
- CDC.gov. “Opioid Data Analysis and Resources.”
- Gosport Independent panel. “The Panel Report - 20th June 2018.” Chapter 2: Prescribing and administration of drugs and the deaths that resulted.

Cont.

- [HHS.gov/opioids](https://www.hhs.gov/opioids). “What is the U.S. Opioid Epidemic?”
- Johnson, Alex. “FDA Approves OxyContin for Children as Young as 11.” Health News NBC. Aug. 2015.
- Jones, Mark. Et. Al. “A Brief History of the Opioid Epidemic and Strategies for Pain Medicine.” Pain Ther. 2018 Jun; 7(1): 13–21.
- Mattson, Christine. Et. al. “Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019.” Weekly / February 12, 2021 / 70(6);202–207.
- Porter, J, & Hershel, J. “Addiction rare in patients treated with narcotics.” NEJM. 1980.
- Salam, Maya. “The Opioid Epidemic: A Crisis Years in the Making.” NYT. Oct 2017.
- Scutti, Susan. “Mussels in Washington’s Puget Sound test positive for opioids, other drugs.” CNN health. May 2018.