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OCTOBER 1, 2023

The Opioid Epidemic Explained in 10 Figures

EXECUTIVE SUMMARY

- The tables below are provided by the **Stanford-Lancet Commission** on the North American Opioid Crisis and the U.S. Centers for Disease Control and Prevention (CDC).

- Stanford University funds the Commission and brings together diverse Stanford scholars and other leading experts in the USA and Canada.

- Lancet is a medical journal that seeks to publish the best research papers with the goal of transforming society and positively impacting the lives of people.

- The Commission's goal is to:
  (1) **understand** the opioid crisis
  (2) propose solutions **domestically**
  (3) stop its spread **internationally**

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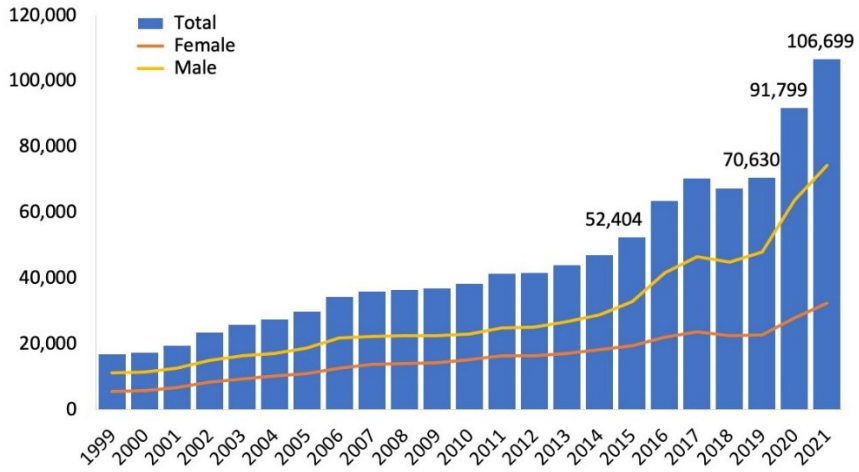
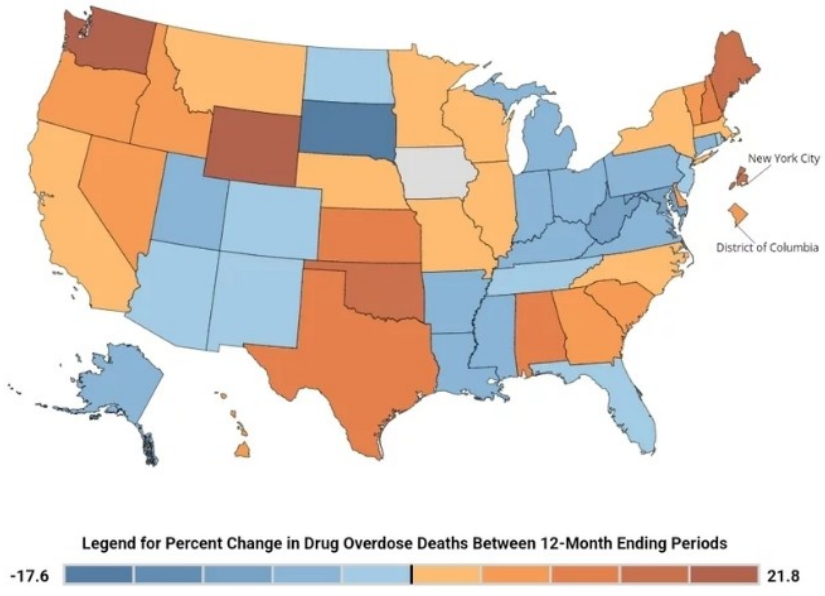
Figure 1. National Drug-Involved Overdose Deaths*, Number Among All Ages, by Gender, 1999-2021



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.



Preliminary data from the Centers for Disease Control and Prevention shows some states reduced drug deaths in 2022 by up to 7 percent. But other states saw surges in fatal overdoses of 10-20 percent.

Centers for Disease Control and Prevention

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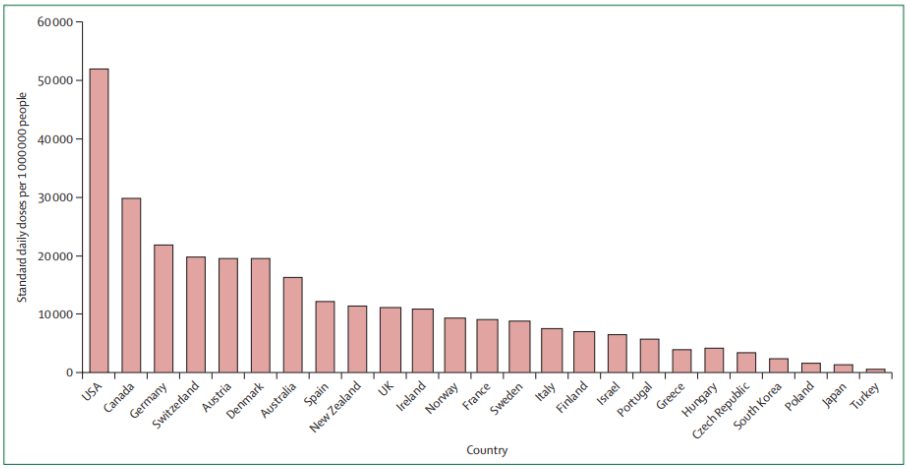

Figure 1: **International per-person consumption of prescription opioids (2010–12)**
This period coincides with the peak of opioid prescribing in the USA and Canada.

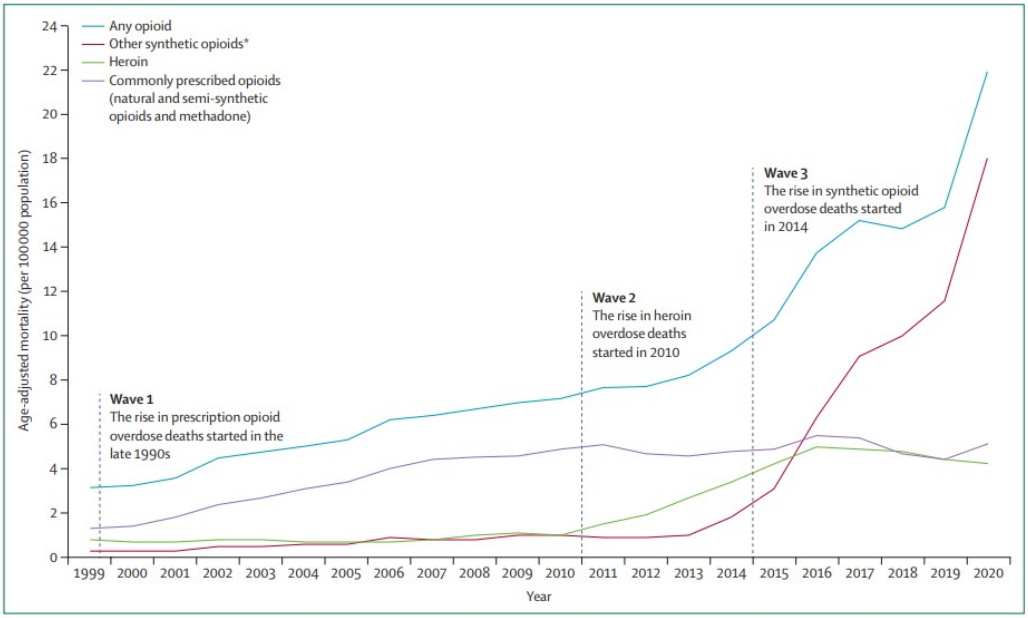

Figure 2: **The three waves of the epidemic of opioid overdose deaths in the USA**
Data are from the US Centers for Disease Control and Prevention's Wide-Ranging Online Data for Epidemiologic Research.[17] *Tramadol or fentanyl prescribed or illicitly manufactured.

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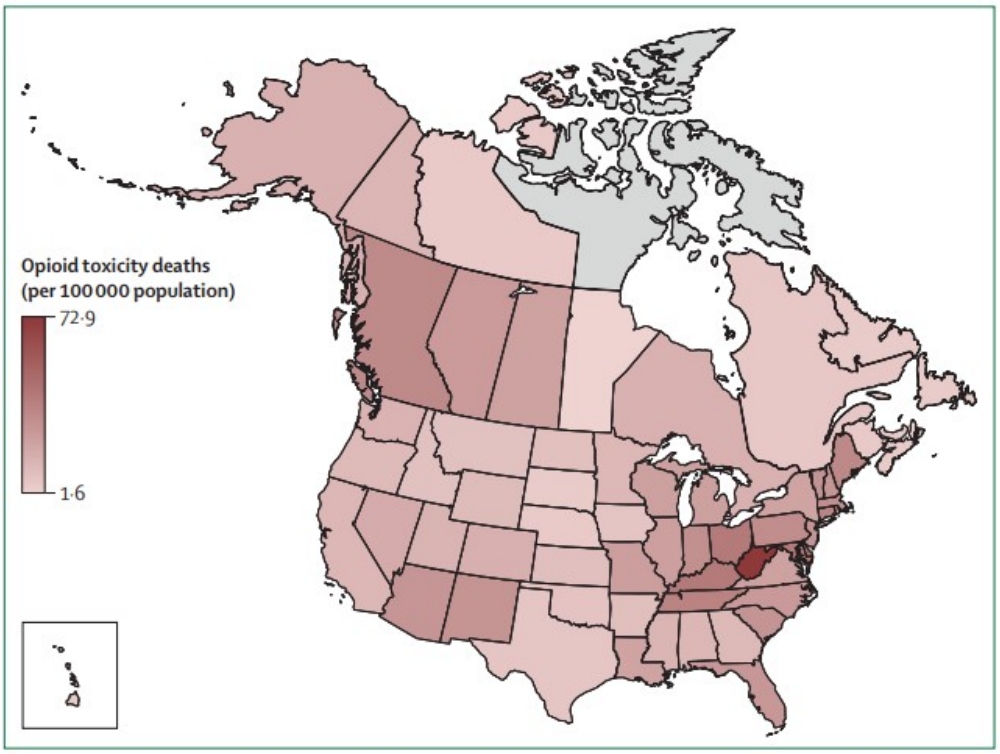

Figure 3: **Age-adjusted opioid toxicity deaths (per 100 000 population) in the USA and Canada, 2020**
Canadian data from Public Health Agency of Canada. US data from the Centers for Disease Control and Prevention Wide-Ranging Online Database for Epidemiologic Research. Values for Quebec include all illicit drug toxicity deaths—separate statistics for opioids were not available. Values for Nunavut were unavailable due to small counts.

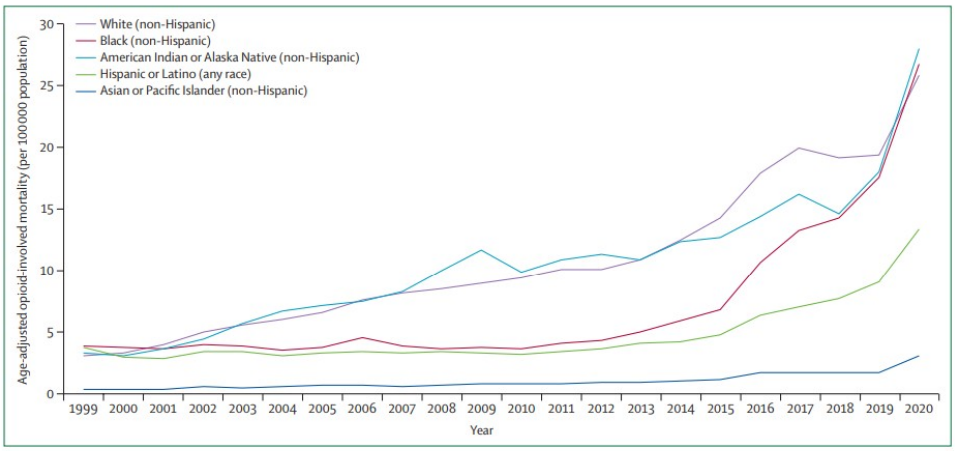

Figure 4: **US age-adjusted opioid-involved mortality (per 100 000 population), 1999–2019**
Data are from the US Centers for Disease Control and Prevention's Wide-Ranging Online Data for Epidemiologic Research.[17]

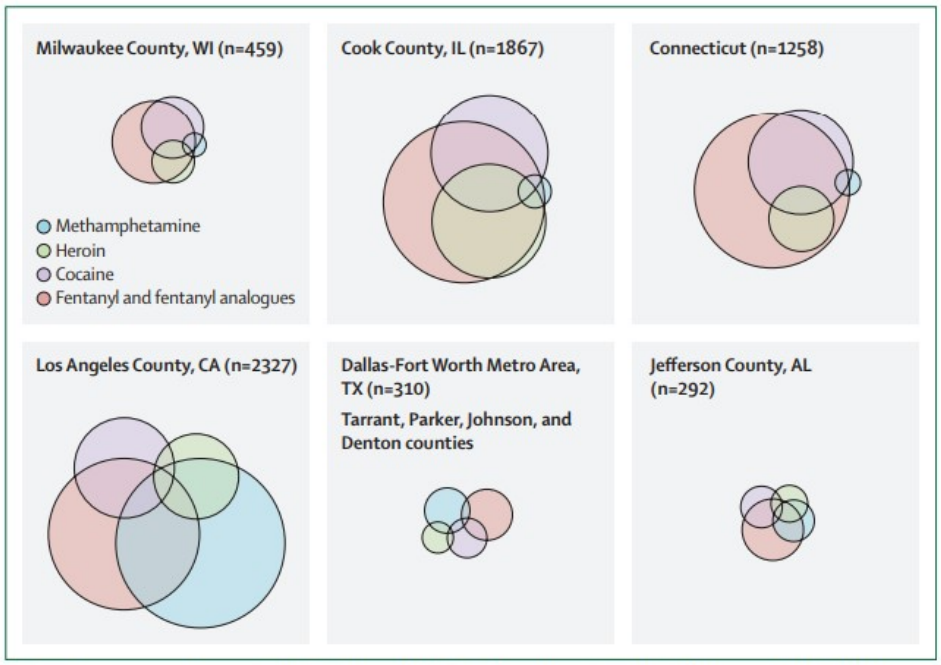

Figure 5: **Proportional drug combinations involved in fatal overdoses in US jurisdictions with detailed medical examiner data available, 2020**
Based on death investigations that were completed at time of data request.[71-73] Official counts by jurisdictions may differ as all investigations are completed. These areas were chosen to provide a country-wide view.

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***Panel 6*: Priority areas and objectives in the US National Pain Strategy[176]**

Population research

- Objective 1: Estimate the prevalence of chronic pain and high-impact chronic pain in the general population and in primary care settings, both overall and in anatomically defined pain conditions and various population groups
- Objective 2: Refine and use standardised electronic health-care data methods to establish the extent to which people with common pain conditions, including people from vulnerable groups, receive various treatments and services, the costs of these services, and the extent of use of treatments that best evidence suggests are underused, overused, effective, or ineffective
- Objective 3: Develop a system of metrics for tracking changes in pain prevalence, effects, treatments, and costs over time that will enable assessment of progress and the effectiveness of interventions at the population health level (such as public education or changes in public policy, payment, and care), as well as identification of emerging needs

Prevention and care

- Objective 1: Characterise the benefits and costs of prevention and treatment approaches
- Objective 2: Develop nation-wide programmes for self-management of pain
- Objective 3: Develop standardised, consistent, and comprehensive pain assessments and outcome measures across the continuum of pain

Disparities

- Objective 1: Reduce implicit, conscious, and unconscious bias and their effects on pain treatment by improving understanding of the effects of bias and supporting strategies to overcome it
- Objective 2: Improve access to high-quality pain services for vulnerable population groups
- Objective 3: Facilitate communication between patients and health professionals
- Objective 4: Improve the quality and quantity of data available to assess the effect of pain on high-risk population groups, including data for group members' access to high-quality pain care and the costs of disparities in pain care

Service delivery and reimbursement

- Objective 1: Define and assess integrated, multimodal, and interdisciplinary care for people with acute pain, chronic pain, and end-of-life pain
- Objective 2: Enhance the evidence base for pain care, and integrate it into clinical practice through defined incentives and reimbursement strategies to ensure that the delivery of treatments is based on the highest level of evidence, is population-based, and represents real-world experience
- Objective 3: Tailor reimbursement to promote and incentivise high-quality, coordinated pain care through an integrated biopsychosocial approach that is cost-effective, comprehensive, and improves outcomes for people with pain

Professional education and training

- Objective 1: Develop, review, promulgate, and regularly update core competencies for pain care education, licensure, and certification at the undergraduate and graduate levels
- Objective 2: Develop a pain education portal that contains a comprehensive array of standardised materials to enhance available curricular and competency tools

Public education and communication

- Objective 1: Develop and implement a national public awareness and information campaign about the effects and seriousness of chronic pain, to counter stigma and correct common misperceptions
- Objective 2: Develop and implement a national educational campaign that encourages safe medication use, especially safe opioid use, among patients with pain

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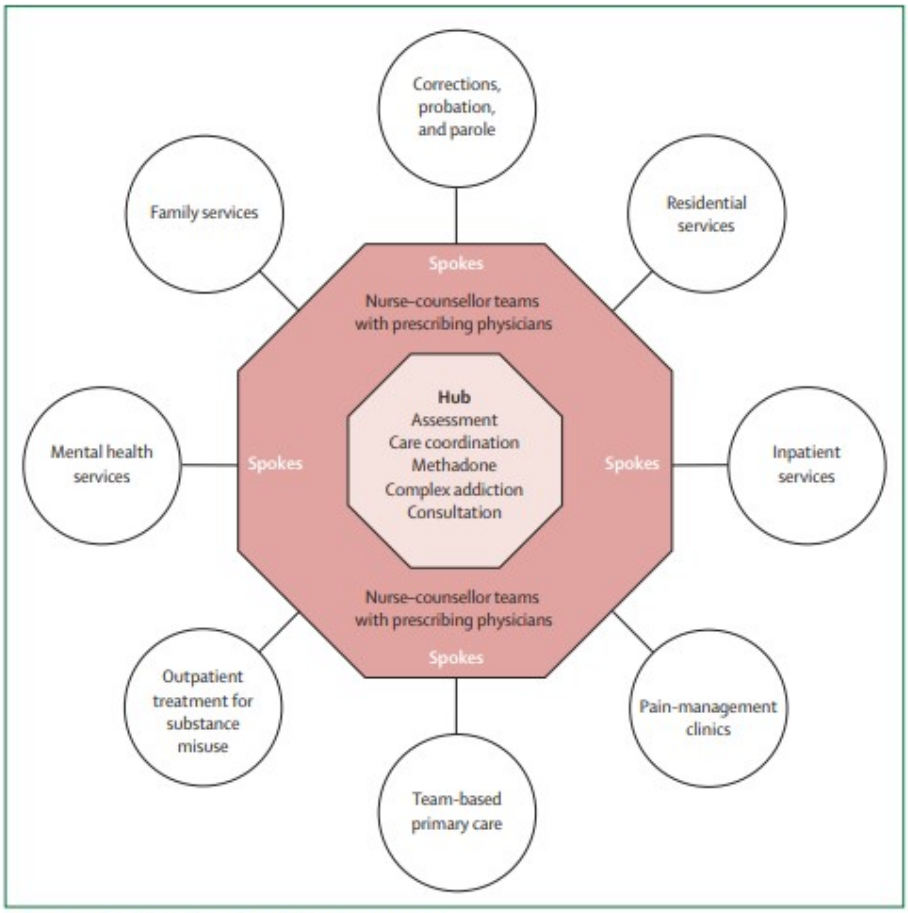

Figure 7: **Hub-and-spoke model of addiction treatment**

Panel 7: Voices of people in recovery from addiction

"For me, recovery wasn't an overnight process—it was a series of events dating back to my active using days—but my journey started at the needle exchange. The very first person I met who had successfully kicked heroin and stayed off for many years was a staff person at the exchange. By talking with us, encouraging us, and simply being there, the staff and volunteers reinforced that all drug users are human beings, deserving of compassion."

Tracey Helton Mitchell[255]

"I am one of the lucky ones. And I know my continuing sobriety is not the result of my actions alone. I have a loving family and an extensive support network. I have 12-step and the guidance of my sponsors. I have good health insurance. I have the money, time, and resources to help me save myself."

Nikki Sixx, Mötley Crüe bassist[256]

"During the ten years of my life I was using opioids, I never had a real friend. But once I put the drugs down, I started to find my people. That's how it is in recovery. We make friends quickly. We know what it's like out there. We've all survived the same nightmare."

Ryan Hampton[257]

"I got tired of being a junkie, and I got tired of being a patient. I help take care of my grandma now. She has Alzheimer's, and I do a lot of things for her, just like taking care of a little baby. My mom says I take even better care of her [Grandma] than she does ... I want to be well, and hold onto my dignity as long as I can. I can think again, and I'm doing art again, and that feels really good."

Diana[44]

"I started Homecomings: From Prison to Positivity. It's for people who've been to prison, come home, and tried to keep their recovery. I know the struggles. I know the anxieties. We started meeting every Tuesday from eleven to twelve, and this room got so packed that I had to add another day ... We focus on getting better, whatever we're recovering from."

Tarah Dorsey[258]

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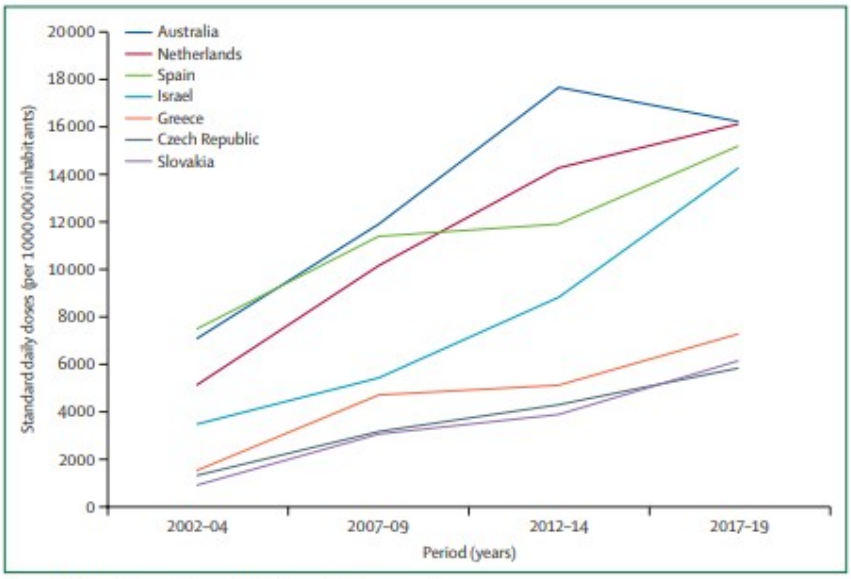

Figure 8: **Selected countries with rising opioid consumption**

SOURCES: THE STANFORD-LANCET COMMISSION, CDC