

The Socioeconomic and Public Health Impact of the Opioid Crisis

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CME Credit for this module:

- This module will count towards 0.5 credits upon completion of the series.

Series Objective

- The goal of this CME series is to equip physicians with the tools, data, and strategies to reclaim their leadership role in solving the opioid crisis through tangible, high-value surgical innovation.
- This includes advancing opioid-free surgery as a proven alternative that meets the rising demand from employers, unions, and payers for smarter, outcome-driven care.
- By reducing unnecessary opioid prescriptions, this series aims to help clinicians meet a real-world need—and lead the market shift toward value-based care.

Module Objectives

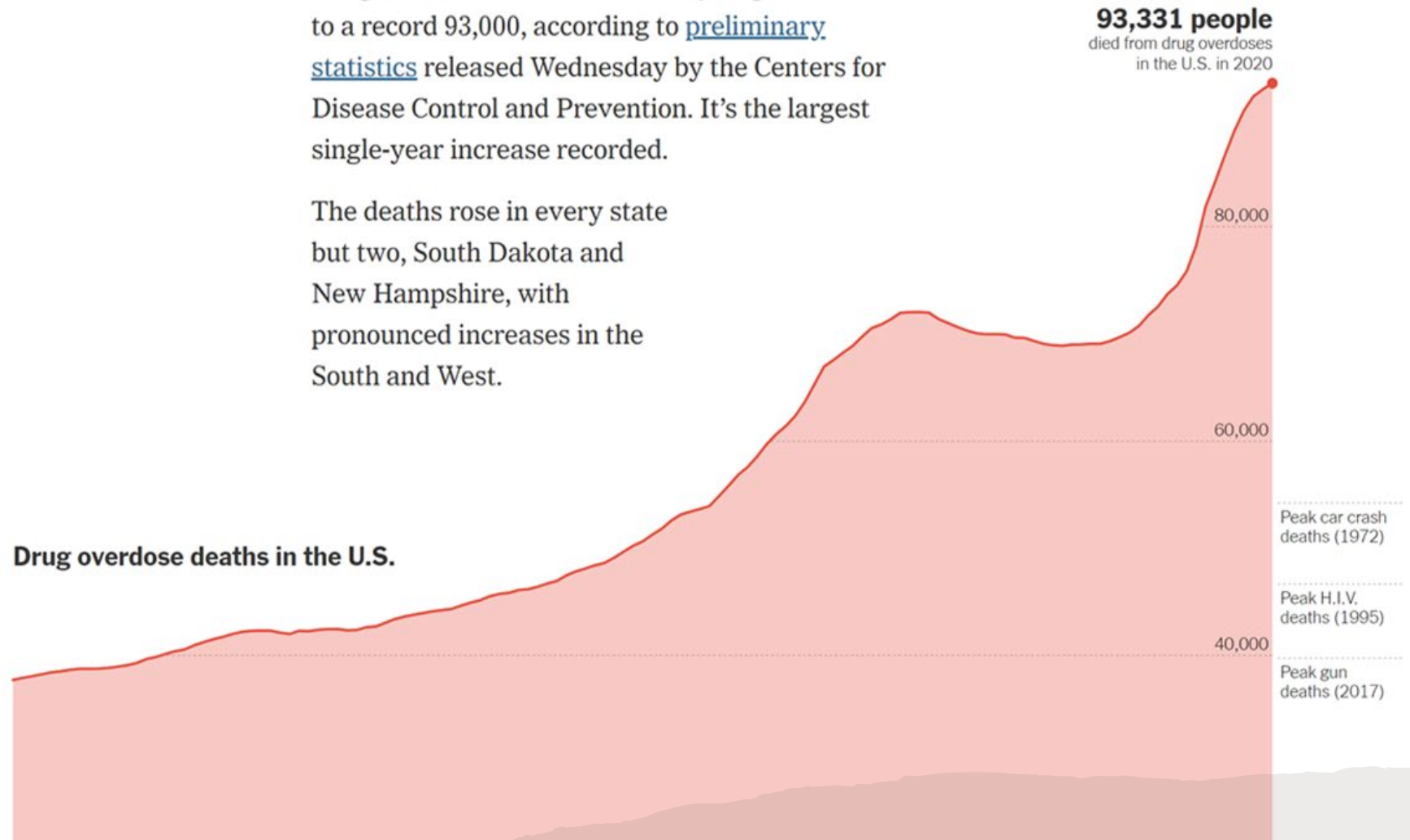
- **Identify industries and workforce segments** disproportionately impacted by opioid overdose deaths, especially in construction, manufacturing, and other labor-intensive sectors.
- **Analyze the financial burden** of the opioid crisis on employers and health plans, including increased claims, prolonged disability, and elevated healthcare costs linked to postsurgical opioid use.
- **Contrast opioid prescribing practices** in the U.S. with international standards, recognizing how systemic cultural differences contribute to the overuse of opioids in surgical recovery.
- **Describe employer-based solutions**, such as enhanced recovery programs and opioid-free protocols, as upstream interventions to reduce opioid dependence and its associated costs.

The Socioeconomic and Public Health Impact of the Opioid Crisis

- Over 1 million deaths since 1999.
- According to the National Institute on Drug Abuse (NIDA), nearly 80% of Americans using heroin (including those in treatment) reported misusing prescription opioids prior to using heroin.(1)
- Prescription opioids implicated in 13% of deaths.
- Labor-intensive industries disproportionately impacted.

As Covid raged, so did the country's other epidemic. Drug overdose deaths rose nearly 30 percent in 2020 to a record 93,000, according to [preliminary statistics](#) released Wednesday by the Centers for Disease Control and Prevention. It's the largest single-year increase recorded.

The deaths rose in every state but two, South Dakota and New Hampshire, with pronounced increases in the South and West.

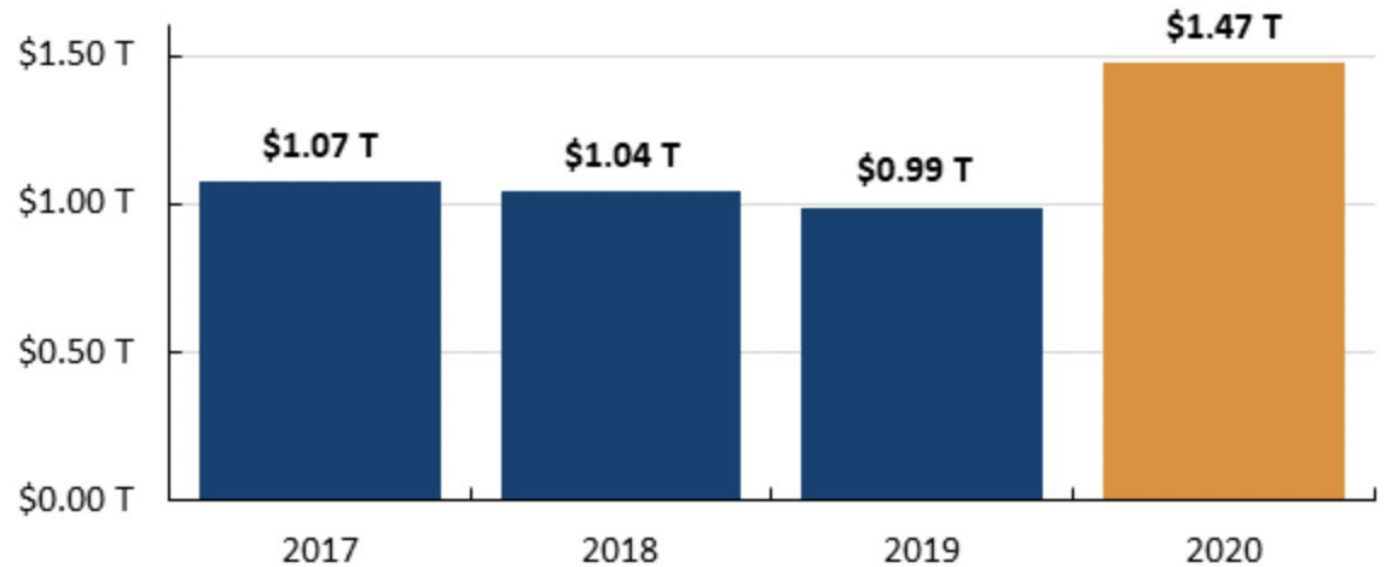


Economic Impact of the Opioid Crisis

- Total Economic Burden
- **\$1.02 trillion annually (as of 2020):**
 - This includes direct healthcare costs, lost productivity, and costs to the criminal justice system.
 - Between 2015–2018, the crisis cost the U.S. over **\$630 billion**, growing annually.

In 2020, the Opioid Crisis Cost \$400 Billion More Than in 2017

U.S. cost of opioid use disorder and fatal opioid overdose in 2020 dollars (trillions)



Source: The 2017 cost estimate is from "The Economic Burden of Opioid Use Disorder and Fatal Opioid Overdoses in the United States, 2017," Florence et al. The 2018-2020 cost estimates are JEC calculations that adopt Florence et al's methodology and use annual data from SAMHSA and the CDC's National Vital Statistics System. All cost estimates are adjusted to 2020 dollars.



Economic Burden Broken Down

Healthcare Costs:

- Treatment for opioid misuse, overdose, and associated health conditions.
- Emergency medical services for overdose cases.
- Neonatal care for opioid-exposed newborns.
- **\$38 billion** annually for direct healthcare costs.

Lost Productivity:

- Absenteeism and workforce attrition due to opioid addiction.
- **\$96 billion annually** in lost productivity.
- High rates of disability claims related to opioid misuse.

Criminal Justice Costs:

- Policing, legal proceedings, and incarceration related to opioid-related crimes.
- Costs of enforcing drug-related laws and prosecuting offenders.
- Estimated at **\$14.8 billion annually**.

Employer Costs:

- Increased workers' compensation claims in physically demanding industries.
- Higher healthcare premiums due to opioid misuse among employees.

Social Costs:

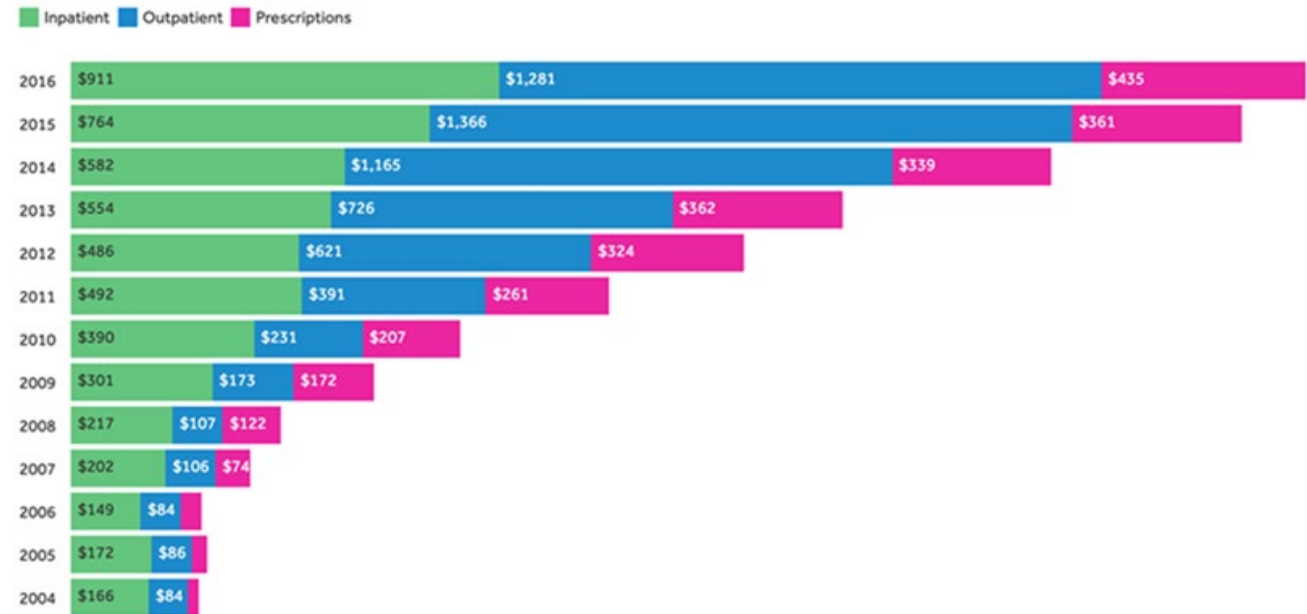
- Child welfare and foster care services for children affected by parental opioid misuse.
- Community-level effects like housing instability and food insecurity.

Economic Strain: Employers

- **Commercial Market:**
- **Total Expenditure:** Between 2004 and 2016, annual spending on opioid addiction and overdose treatment by large employer plans surged from \$0.3 billion to **\$2.6 billion**. kff.org
- **Inpatient Treatment Costs:** For enrollees requiring inpatient care, average expenses increased from \$5,809 in 2004 to \$16,104 in 2016. kff.org
- **Per Enrollee Expenditure:**
- A 2023 study revealed that the annual medical expenditure attributable to substance use disorders **was \$15,640 per affected enrollee**, totaling \$35.3 billion across the population. Alcohol-related disorders accounted for \$10.2 billion of this amount. jamanetwork.com
- **Impact on Employer Plans:**
- Individuals diagnosed with opioid use disorder incur nearly double the annual medical expenses (**\$19,450**) compared to those without the disorder.

Spending on opioid addiction and overdose treatment has increased each year in the last decade

Total amounts paid for opioid addiction and overdose treatment diagnoses for enrollees in large employer plans, in millions, 2004-2016



Source: Kaiser Family Foundation analysis of Truven MarketScan data, 2016 • [Get the data](#) • PNG

Peterson-Kaiser
Health System Tracker

Industries at Disproportionate Risk

- Construction and manufacturing workers are 6 times more likely to die from opioid overdoses than the general population.

- High rates of injury and chronic pain in these industries lead to higher opioid prescriptions.

- Cultural and economic pressures drive reliance on opioids, often to 'work through the pain.'

Construction and manufacturing bear a higher burden due to injury and opioid dependency.

- Overdose death rates in construction exceed 70 per 100,000 compared to the national average of 21 per 100,000.

Health Care Burden Associated with Outpatient Opioid Use Following Inpatient or Outpatient Surgery

Chad M. Brummett, MD; Christina England, MPH; Jackie Evans-Shields, PharmD; Amanda M. Kong, DrPH; Carolyn R. Lew, PhD; Caroline Henriques, MPH; Nicole M. Zimmerman, MS; Jayne Pawasauskas, PharmD; and Gary Oderda, PharmD, MPH

ABSTRACT

BACKGROUND: The treatment of postsurgical pain with prescription opioids has been associated with persistent opioid use and increased health care utilization and costs.

OBJECTIVE: To compare the health care burden between opioid-naive adult patients who were prescribed opioids after a major surgery and opioid-naive adult patients who were not prescribed opioids.

METHODS: Administrative claims data from the IBM Watson Health MarketScan Research Databases for 2010-2016 were used. Opioid-naive adult patients who underwent major inpatient or outpatient surgery and

What is already known about this subject

- Opioids are commonly prescribed for treating acute postsurgical pain. Studies have reported that postsurgical opioid use can lead to persistent opioid use in opioid-naive patients.
- Evidence on the economic burden of postsurgical opioid use in the management of acute postsurgical pain remains limited.

What this study adds

- This study showed that filling an outpatient prescription for

Impact of Postsurgical Opioid Prescription on Healthcare Costs

- A study of over 4 million opioid-naive surgical patients revealed that **filling an opioid prescription after elective surgery significantly increases healthcare costs across all payer types (commercial, Medicare, Medicaid).**

Key Findings:

- ****Commercial Insurance****: Opioid users incurred **\$7,770 more in total costs** than non-opioid users within 1 year of surgery.
- ****Medicare****: Opioid users faced **\$4,960 higher costs** than non-opioid users.
- ****Medicaid****: Opioid users had **\$4,309 more in costs** compared to non-opioid users.

Opioid use was associated with:

- Increased hospital readmissions and emergency department visits.
- Greater pharmacy claims and persistent postsurgical pain.
- **Conclusion: Even one opioid prescription after surgery leads to a higher economic burden for payers and worsens patient outcomes.**

U.S. vs. Global Opioid Use: A Stark Contrast

- According to the WHO, **the U.S. accounts for <5% of the world population but consumes >80% of the global opioid supply.**
- Study of 4,690 patients across 8 countries. Hernia, Lap Chole, Appendectomy.
- ****91%** of U.S. patients were prescribed opioids post-surgery compared to ****5%** globally.****
- U.S. patients received a median of ****20 pills (150 mg OME)****, compared to ****0 pills (0 mg OME)**** in non-U.S. patients.
- Higher opioid refill rates in the U.S. (4.7%) vs. global average (1.0%).
- Conclusion: **Cultural and systemic factors in the U.S. contribute to excessive opioid prescribing post-surgery.**

Employers and Union Concerns: Economic Drivers

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- Rising healthcare costs due to addiction treatment, absenteeism, and disability claims.
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- Workers' compensation claims often tied to opioid prescriptions increase liability for employers.
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- Labor shortages worsen as addiction sidelines skilled workers.

Opioid's Impact on Workers Compensation Claims

- **Decline in Opioid Prescriptions in Workers' Compensation Claims:** In 2012, 55% of workers' compensation claims with prescriptions included at least one opioid prescription. By 2022, this figure had decreased to 32%, indicating a positive trend in reducing opioid prescriptions within the workers' compensation system.
- **Duration of Temporary Disability:** Injured workers prescribed opioids tend to experience longer periods of temporary disability. Specifically, those receiving longer-term opioid prescriptions for low back injuries had temporary **disability durations more than three times longer** than similar claims without opioid prescriptions.
CDC.GOV
- **Increased Claim Costs:** The prescription of **long-acting opioid** painkillers is **associated with a higher likelihood** of workers' compensation **claims escalating to catastrophic** levels, with costs **exceeding \$100,000**.

CDC.gov

Employers and Union Concerns: Solutions

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- Enhanced recovery programs offer a prevention-first solution, reducing long-term costs and improving employee health outcomes.
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- Non-opioid surgical protocols directly address concerns by reducing complications and opioid dependency after surgery.
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- Large employers and unions are motivated to support these initiatives for better health outcomes and workforce retention.

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Conclusion

Congratulations - you have now completed the first module of *Primer for Opioid-Free Surgery*.

After completing all ten modules, you can fill out the post-course questions and evaluation to claim CME credits.

Questions about this module or CME credits?

Please send an email to TUN.CME@touro.edu