State Opioid Taxes:

ECONOMIC & HEALTH POLICY IMPLICATIONS

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January 2019

MATRIX GLOBAL ADVISORS

WOMEN IN GOVERNMENT

Executive Summary

Opioid abuse in the United States is a scourge. From 1999 to 2017, U.S. opioid overdose deaths have increased six-fold, with an estimated 130 people now dying every day from an opioid overdose. The burdens on the U.S. health care system, criminal justice system, and labor market are significant. While the state-level impact of the opioid epidemic varies considerably, the national economic burden is estimated to exceed $500 billion annually. And the epidemic is evolving, with a rising share of opioid deaths attributed to heroin and synthetic opioids — particularly illicitly manufactured fentanyl — and a diminishing share attributed to prescription opioids.

Facing this national crisis, policymakers have understandably looked for solutions, leading some state lawmakers to propose an excise tax on prescription opioids to deter their use or to fund opioid-related treatment or deterrence programs. The most prominent of these proposals was in New York State, where an opioid tax bill was enacted in 2018 but then tossed out by a federal judge who ruled that the law violated the Commerce Clause of the U.S. Constitution.

While perhaps appealing at first blush, a tax on prescription opioids would be ineffective at discouraging misuse and would impose a burden on the health care sector broadly. Unlike most traditional excise taxes, like those applied to cigarettes, alcohol, or fuel, an excise tax on prescription opioids has unique characteristics that diminish its usefulness as a public policy tool.

AN OPIOID TAX IS AN INEFFECTIVE TOOL FOR REDUCING OPIOID ABUSE

- An excise tax would not change the price for most customers. Insured individuals acquiring an opioid prescription would not see an increase in out-of-pocket costs because most pay a fixed copay for prescriptions.

- Misused prescription opioids are often acquired indirectly – that is, the person who misuses the drug is not the person for whom it is prescribed. Only slightly more than one-third of people who misuse prescription painkillers are prescribed them by a doctor.

- Illegal opioids — heroin and fentanyl, primarily — are now the leading cause of opioid-related deaths. This large and growing category would be unaffected by a tax on prescription opioids.

AN OPIOID TAX WILL HAVE UNINTENDED CONSEQUENCES

- Once the market fully adjusts to any new tax imposed on prescription opioids, health insurers would see their costs rise and would respond by increasing insurance premiums. In this way, the burden of the tax would fall on everyone with health insurance.

- Should out-of-pocket costs for prescription opioids somehow rise as a result of a tax, consumers who abuse opioids would be incentivized to substitute illegal opioids, and consumers who take prescription opioids appropriately would be unduly penalized.

- If manufacturers and distributors are unable to raise prices (due to contractual constraints, a retroactive tax, or an outright ban on passing on costs), they may depart or not enter the market.

A BETTER APPROACH

An opioid tax is not well-targeted to raise revenues or deter abuse and would constitute a new administrative burden for manufacturers and for state revenue departments. Adequate public spending on opioid treatment and prevention programs is critically important, and many states will likely need to supplement existing federal funds. State strategies should be designed to complement federal efforts. This would help ensure that policies are vetted and consistent and that the most effective ones are pursued as widely as possible. However, such efforts should be financed through existing general tax mechanisms — that is, broad-based income or consumption taxes depending on the state's tax structure — or by cutting other spending.

I. Introduction

Opioid abuse in the United States is a scourge, with an estimated 130 people dying every day from an opioid overdose (*CDC, 2018a*). Despite heightened awareness of this crisis, its grip shows no signs of loosening. In fact, deaths caused by use of heroin and fentanyl continue to rise. It is no wonder that policymakers at both the state and federal levels are driven to find a solution to this costly and gripping public health challenge. While characterizing the problem has been relatively easy, effective solutions are harder to craft.

One misguided policy popular in a number of states is to tax prescription opioid products much like cigarettes or alcohol. However, because of the structure of the health care system in the United States, taxing opioids would both fail to mitigate opioid abuse and impose undue burdens on those not suffering from opioid abuse disorder. Moreover, a tax on prescription opioids would do nothing to address the substantial and growing problem of illegal opioids, and in fact could drive more use of illicit substances. Unfortunately, there has been a recent proliferation of state opioid tax proposals, including the highly publicized New York State legislation and ensuing legal battle. After describing the evolution of the opioid epidemic, this paper explains why taxing opioids is an ineffective policy and discusses better options for helping those who suffer from addiction and for stopping opioid abuse before it starts.

II. Evolution of the Opioid Epidemic

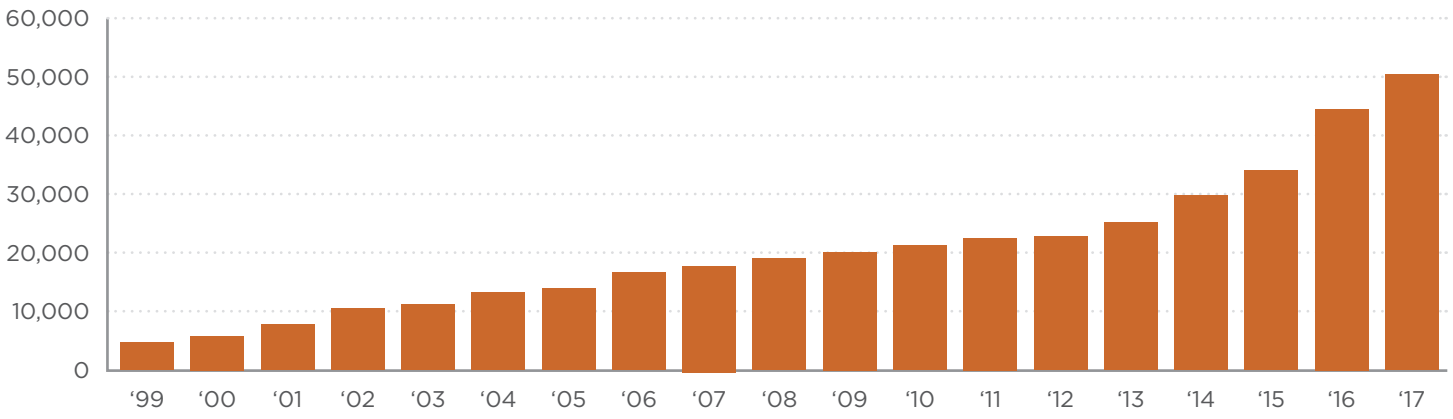
Opioids as a drug class include prescription pain relievers such as oxycodone, hydrocodone, and morphine; synthetic opioids (most commonly fentanyl), which can be prescription or illegal; and heroin. The rise of the opioid epidemic in the United States can be traced to the 1990s and the heavy utilization of prescription painkillers that began that decade (*NIDA, 2018a*). Since then, use of heroin and synthetic opioids (particularly illicitly manufactured fentanyl) have increased markedly.

OPIOID-RELATED DEATHS

From 1999 to 2017, opioid overdose deaths in the United States increased six-fold, to nearly 50,000 deaths in 2017 (*CDC, 2018b)*. **Chart 1** shows the dramatic increase on an annual basis.

Opioids now represent the top drug involved in overdose deaths. The Centers for Disease Control and Prevention (CDC) estimate that more than two-thirds (68 percent) of all U.S. drug overdose deaths in 2017 were related to opioids (*CDC, 2018a*).

Chart 1. U.S. Opioid-Related Deaths, 1999–2017

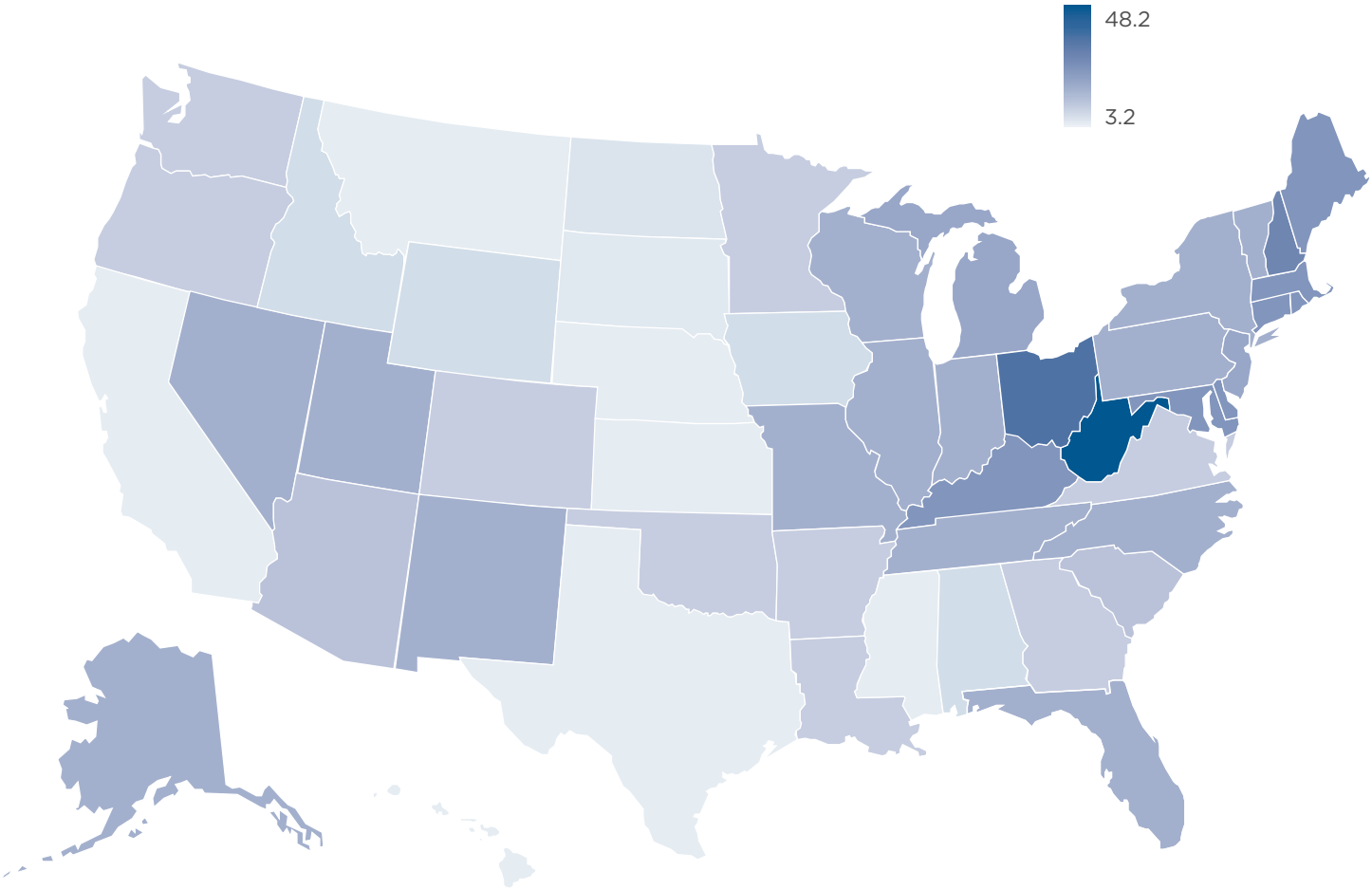


Source: *CDC WONDER Multiple Cause of Death database.*

The geographic impact of opioids has been disparate, with addiction hitting some states and communities far harder than others, particularly in rural areas. In West Virginia, the death rate from opioid overdose was 48.2 per 100,000 people in 2017 (the highest rate nationally), while in Nebraska the rate was only 3.2 (the lowest rate nationally) (**see Chart 2**).

The demographic impact of opioids has also been uneven. In terms of race, the white population in the United States initially was affected disproportionately. With the rise of prescription opioid abuse in the 1990s, opioid overdose deaths increased dramatically for whites. In the 1980s, the black population had a higher opioid mortality rate than the white population, due primarily to heroin use, but by 2010, whites were twice as likely to die from an opioid overdose than blacks (*Alexander et al., 2018*). However, since 2010, black and white populations have both seen a substantial rise in mortality rates as opioid use shifts toward heroin and synthetic opioids (discussed below). The Hispanic population has been less affected by opioids until recently. Before 2014, the opioid overdose rate for Hispanics never exceeded 4 per 100,000. But from 2014 to 2016, the rate jumped more than 50 percent, from 4 to 6.1 (compared to 17.5 for non-Hispanic whites and 10.3 for non-Hispanic blacks in 2016) (*KFF, 2019*).

CHART 2. State Opioid-Related Death Rates per 100,000, 2017



Source: *CDC WONDER Multiple Cause of Death database.*

Opioid overdose deaths also differ based on educational attainment and gender (*Ho, 2017*). While the disparity in educational attainment has increased in recent years, the gender gap has narrowed. From the outset of the epidemic, those with a college degree have been the least likely to die from an overdose while those with less than a high school diploma have been the most likely. In recent years, the overdose rates for those with less than a college degree have risen more quickly than for those who have graduated from college, particularly for non-Hispanic whites with less than a high school diploma. In terms of gender, in the earlier years of the epidemic, men died from overdoses more often than women, particularly among those without a college degree. But mortality rates by gender now are roughly comparable regardless of education (*Ho, 2017*).

NONFATAL CONSEQUENCES OF OPIOID ADDICTION

Deaths from opioid overdoses are not the only concern in the epidemic. Misuse of opioids and opioid disorders have enormous local, state, and national consequences, not to mention the deterioration in quality of life for those who suffer addiction and the impact on their children and families. The most recent National Survey on Drug Use and Health found that an estimated 11.4 million people age 12 or older (or 4.2 percent of this population) misused opioids in 2017, while 2.1 million people in the same age cohort (or 0.8 percent of this population) had an opioid use disorder (*SAMHSA, 2018*).

Nonfatal opioid overdoses are a significant and growing issue for emergency responders and emergency departments (EDs) nationwide. CDC researchers recently reported that ED visits from opioid overdoses totaled 142,557 between July 2016 and September 2017 and increased by nearly 30 percent across the country during this period (*Vivolo-Kantor et al., 2018*).

In addition to the impact on EDs, the opioid epidemic has put pressure on the health care system more broadly. For example, a commercially insured person who abuses opioids generates, on average, $14,810 more in annual health care expenditures than a commercially insured individual who does not abuse opioids (*Kirson et al., 2017*).

Other nonfatal consequences of the epidemic relate to the criminal justice system and the labor market. The National Institute on Drug Abuse (NIDA) reports that opioid use disorders that go untreated in criminal justice populations contribute to repeat offenses (*2018b*). Economists have examined the relationship of opioid abuse to unemployment and labor force participation. For example, Alan Krueger (*2017*), in explaining the noted decline in men's labor force participation from 1999 to 2015, estimates that 43 percent of the drop could be attributable to the opioid epidemic.

PRESCRIPTION PAINKILLERS VS. ILLICIT OPIOIDS

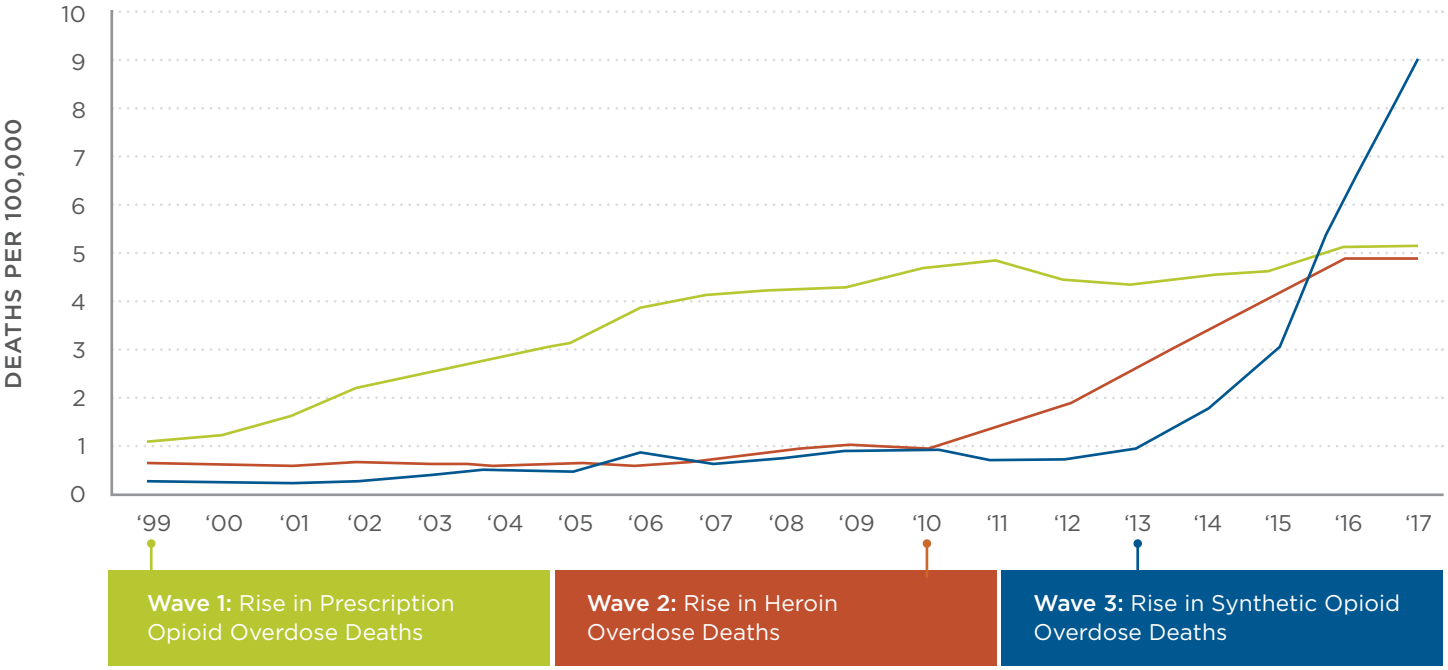
The opioid epidemic has been characterized by shifts in the type of opioid being abused, with a distinct trend away from abuse of prescription opioids toward heroin (*Cicero et al., 2018*) and synthetic opioids (*Seth et al., 2018*). The CDC delineates three "waves" to the epidemic based on the type of opioid involved in a spike in overdose deaths (see **Chart 3**). The first wave, beginning in the late 1990s, describes the increase in deaths related to prescription opioids; the second, beginning in 2010, heroin; and the third, beginning in 2013, synthetic opioids, especially illicit fentanyl (*CDC, 2018a*).

ECONOMIC IMPACT OF THE OPIOID EPIDEMIC

For more than a decade, researchers have been attempting to estimate the burden that the opioid epidemic has imposed on the economy.[1] In 2016, CDC researchers estimated that the total cost of the opioid epidemic — that is, health care and substance abuse treatment costs, criminal justice costs, and lost productivity — was $78.5 billion in 2013 (*Florence et al., 2016*). Building on this estimate, the Council of Economic Advisers (CEA) released a report in November 2017 that added a mortality cost associated with the epidemic. Incorporating a metric called the value of statistical life, CEA (*2017*) estimated that the economic impact of the opioid epidemic in 2015 totaled $504 billion in mortality and non-mortality costs, with the vast majority (more than 85 percent) composed of mortality costs.

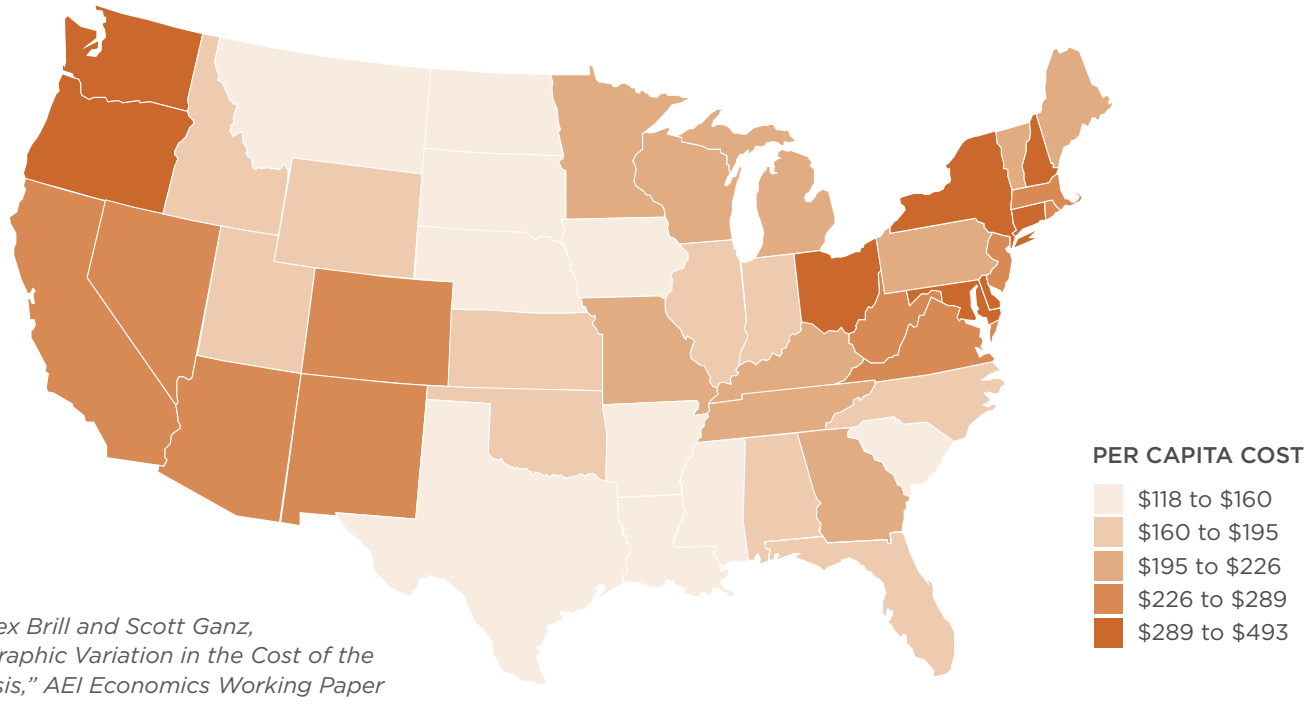
[1] *For a review of older estimates, see Alex Brill and Scott Ganz, "The Geographic Variation in the Cost of the Opioid Crisis," AEI Economics Working Paper 2018-03 (March 2018), available at www.aei.org/wp-content/uploads/2018/03/Geographic_Variation_in_Cost_of_Opioid_Crisis.pdf.*

Chart 3. Three Waves in Opioid Overdose Deaths



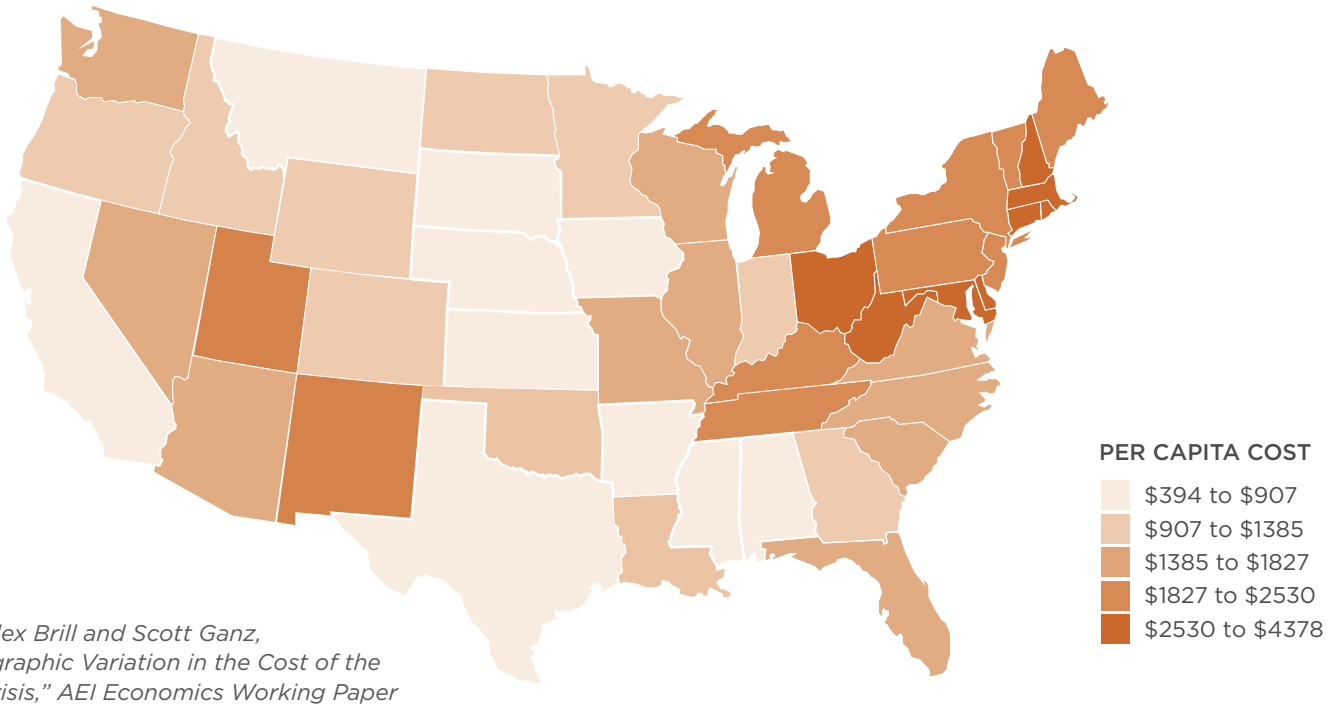
Source: *CDC, "Understanding the Epidemic," www.cdc.gov/drugoverdose/epidemic/index.html (updated December 19, 2018).*

Chart 4. Non-Mortality Opioid Costs Per Capita by State in 2015



Source: *Alex Brill and Scott Ganz, "The Geographic Variation in the Cost of the Opioid Crisis," AEI Economics Working Paper 2018-03 (March 2018).*

Chart 5. Total Opioid Costs Per Capita by State in 2015



Source: *Alex Brill and Scott Ganz, "The Geographic Variation in the Cost of the Opioid Crisis," AEI Economics Working Paper 2018-03 (March 2018).*

CEA and other economic estimates have focused primarily on the national impact of the opioid epidemic. As noted above, the epidemic is characterized by significant geographical variation. In an effort to distinguish the economic impact on a more granular level, Brill and Ganz (*2018*) distributed the national CEA (*2017*) estimate at the state and county levels. On a per-capita basis, non-mortality costs were highest in the District of Columbia ($493) and New Hampshire ($360), while total costs (including mortality costs) were highest in West Virginia ($4,378) and the District of Columbia ($3,657). **Charts 4** and **5** show state-by-state results for non-mortality and total costs, respectively.

III. Impact of Proposed Opioid Taxes

Policymakers, health policy experts, and many others have been working diligently to address the opioid crisis. One proposal that has taken root in several states is an excise tax on prescription opioids, with the idea being that it would deter use — akin to a cigarette or soda tax — or at least defray some of the cost of the opioid epidemic. Opioid taxes were proposed in at least 15 states in 2018. New York State actually enacted an opioid tax in 2018 that would have required opioid manufacturers and distributors to pay a tax based on their share of opioid products sold in the state, retroactive to 2017. In December 2018, shortly before the law was to go into effect — and after drug manufacturers and distributors had received their tax bills — a federal judge ruled that the law violated the U.S. Constitution's interstate commerce clause. But legislators in New York and elsewhere plan to introduce prescription opioid tax legislation in 2019 (*Durkin, 2019*).

While the promise of addressing the opioid epidemic through a simple tax on prescription opioids may be compelling to some, this strategy would do little to curb opioid abuse overall and is a distortionary and ineffective policy for a number of reasons. If properly understood, the adverse consequences of a tax on prescription opioids clearly suggest that policymakers' time and energy would be better spent on other

strategies to address the epidemic. To accurately assess the impact of a tax on prescription opioids, it is important to first understand a bit about excise taxes.

HOW AN EXCISE TAX WORKS

Excise taxes are generally used for one of two purposes: to finance a specific government program or function, or to discourage the purchase of a certain good or service. An example of an excise tax intended to fund a dedicated activity is the federal gas tax, which finances the Highway Trust Fund. The federal tax on tobacco and alcohol are both intended to discourage use of these products, and receipts are collected in the general fund, not dedicated to a specific use. Opioid taxes have been proposed for both purposes. Most state proposals aim to funnel opioid tax revenues directly into treatment or prevention programs, but some proposals have directed the revenues into the state general fund or unrelated programs or activities.

Excise taxes can be *ad valorem* (that is, a percentage of the price) or specific (that is, a fixed amount per unit). As noted above, New York's opioid tax was set to raise a fixed amount of total revenue, and opioid manufacturers and distributors subject to the tax were sent tax bills in proportion to their market share. Kentucky considered an opioid tax of $0.25 per dose, Minnesota a penny-per-pill tax, and Vermont a tax of one cent per morphine milligram equivalent. Other states' proposals generally mimicked one of these approaches.

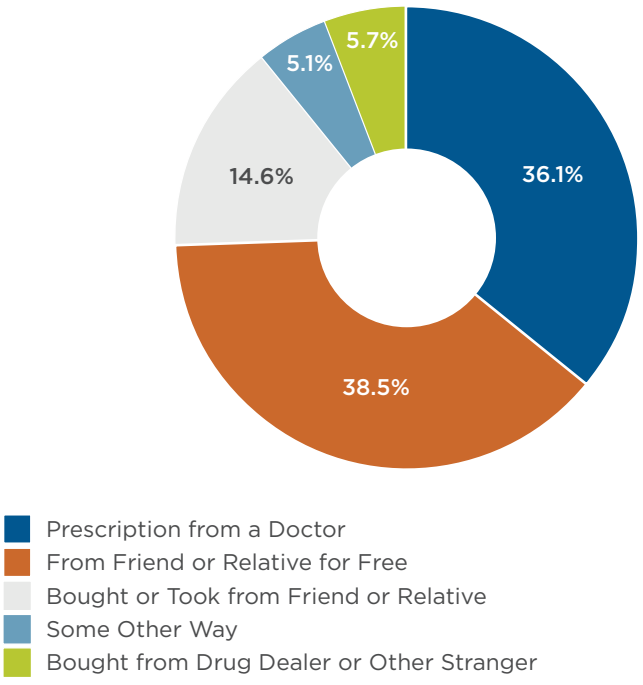
Economic theory predicts that the impact of an excise tax on a product depends on the responsiveness of consumers and producers to a change in the price of the product. Economists refer to these dynamics as demand and supply elasticities. In assessing elasticities, analysts consider both the short-run and long-run responses to a tax, which can sometimes be quite different. For a product in a competitive marketplace, where no firm can earn above-normal profits and there is little or no barrier to entry, an excise tax raises the cost of production and can only be passed forward as a higher price; otherwise, firms will exit the market.

Unlike most traditional excise taxes, like those applied to cigarettes, alcohol, or fuel, an excise tax on prescription opioids has unique characteristics, detailed below, that weaken its effectiveness and ultimately diminish its usefulness as a public policy tool. And while an excise tax on prescription opioids would raise revenue, the negative consequences of such a tax, also detailed below, indicate that revenue necessary to finance opioid addiction treatment or prevention programs would be better derived through more conventional, broad-based strategies.

WHY A PRESCRIPTION OPIOID TAX WOULD BE INEFFECTIVE AS A DETERRENT

To understand the ineffectiveness of a tax on prescription opioids, consider that more than half of those who struggle with abuse or misuse of prescription opioids obtain them indirectly, such as from a friend or relative, and often for free. In fact, only slightly more than one-third (36.1 percent) of people who misuse prescription painkillers are prescribed them by a doctor (*SAMHSA, 2018*) (see **Chart 6)**.

Chart 6. Source of Misused Prescription Painkillers



Note: *Misuse in 2017 among people age 12 or older.*
Source: *SAMHSA, 2018.*

Importantly, for those who do fill opioid prescriptions, insured individuals would not see an increase in out-of-pocket costs because a tax would not affect their prescription copay. This includes those who misuse or abuse as well as those who properly use opioids.

Finally, a large and increasing number of individuals suffering from opioid addiction use non-prescription opioids (particularly heroin and illicitly manufactured fentanyl), and the tax would not apply to these products.

WHY A PRESCRIPTION OPIOID TAX WOULD BE HARMFUL

The premise of a tax on prescription opioids is unfair to patients who use these products appropriately. Unlike cigarettes, which are uniformly harmful, prescription opioids are an important pharmaceutical tool for many patients. But a tax on prescription opioids harms more than those who use prescription opioids appropriately. As mentioned above, a large share of individuals filling opioid prescriptions would not pay a higher price at the pharmacy because they have a fixed copay. The consequence of this is that the tax would be borne initially by insurers, who would be expected to pass the cost forward to all beneficiaries as higher insurance premiums. In this way, the burden of the tax would fall on everyone with health insurance. Even if the policy rationale for the tax was to finance opioid treatment programs, forcing this group to shoulder the cost is not efficient.

If out-of-pocket costs for prescription opioids did rise as a result of a tax on these products — for example, if insurers responded to the tax by creating a unique and higher copay for these products — consumers who suffer from an opioid abuse disorder would be incentivized to substitute illegal opioids, which, as noted above, are already becoming more prevalent. The magnitude of this risk is low because most people will not pay the tax directly, but it is a concern, especially for those who lack health insurance and already pay the retail price for prescription opioids.

Finally, there is a potential adverse impact on manufacturers and other firms in the supply chain. Opioid manufacturers and other firms may be unable to raise prices due to contractual constraints, or a tax could be imposed retroactively. In the case of New York State's short-lived law, manufacturers and distributors were banned from passing on the tax to New York residents. The attendant risk of these firms' inability to pass on costs is that they may depart or not enter the market.

IV. Alternative Strategies to Combat the Opioid Epidemic

Proposals to tax prescription opioids originated because people want to stop the devastation of the opioid epidemic — a worthy goal. If a tax is not a good solution, what is? To begin answering this question, it is helpful to consider the purpose of the tax. If it is to fund opioid programs, public finance theory tells us that the narrow base of such a tax is inefficient. Given the fragmented nature of the health care industry, the role of insurance in dramatically reducing out-of-pocket costs for the insured (but not the uninsured), and the complex structure of reimbursement and payment policies, the tax would do little to discourage inappropriate use, could have the unintended consequence of promoting illicit opioids for some, and would raise the cost of health care generally.

Public spending on opioid treatment and prevention programs should be financed through broad-based income or consumption taxes or by cutting other spending. If the purpose of an opioid tax is to deter abuse, we know that it is not well-targeted. The search for alternatives to a tax should therefore lead to better-targeted interventions, both for those suffering from addiction and those at risk of addiction.

Broadly speaking, policies to address the opioid epidemic can be classified into two categories: those geared toward helping people who suffer from addiction, and those geared toward preventing people from becoming addicted. The former involve providing affordable access to treatment programs and other related strategies, while the latter involve changes in prescribing standards, limits on

dispensed quantities, and education campaigns. The rise of heroin and illicitly manufactured fentanyl present additional challenges.

At the federal level, Congress recently enacted H.R. 6, the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act. The SUPPORT Act made changes to Medicaid and Medicare to improve treatment for addiction and included measures to reduce illicit trade, efforts to improve safe disposal of unused prescription opioids, and other steps directing the Food and Drug Administration and other agencies to combat the epidemic. Other recent federal legislation has boosted funding to states for local efforts to expand access to treatment and recovery support, and those resources are being deployed across the nation. The Substance Abuse and Mental Health Services Administration has awarded over $1 billion in such grants, and the Health Resources and Services Administration has awarded nearly $400 million to community health centers and rural health organizations to address the opioid crisis (*HHS, 2018*).

While states should be considering efforts beyond federally funded programs, these should be designed to complement federal efforts through matching federal funds or supplementing other strategies championed by federal agencies, physician organizations, and private community efforts. This will help ensure that policies are vetted and consistent and that the most effective ones are pursued as widely as possible.

V. Conclusion

Misuse and abuse of both prescription and illicit opioids have led to a national epidemic. Perhaps inspired by the trend to tax tobacco, alcohol, and even soda, some policymakers have been drawn to the idea of taxing prescription opioids. However, policymakers must carefully understand the consequences of an opioid tax, including the potential unintended consequences. Such a tax is an inefficient means for financing treatment and prevention programs and an ineffective strategy to deter misuse of opioids. On top of this, it would increase health care costs for the insured population and could drive uninsured individuals who struggle with addiction to turn to illegal opioids. Policymakers are right to work hard to tackle this evolving epidemic, but should focus on effective strategies aimed squarely at treatment and prevention.

SOURCES

Alexander, Monica J., Mathew V. Kiang, and Magali Barbieri. 2018. "Trends in Black and White Opioid Mortality in the United States, 1979–2015," *Epidemiology* 29, no. 5 (September): 707–15.

Brill, Alex, and Scott Ganz. 2018. "The Geographic Variation in the Cost of the Opioid Crisis," AEI Economics Working Paper 2018-03. March. **www.aei.org/wp-content/uploads/2018/03/Geographic_Variation_in_Cost_of_Opioid_Crisis.pdf**.

Centers for Disease Control and Prevention (CDC). 2018a. "Understanding the Epidemic." Updated December 19. **www.cdc.gov/drugoverdose/epidemic/index.html**.

CDC. 2018b. "Overview of the Drug Overdose Epidemic: Behind the Numbers." Updated December 19. **www.cdc.gov/drugoverdose/data/index.html**.

CDC. Wide-ranging Online Data for Epidemiologic Research (WONDER) Multiple Cause of Death database. Available through **https://wonder.cdc.gov/mcd-icd10.html**.

Cicero, Theodore J., Zachary A. Kasper, and Matthew S. Ellis. 2018. "Increased Use of Heroin as an Initiating Opioid of Abuse: Further Considerations and Policy Implications," *Addictive Behaviors* 87 (December): 267–71.

Council of Economic Advisers (CEA). 2017. *The Underestimated Cost of the Opioid Crisis.* November.

Department of Health and Human Services (HHS). 2018. "HHS Awards Over $1 Billion to Combat the Opioid Crisis." News Release. September 19.

Durkin, Erin. 2019. "State Policymakers Consider Opioid Taxes for 2019," *National Journal.* January 4.

Florence, Curtis S., Chao Zhou, Feijun Luo, and Likang Xu. 2016. "The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 2013." *Medical Care* 54, no. 10 (October): 901–906.

Ho, Jessica Y. 2017. "The Contribution of Drug Overdose to Educational Gradients in Life Expectancy in the United States, 1992-2011," *Demography* 54, no. 3 (June): 1175–1202.

Kaiser Family Foundation (KFF). 2019. Opioid Overdose Deaths by Race/Ethnicity. Accessed through **www.kff.org/state-category/health-status/opioids**.

Kirson, Noam Y., Lauren M. Scarpati, Caroline J. Enloe, Aliya P. Dincer, Howard G. Birnbaum, and Tracy J. Mayne. 2017. "The Economic Burden of Opioid Abuse: Updated Findings." *Journal of Managed Care and Specialty Pharmacy* 23, no. 4 (April): 427–45.

Krueger, Alan B. 2017. "Where Have All the Workers Gone? An Inquiry into the Decline of the U.S. Labor Force Participation Rate." Brookings Paper on Economic Activity. September 7.

National Institute on Drug Abuse (NIDA). 2018a. "Opioid Overdose Crisis." Revised in March. **www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis**.

NIDA. 2018b. "How Is Opioid Use Disorder Treated in the Criminal Justice System?" Updated in June. **www.drugabuse.gov/publications/medications-to-treat-opioid-addiction/how-opioid-use-disorder-treated-in-criminal-justice-system**.

Seth, Puja, Lawrence Scholl, Rose A. Rudd, and Sarah Bacon. 2018. "Overdose Deaths Involving Opioids, Cocaine, and Psychostimulants — United States, 2015–2016," *MMWR Morbidity and Mortality Weekly Report* 67, no. 12 (March 30): 349–58.

Substance Abuse and Mental Health Services Administration (SAMHSA). 2018. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health*. September.

Vivolo-Kantor, Alana M., Puja Seth, R. Matthew Gladden et al. 2018. "Vital Signs: Trends in Emergency Department Visits for Suspected Opioid Overdoses — United States, July 2016–September 2017," *MMWR Morbidity and Mortality Weekly Report* 67, no. 9 (March 9): 279–85.

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