

The Cascading Effects of the Reformulation of OxyContin



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THE ISSUE

Policies to reduce opioid misuse have disproportionately focused on reducing access rather than curbing demand. One of the most comprehensive attempts to disrupt opioid supply is the FDA approval of an abuse-deterrent version of OxyContin, the prescription pain medication whose abuse initially drove the opioid crisis. In a series of innovative studies, Center researchers examined how reformulation affected overall public health in both the short and long term.



STUDY FOCUS

Drawing on multiple state-level data sources researchers constructed a measure of OxyContin misuse, based on documented nonmedical OxyContin use. They used the measure of misuse as a baseline against which to compare multiple outcomes before and after reformulation in 2010: the shift from prescription opioids to illicit drugs, including heroin; a consequent rise in heroin overdose deaths; effects of reformulation on the illicit drug market; and labor market participation and claims for disability insurance.



KEY FINDINGS

The reformulation of OxyContin, intended to reduce overdose deaths from prescription opioids, had multiple unintended effects.

- In the short term, reformulation did reduce misuse of OxyContin.
- Total overdose deaths remained unchanged due to a sharp **increase in heroin-related overdoses** after 2010: the reformulation explains the vast majority of the increase in heroin overdoses between 2010 and 2013.
- Increased use of injectable heroin fueled a surge in **hepatitis C infections**, a virus responsible for more deaths in the United States than any other infectious disease before the advent of COVID-19.
- Over the longer term, the **transition to the illicit market** led to a dramatic increase in deaths from synthetic opioids such as fentanyl in those states that had higher rates of opioid misuse. Those states also experienced higher rates of heroin overdoses.
- States that had higher rates of OxyContin misuse before the drug was reformulated in 2010 subsequently experienced **greater relative reductions in their labor market** and higher rate of disability claiming among their population 18-64.





IMPLICATIONS FOR POLICY

The cascading effects of the OxyContin reformulation provide an unusually powerful example of why the opioid crisis is appropriately viewed as an ecosystem. Initiatives focused on one part of the system may generate undesirable public health consequences elsewhere in the system.

Policies intended to reduce the harms of the opioid crisis by limiting the supply of drugs can be a double-edged sword. Reformulation of OxyContin reduced non-medical use of opioids and other pain relievers, but it also stimulated growth in the market for illicit drugs, which had associated effects on national labor supply and the number of individuals claiming disability insurance.

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