Treatment Versus Punishment*

Understanding Racial Inequalities in Drug Policy

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Abstract

Context: Many observers believe that the policy response to the opioid crisis is less punitive than the crack scare and the reason is that victims are (stereotypically) white.

Methods: We test these conjectures using data on district-level drug-related deaths and (co)sponsorship of legislation on illegal drugs in the House of Representatives.

Findings: Policymakers were more likely to introduce punitive drug-related bills during the crack scare and are more likely to introduce treatment-oriented bills now. The relationship between district-level drug deaths and subsequent sponsorship of treatment-oriented legislation is greater for opioid deaths than for cocaine-related deaths and for white victims than for black victims. By contrast, district-level drug deaths are not significantly related to sponsorship of punishment-oriented bills.

Conclusions: These results suggest that the racial inequalities and double standards of drug policy still persist but in different form.

Keywords: crack, opioids, policy

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The opioid crisis continues to reach new levels of severity, but seemingly receives disproportionately less public attention, media coverage, and legislative action than crack cocaine did in the 1980s and 1990s. The discrepancy in responses between these two cases is not easily explained by the objective severity of the crises. More than 70,000 Americans died of drug overdoses in 2017, a record total that far exceeds the number who died from car accidents or gun violence (Katz and Sanger-Katz 2018). Most of these deaths — 47,600 (67.8%) — involved opioids (Scholl et al. 2018). The scale of the opioid crisis thus outstrips any prior U.S. drug epidemic. In addition, though the use of crack cocaine was associated with negative social and public health consequences such as increased homicides (Golub and Johnson 1997; Fryer et al. 2013), the opioid crisis has had massive social costs and has generated substantial negative externalities as well (e.g., Kolhatkar 2017).

As observers frequently note (e.g., Cohen 2015; Peterson and Armour 2018), the federal policy response to the opioid crisis seemingly emphasizes treatment and rehabilitation to a greater extent than the punitive approach that dominated drug policy in recent decades.[1] At the height of the crack scare, for instance, the 1992 Republican platform stated that "Drug users must face punishment, including fines and imprisonment, for contributing to the demand that makes the drug trade profitable" (Delegates to the R.N.C. 1992). As a result of policy and administrative changes resulting from this punitive consensus, which was largely endorsed by both parties, the number of drug-related arrests and the number of people entering prison for drug crimes increased dramatically after the early 1990s (Bureau of Justice Statistics 2019; Rothwell 2015). By contrast, the 2016 Republican platform highlighted how "the opioid crisis is ravaging communities all over the country, often hitting rural areas harder than urban," and called for "expeditious agreement" on a bill later signed by President Obama that sought to "expand prevention and education efforts while also promoting treatment and recovery"

[1]This policy difference appears to be replicated at the state level, though a comparison of drug policy proposals across all 50 states is beyond the scope of this article. Mauer and Huling (1995) discusses changes in state approaches to drug policy during the crack scare. For recent reviews of the state policy response to the opioid crisis, see National Council of State Legislatures (2017) and Parker, Strunk, and Fiellin (2018).

(Delegates to the R.N.C. 2016; Community Anti-Drug Coalitions of America 2019). This discrepancy has been frequently been noted by lawmakers and journalists, who conjecture that the shift is the result of greater empathy for stereotypically white opioid users compared to stereotypically black crack users (e.g., Glanton 2017; King 2017; Newkirk 2017).[2]

However, these conjectures about the differences between the policy response to the opioid crisis and the crack scare have not been systematically tested. In addition, little convincing evidence exists that isolates race or drug type as the key factors that explaining any such differences, which could instead reflect a broader shift toward viewing drug addiction as a type of disease rather than a crime (e.g., Pew Research Center 2014).

In this paper, we therefore measure the policy response to the opioid crisis in Congress and compare its content with the response to the crack scare. Drawing from theory and prior research on policy responsiveness, we consider the following four research questions. First, we test whether the legislative response to the crises has differed in the aggregate, comparing the bills introduced during these epidemics and the extent to which they focus on treatment versus punishment. Second, we assess whether legislators respond to district-related drug deaths with drug policy legislation and, further, whether they respond with a treatment- or punishment-oriented approach. Third, we consider whether these patterns of responsiveness to drug deaths differ between opioids, cocaine, and methamphetamine and between white and black victims. Fourth, we test if these relationships vary over time, comparing the crack scare, the opioid crisis, and the period between them, which allows us to examine whether the recent shifts toward more empathetic approaches (if any) hold across different drug types and victim's race. Finally, we evaluate the robustness of our findings to controlling for measures of homicide deaths at the district level and test for heterogeneity in responsiveness to drug-related deaths by legislator party or factors that affect media coverage.

We evaluate these theories using newly coded data on legislative sponsorship and cospon-

[2]Contrary to these stereotypes, the opioid crisis has tragically claimed numerous nonwhite victims (e.g., Shihipar 2019).

sorship of drug-related bills in the U.S. House of Representatives and data on drug-related deaths at the Congressional district level. Our findings indicate that legislators respond to drug deaths in their district by sponsoring more treatment-oriented legislation, but this relationship is only observed for opioid deaths and white victims. Legislators are specifically more responsive to opioid-related deaths than cocaine-related deaths (especially during the opioid crisis) and to white drug deaths than to black drug deaths. By contrast, we observe no evidence of a relationship between district-level drug deaths and punishment-oriented bills regardless of drug, race of victim, or era.

Theoretical approach

What factors cause legislators to propose changes to drug policy? If political elites responded directly to objective conditions, legislative attention to the opioid crisis would be expected to be far greater than the crack scare. However, scholars have long emphasized that objective conditions are relevant but not decisive in setting the national agenda. Changes in issue salience often result instead from political entrepreneurs exploiting exogenous events or institutional processes to advance their policy goals (Kingdon and Thurber 1984; Adler and Wilkerson 2013). Compelling "focusing events" can also help to put issues on the policy agenda (Birkland 1997), which is shaped in part by episodic and often non-linear changes in media coverage (Weaver, McCombs, and Shaw 2004; Boydstun 2013). By contrast, a lack of media coverage can reduce public and legislative attention to a problem and thereby reduce the likelihood of a policy response (Eisensee and Strömberg 2007).

Prior research shows that attention to the issue of illegal drugs is often divorced from objective measures of severity. In the case of crack cocaine, media coverage was extensive and frequently inaccurate (e.g., the panic over so-called "crack babies"; see Newkirk 2017). News reports hyped myths about crack cocaine that reinforced negative racial stereotypes (Golub

and Johnson 1997) — part of a pattern of racialized news reporting that increased support for punitive approaches to crime, especially among people with negative racial attitudes (Hurwitz and Peffley 1997; Gilliam Jr. and Iyengar 2000; Dixon 2006). Politicians leveraged the increased salience of drug use to make a punishment-oriented approach to the issue an important public priority (Baumgartner and Jones 1993, 153–161). This tactic resonated with public opinion, which was heavily punitive at the time (Enns 2014, 2016). By contrast, the opioid crisis did not center in urban areas among non-white Americans, lacked identifiable perpetrators like crack cocaine dealers, and came at a time when public demand for a punitive approach to crime had declined (Enns 2014, 2016). Politicians have therefore not exploited the issue as extensively as they exploited crack; similarly, media depictions have tended to be more sympathetic and less racialized (Dasgupta, Mandl, and Brownstein 2009; Netherland and Hansen 2016; Harbin N.d.).

As a result of these differences, attention to and interest in the crack scare greatly exceeded the opioid crisis despite the latter's far larger death toll. In 1989, a time when overdose deaths were a small fraction of the current total, 64% of Americans said drugs were the most important problem facing the country (CBS News/New York Times 1989). Only 2% said the same in December 2018 (Gallup 2019). Similarly, during the 1989–1990 period, for example, 417 *New York Times* front-page stories mentioned crack compared with only 68 for opioids in 2017–2018.[3] During the same time period, public support for tough-on-crime policies has ebbed since its high-water mark in the early 1990s (Enns 2016). We therefore expect to observe a less intense and less punitive legislative response to the opioid crisis than to the crack scare. We test this expectation empirically by describing changes over time in treatment- and punishment-oriented legislative responses over the past four decades, drawing on comprehensive data of bills introduced in U.S. House.

[3]Results based on Nexis Uni searches for `publication(New York Times) AND crack AND ("Section 1; Page 1" OR "Section A; Page 1" OR A1)` for 1/1/1989–12/31/1990 and `publication(New York Times) AND opioid AND ("Section 1; Page 1" OR "Section A; Page 1" OR A1)` for 1/1/2017–12/31/2018.

To better understand the factors that promote different responses to the two drugs, we specifically consider whether and how legislators respond to the severity of these drug epidemics in their districts. Previous research provides theoretical reasons to expect district-level responsiveness. In some cases, district conditions or characteristics may serve as a proxy for constituent preferences (Peltzman 1984). In other cases, legislators may anticipate future constituent preferences over outcomes (Canes-Wrone, Herron, and Shotts 2001) and assume they will be held accountable retrospectively (e.g., for local casualties in a war they supported — see Grose and Oppenheimer 2007). Finally, some legislators may simply seek to act on behalf of perceived constituent interests as a trustee model of representation would predict.

The available evidence, though limited, does suggest that legislators respond to district conditions and would thus be expected to respond to the severity of drug-related deaths in their districts. For instance, studies find a correspondence between district conditions and voting records on agriculture (Bellemare and Carnes 2015), poverty (Miler 2018), and free trade (Xie 2006; Conconi, Facchini, and Zanardi 2012). Further evidence suggests that legislators respond to changes in the status quo within their district. For instance, Winburn and Sullivan (2011) find that legislators from districts affected by Hurricane Katrina introduced more disaster relief bills after the storm, while (Cayton 2017) find that legislators from districts hardest hit by the Great Recession were more likely to vote to extend unemployment benefits.

These relationships are documented most systematically in legislative voting by Adler, Cayton, and Griffin (2018), who find that district conditions are related to voting in Congress even after accounting for constituent preferences. Similarly, Lazarus (2013) and Waggoner (2018) find that sponsorship of issue-specific legislation is strongly associated with employment levels in related industries. These relationships appear to be strongest in the House for electorally vulnerable members (Lazarus 2013), though it is important to note that such effects are typically strongly conditioned by party (e.g., Kriner and Shen 2014; Adler, Cayton,

and Griffin 2018) and are not always observed (see in particular Fowler and Hall 2016).

There are reasons to doubt, however, that the likelihood or content of legislators' policy response to changing conditions in their districts will necessarily be proportional to the severity of the problem. First, the volume of coverage that various risks receive in the media, which has an important influence on legislative behavior (e.g., Arnold 2004), rarely correspond to objective measures of severity (e.g., Frost, Frank, and Maibach 1997; Bomlitz and Brezis 2008). Similarly, public concern tends to be driven more by cues from elites than by objective conditions — Beckett (1994) finds, for instance, that the perceived importance of drug and crime tracked with statements by government officials, not incidence rates. Finally, legislative attention tends to be driven by the strategic choices of political actors (e.g., the president and party leaders) as well as unexpected events and institutional rules and processes (Kingdon and Thurber 1984; Baumgartner and Jones 1993; Adler and Wilkerson 2013).

In addition, prior work has found evidence of racial inequality in legislative responsiveness. Such inequality can take the form of direct discrimination — for example, Butler and Broockman (2011) find that white legislators are more likely to respond to emails from putatively white constituents, while minority legislators respond more often to putatively black constituents. Legislators may also differ in responsiveness to the preferences of constituents in their districts. Following the 1992 redistricting, for instance, white incumbents who lost black constituents became less responsive to black policy preferences (Overby and Cosgrove 1996). Finally, in previous research race has consistently been found to be a significant factor in welfare policy. For example, states with higher proportions of black welfare recipients have stricter eligibility rules and offer less generous benefits (Fellowes and Rowe 2004).

We consider whether such racial inequalities exist in drug policy, a domain in which the form of elite responsiveness may depend on the stereotypical race of a drug's users or the race of the victims themselves. As noted above, negative racial stereotypes invoked by the crack scare were associated with support for punitive responses to the issues of drugs and

crime (Golub and Johnson 1997; Hurwitz and Peffley 1997; Gilliam Jr. and Iyengar 2000; Dixon 2006; Newkirk 2017). As such, deaths from cocaine, especially among non-white victims, may be especially likely to induce a fear-oriented policy response that emphasizes punishment (Dasgupta, Mandl, and Brownstein 2009; Netherland and Hansen 2016; Harbin N.d.). By contrast, victims of the opioid crisis are seen as stereotypically white and may be viewed more sympathetically (Keller 2017; Lopez 2017; McKenzie 2017; Peterson and Armour 2018). In fact, many have claimed that the opioid crisis inspired a more treatment-oriented policy response than did the crack scare because of racial inequality in American society (e.g., Glanton 2017; King 2017; Newkirk 2017).

To empirically test these claims, we measure legislative responsiveness to drug-related deaths, evaluating whether treatment- or punishment-oriented responses vary with the drug in question and the race of the victims. This approach allow us to address the concern that the difference in legislative responses between the two drug epidemics reflects a broader shift toward viewing drug addiction as a type of disease rather than a crime (e.g., Pew Research Center 2014).

To better understand these relationships, we also consider legislator responsiveness to deaths from methamphetamines, a drug predominately used by whites that has generated less public sympathy than opioids but which has also been portrayed less negatively than crack (Cobbina 2008; Murakawa 2011). The comparison to methamphetamine will help us better understand whether policy responses to the opioid crisis have been different because its victims are stereotypically white or might have addictions that began with prescription drugs.

Finally, we consider two possible moderators of the relationships of interest. First, given the evidence noted above that legislative responsiveness may vary by party (e.g., Kriner and Shen 2014; Adler, Cayton, and Griffin 2018), we test whether the relationship between drug-related deaths and subsequent (co)sponsorship of treatment- or punishment-oriented legislation differs between Democrats and Republicans. Second, research shows that media cover-

age can have important effects on legislative behavior (e.g., Arnold 2004; Snyder and Strömberg 2010). We therefore evaluate whether variation in media coverage influences legislative responsiveness to drug-related deaths using the Snyder and Strömberg (2010) approach of exploiting district congruence with media markets, which is a plausibly exogenous source of coverage variation. We specifically test whether the relationship between drug-related deaths and legislative responsiveness varies with district/media market congruence for deaths within the district and for deaths within the media market as a whole.[4]

Data

We measure the federal legislative response to the crack scare and the opioid crisis using data for the 96th–114th Congress (1983–2016) from the Congressional Bills Project (Adler and Wilkerson N.d.). We selected every bill from this period that had been coded as pertaining to "Drug and Alcohol Abuse" ("related to alcohol and illegal drug abuse, treatment, education, and health effects") or to "Illegal Drugs" ("related to illegal drug crime and enforcement [and] criminal penalties for drug crimes, including international efforts to combat drug trafficking").[5] We then further coded the summary for each qualifying bill to exclude bills solely focused on alcohol and to identify bills that contained measures addressing criminal or civil penalties or promoting prevention, treatment, and rehabilitation (34 of the bills, or 2.3%, do both).[6] We then merge information on these bills with cosponsorship data from GovTrack.[7]

From these measures, we construct four simple binary measures of bill sponsorship and

[4]Legislators may be responsive to drug problems in nearby areas outside their district that receive news coverage and prompt fears among their constituents.

[5]The Congressional Bills Project labels bill summaries according to the topic coding system of the Policy Agendas Project (PAP). The PAP codebook is available at `https://www.comparativeagendas.net/pages/master-codebook`.

[6]We sought to specifically identify bills that *increased* penalties for illegal drug *use*. We therefore excluded bills whose summaries specifically mentioned *reducing* penalties or specifically target drug *distributors*. Intercoder reliability ratings for the codings we employ in this study exceeded conventional norms in blind tests using randomized samples of bills. Results and detailed coding rules are provided in Online Appendix.

[7]The source is James Fowler (`http://jhfowler.ucsd.edu/cosponsorship.htm`).

cosponsorship for each member of the House of Representative from 1983–2016 at the year level.[8] Specifically, for each member of Congress, we measure whether they sponsored at least one prevention- or treatment-oriented bill related to illegal drugs ("treatment bill") and whether they sponsored at least one punishment-oriented bill related to illegal drugs ("punishment bill").[9] We then construct analogous measures for legislative cosponsorship, a symbolic but consequential act in which legislators officially indicate their support for a bill that another legislator has sponsored (Koger 2003).

Our primary independent variables are drug-related death rates by year at the Congressional district. To obtain these, we analyze confidential multiple cause of death data from the Division of Vital Statistics at the National Center for Health Statistics. These data provide individual-level records on the causes of death and contributing conditions for every American who dies in a given year. We identify the causes of death for each variable using ICD-9 and ICD-10 codes, which are provided for each death in the data. Following standard practices in the literature, we use a combination of diagnosis and external cause codes (ICD-9) and multiple cause of death codes (ICD-10) to identify cocaine-, opioid-, and methamphetamine-related deaths.[10] We specifically calculate the total number of drug poisoning deaths overall and separately for whites, blacks, and people from other racial/ethnic groups. We also calculate drug-specific totals of the total number of deaths related to opioids, cocaine, and methamphetamines. Finally, we calculate the total number of homicide deaths. We then aggregate these county-level totals, which are based on the location of the deceased's residence, by year

[8]We consider the set of legislators who served in each Congress during this period using data from the Legislative Effectiveness Project (Volden and Wiseman 2014). Each is considered to serve in both years except for those who left office in the first year of a given Congress because they died, resigned, etc. or entered office in the second year via appointment, special election, etc. (data from Elaine K. Swift and Martis 2000 and Stewart and Woon N.d.). We follow standard practice in the Congress literature and treat party switchers as new members after a switch and apply analogous year-level exclusions depending on its timing.

[9]We use binary measures due to concerns about skew in a small number of variables for the outcome measures and the greater robustness of OLS (Angrist and Pischke 2009).

[10]See Online Appendix for a detailed list of our coding rules. We note in particular that we observe of no evidence of discontinuities in the aggregate time series of overall or drug-specific deaths during the switch from ICD-9 to ICD-10 in 1999 (see Figure 1 below). We thus pool the data over the study period.

at the Congressional district level and divide them by the district population, transforming them into drug-related death rates.[11]

To consider the role of media coverage in political responsiveness to drug-related deaths, we construct two measures. First, because legislators might respond to media coverage of drug deaths outside of their district, we estimate drug-related death rates at the media market level using data from Gentzkow and Shapiro (2008). In addition, we use the Snyder and Strömberg (2010) measures of congruence between media markets and Congressional districts to identify plausible exogenous variation in coverage intensity that might affect legislator responsiveness to drug-related deaths in their district.

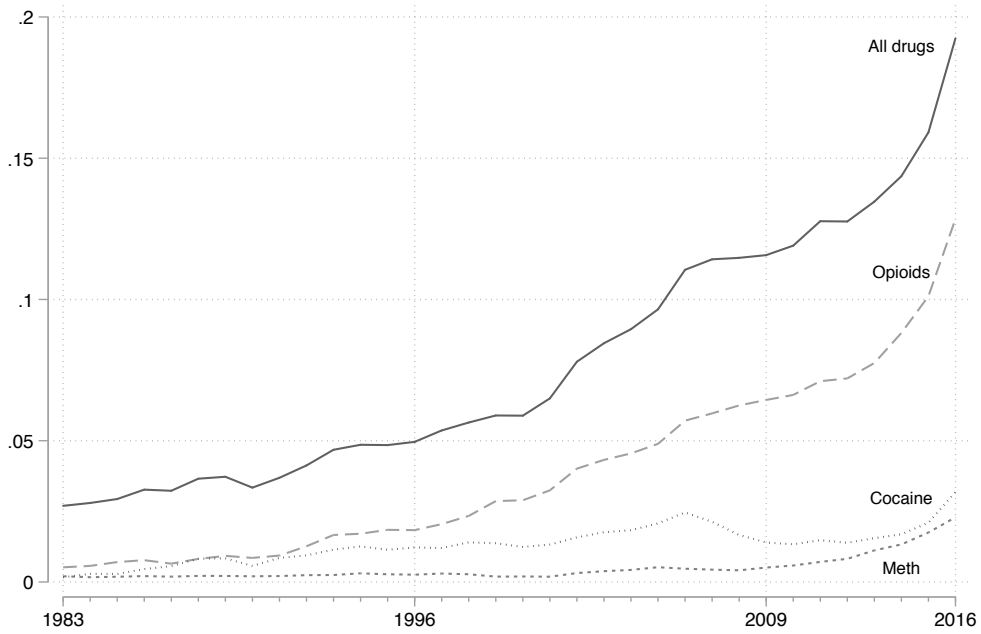
Results

We first present descriptive graphs and statistics for our primary independent and dependent variables, illustrating how drug death rates and legislative policy approaches to illegal drugs have varied over our study period.[12] Figure 1 plots annual drug-related death rates by year for all drugs and for opioids and cocaine over the 1983–2016 period. As the figure indicates, drug-related death rates climbed modestly from 1983 to the early 2000s before accelerating in recent years, pushing the mortality rate to .19 per 1,000 people in 2016. This increase was largely driven by opioids. During the crack scare (1983–1995), opioids and cocaine were associated with a nearly identical number of deaths despite widespread public and media attention to crack cocaine. Death rates from opioids began to outstrip cocaine death rates in the mid-1990s, however, rising from .02 per 1,000 people in 1995 to .13 per 1,000 in 2016.

[11] When counties were split across more than one Congressional district, we allocated deaths proportionally using population weights from the most recent Census, which cover the 98th Congress and later. We used redistricting data from Carson et al. (2007) to map Congressional districts prior to the 1980 Census redistricting to counties. We were not able to map 27 districts from this period to counties and thus restrict our main analyses to 1983 and later (results are very similar when including 1979–1982; available upon request).

[12] Table A2 provides descriptive statistics of the key variables.

Figure 1: Yearly drug-related death rates (per 1,000 people)



Total drug-related deaths per year from all illegal drugs and from opioids, methamphetamines, and cocaine. Calculated using data from the National Center for Health Statistics (see Online Appendix for coding details).

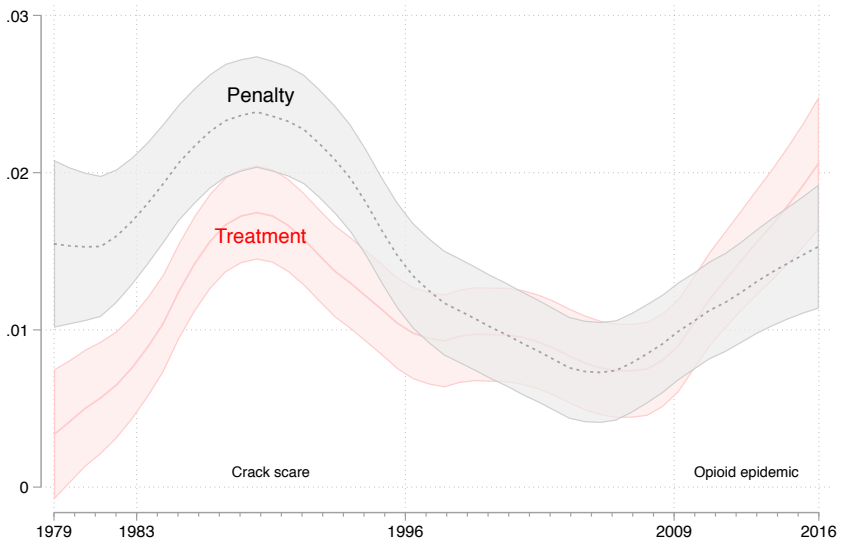
Opioids now kill far more Americans per year than all drugs did at the crack scare's peak.[13]

To understand how policy approaches to illegal drugs vary over this time period, Figure 2 presents smoothed models of over-time variation in legislative policy approaches to illegal drugs. These estimates start in 1979 to show pre-study period trends and avoid extrapolation in the local polynomial fits. The figure shows lawmakers introduced more drug-related bills during the crack scare than later on. Taken together with Figure 1, which shows that far more people have died drug poisoning in recent years, this figure demonstrates a striking lack of correspondence between drug mortality and policy responses.[14] While the figure shows that the number of drug-related bills has been increasing during the opioid crisis, the total is still

[13] See Figure A1 in the Online Appendix for corresponding race-specific death rates per 1,000 Americans.

[14] For example, the total number of bills sponsored decreased in the mid-1990s despite the fact that neither cocaine deaths nor overall drug deaths decreased in that period. This decline is likely linked to the decline in media attention to the crack scare around that time (Hartman and Golub 1999).

Figure 2: Illegal drugs bill sponsorship rates by policy approach



Outcome is a yearly binary indicator of sponsorship of one or more bills related to treatment of drug use or punishment of illegal drug use among members of the House of Representatives (local polynomial fits with bandwidth of three years). Data from the Congressional Bills Project (Adler and Wilkerson N.d.).

less than the mid-1980s. These data also indicate that legislators were more likely to sponsor bills that proposed a punishment-oriented approach to illegal drugs than a treatment-oriented approach during the crack scare of 1983–1995.[15] This differential was no longer consistently measurable after 1995. Indeed, the number of treatment bills has been growing more rapidly than punishment bills since the beginning of the opioid crisis, and the mid-2010s represent the first time point at which treatment-oriented policy responses became more prevalent than penalty-oriented ones in our data.

Next, we estimate a series of OLS models to evaluate our theoretical expectations. Each model predicts legislative bill (co)sponsorship using drug-related death rates in a legislator's House district. We calculate separate measures by drug type (total drug-related deaths, opioid

[15]The smoothed year-level estimates in these graphs range from 0 to 0.03, but the yearly data vary from 0.01 to 0.07 for punishment bills (1989, when 30 members [7%] introduced bills) and from 0 to 0.04 for treatment bills (1991, when 16 members [4%] introduced bills).

deaths, and cocaine deaths) and by race of victim (white or black).[16] Each death rate measure is calculated as the total number of deaths per 1,000 district residents and lagged by one year to ensure a plausible temporal relationship between deaths and bill sponsorship.[17]

These models include legislator fixed effects to account for time-invariant legislator and district-level factors that might induce a spurious relationship between drug deaths and (co)sponsorship of drug-related bills such as party.[18] We use legislator fixed effects rather than district fixed effects because districts change over time due to redistricting and legislators tend to behave quite consistently (e.g., Poole and Rosenthal 2007). These fixed effects account for all baseline differences among legislators, allowing us to capture how changes in drug death rates in each legislator's district predicts changes in his/her drug policy responses in the coming year. It is therefore not necessary to control for legislator party or other time-invariant characteristics. We also include fixed effects by Census region-year to account for correlated temporal shocks (possibly region-specific) that do not vary across legislators or districts and could produce spurious relationships such as changes in national drug policy, differences in the availability of different kinds of drugs over time such as fentanyl, and the growth in support for criminal justice reform in recent years. Finally, we separately cluster the standard errors by legislator and region-year to account for any remaining within-legislator or within-region-year correlation (e.g., legislators re-introducing bills they have sponsored repeatedly over time). These fixed effects models are identified using temporal variation in drug-related deaths within (not between) legislators, which we take as exogenous. Per Mummolo and Peterson (2018), we present summary statistics for this identifying within-district variation in Table A3 in the Online Appendix.

[16] In this study, we focus specifically on white deaths because they are the majority racial group at the national level and black deaths because they are the group whom critics argue have been treated worst in drug policy.

[17] We normalize by district population to ensure that the death rate measures are comparable across districts.

[18] The key identifying assumption of a fixed effects model is that a confounding variable does not vary over time. This assumption would not hold if changes in crime rates change are correlated with both drug severity and policy responses. We address this concern below by showing that our results are robust to controlling for district-level homicide rates.

We begin our analysis by estimating the relationship between district drug-related deaths and subsequent sponsorship and cosponsorship of treatment-oriented bills (Tables 1a and 1b, respectively). Our results indicate that drug-related deaths are significantly positively associated with subsequent legislative sponsorship of treatment-oriented bills ($p < .05$; column 1 of Table 1a). However, this pattern of responsiveness to drug deaths varies by drug type and victim race. We find that opioid deaths are significantly associated with subsequent sponsorship of treatment-oriented legislation ($p < .05$ in column 2, $p < .005$ in column 5) but cocaine and methamphetamine deaths are not (columns 3 and 4). Similarly, deaths of white drug victims are positively associated with subsequent treatment bills ($p < .005$; columns 6 and 8) but deaths of black victims are actually negatively associated with treatment legislation when entered into the same model as deaths of white victims ($p < .05$; column 8). Importantly, we can reject the nulls of no difference between the effects of opioid- and cocaine-related deaths ($p < .05$; column 4) and between the effects of deaths of white and black victims ($p < .005$; column 7). We observe a similar pattern in Table 1b of differential responsiveness in cosponsorship of treatment-oriented bills to opioid- and cocaine-related deaths ($p < .005$; column 5), though we find no measurable difference by victim race (column 8).

To interpret the magnitude of these relationship, it is important to note first that the base rate of drug bill sponsorship is only 1.2%. We must also consider the range of variation in white drug deaths accounting for legislator and region-year fixed effects (Mummolo and Peterson 2018). If white drug deaths increased by two standard deviations, the expected increase in the likelihood of treatment bill sponsorship using the results from column 7 of Table 1a is 1.3 percentage points, which represents an increase of 112% in relative terms from the treatment bill sponsorship base rate of 1.1%.[19] An analogous increase of two standard deviations in within-district opioid deaths would generate a 1.5 percentage point increase in the likelihood of treatment bill sponsorship (a 130% increase in relative terms).

[19]Such an increase would, if generalized, translate into more than five additional bills that year across 435 House members.

Table 1: Sponsorship/cosponsorship of treatment-oriented bills by prior drug deaths

(a) Sponsorship of treatment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.196*							
	(0.078)							
Opioid deaths		0.296**			0.432***			
		(0.112)			(0.135)			
Cocaine deaths			-0.055		-0.683*			
			(0.265)		(0.335)			
Meth deaths				0.853	0.567			
				(0.476)	(0.472)			
White drug deaths						0.274***		0.327***
						(0.082)		(0.080)
Black drug deaths							-0.370	-0.689*
							(0.249)	(0.283)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

(b) Cosponsorship of treatment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.059							
	(0.203)							
Opioid deaths		0.387			0.760**			
		(0.231)			(0.275)			
Cocaine deaths			-0.605		-1.664*			
			(0.517)		(0.665)			
Methamphetamine deaths				0.065	-0.334			
				(0.865)	(0.878)			
White drug deaths						0.146		0.224
						(0.226)		(0.223)
Black drug deaths							-0.809	-1.028
							(0.678)	(0.700)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome variables are binary measure of legislative sponsorship (Table 2(a)) or cosponsorship (Table 2(b)) of one or more bills related to treatment of drug use among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

The patterns of differential treatment-oriented responses to drug deaths by victim race (Table 1a) and type of drug (Table 1b) that we describe above do not clearly hold for punishment-oriented bills, however. Table 2a shows no significant association between prior-year drug deaths and sponsorship of punishment-oriented bills regardless of whether we consider total drug deaths (column 1) or disaggregate them by type of drug (columns 2–4) or race of victim (columns 5–7). In Table 2b, we do observe evidence that legislators are more responsive in cosponsoring punishment-oriented legislation as opioid deaths and white drug deaths increase (columns 5 and 8), but we cannot reject the null of no difference in effects with cocaine deaths and black drug deaths, respectively.

Broadly, these results suggest that district-level drug deaths increase the (co)sponsorship of treatment-oriented bills, especially for opioid overdoses and when the victims are white, but do not have a strong or consistent effect on punishment-oriented bills. In Tables 3 and A4, we examine the extent to which this pattern varies over time. To do so, we estimate versions of previous models predicting sponsorship of treatment- or punishment-oriented bills in which we interact drug deaths with indicators for the crack era, which we define as 1983–1995, and the opioid era, which we define as 2009–2016.[20] The coefficients on the interaction terms test whether these relationships vary by era compared to the reference period of 1996–2008.

We first consider differences over time in responsiveness to drug deaths with sponsorship of treatment-oriented bills. Consistent with our expectation, Table 3 indicates that legislators respond to drug deaths in the opioid era with treatment-oriented legislation ($p < .05$ for the marginal effect in the 2009–2016 period), though we cannot reject the null of no difference in effects with the other two eras (column 1). The story becomes clearer when we focus specifically on deaths by drug type. The fully specified model considering opioid, cocaine and methamphetamine deaths (column 5) shows that legislators sponsored more treatment

[20]By 2009, opioid overuse had become a sufficient concern that the Federal Drug Administration launched its Safe Use Initiative (Federal Drug Administration 2019). Heroin deaths started to rise in 2011 and synthetic opioid deaths began to increase in 2014 (Ciccarone 2019).

Table 2: Sponsorship/cosponsorship of punishment-oriented bills by prior drug deaths

(a) Sponsorship of punishment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.039							
	(0.067)							
Opioid deaths		-0.077			0.009			
		(0.070)			(0.085)			
Cocaine deaths			-0.389		-0.406			
			(0.363)		(0.437)			
Methamphetamine deaths				0.031	0.113			
				(0.397)	(0.408)			
White drug deaths						-0.045		-0.044
						(0.056)		(0.045)
Black drug deaths							-0.060	-0.017
							(0.432)	(0.427)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

(b) Cosponsorship of punishment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.253*							
	(0.127)							
Opioid deaths		0.449**			0.588**			
		(0.137)			(0.186)			
Cocaine deaths			0.240		-0.567			
			(0.470)		(0.616)			
Methamphetamine deaths				-0.102	-0.571			
				(1.017)	(1.018)			
White drug deaths						0.319*		0.352*
						(0.137)		(0.139)
Black drug deaths							-0.088	-0.431
							(0.586)	(0.617)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome variables are binary measure of legislative sponsorship (Table 3(a)) or cosponsorship (Table 3(b)) of one or more bills related to punishment of illegal drug use among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table 3: Sponsorship of treatment-oriented drugs bills by time period and prior drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.106*							
	(0.050)							
Total drug deaths × crack era	0.044							
	(0.096)							
Total drug deaths × opioid era	0.163							
	(0.099)							
Opioid deaths		0.099			0.251**			
		(0.077)			(0.093)			
Opioid deaths × crack era		0.107			-0.289			
		(0.296)			(0.300)			
Opioid deaths × opioid era		0.317*			0.338*			
		(0.127)			(0.148)			
Cocaine deaths			-0.221		-0.603			
			(0.258)		(0.329)			
Cocaine deaths × crack era			0.433		0.713			
			(0.361)		(0.416)			
Cocaine deaths × opioid era			0.256		-0.638			
			(0.349)		(0.407)			
Methamphetamine deaths				0.202	0.188			
				(0.479)	(0.499)			
Meth deaths × crack era				0.011	0.128			
				(0.961)	(0.962)			
Meth deaths × opioid era				1.085*	0.549			
				(0.534)	(0.596)			
White drug deaths						0.194***		0.245***
						(0.055)		(0.059)
White drug deaths × crack era						-0.053		-0.174
						(0.143)		(0.178)
White drug deaths × opioid era						0.141		0.135
						(0.102)		(0.100)
Black drug deaths							-0.517	-0.803**
							(0.272)	(0.306)
Black drug deaths × crack era							0.569*	0.639
							(0.281)	(0.339)
Black drug deaths × opioid era							-0.150	-0.109
							(0.209)	(0.215)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

bills as opioid deaths increased in their district in the interim period (1996–2008; $p < .01$) and especially during the opioid crisis (2009–2016 marginal effect; $p < .005$). As a result, we can reject the null of no difference in the relationship between opioid and cocaine deaths only during the opioid crisis ($p < .05$). We also find that white drug deaths were significantly associated with treatment bill sponsorship in the interim period and during the opioid crisis, but not during the crack era (columns 6 and 8). This relationship is significantly different from the one observed for black drug deaths in those eras ($p < .005$), which are unrelated with treatment bill sponsorship.

For ease of understanding, we plot the relationship between drug deaths and treatment bills by era in Figure 3 (based on columns 1–4 and 6–7 of Table 3). It shows that the relationship between drug deaths and treatment-oriented bills has become stronger overall (Figure 3a). However, this finding holds for opioid-related deaths (Figure 3b) and methamphetamine-related deaths (Figure 3d), but not those related to cocaine (Figure 3c), which are not estimated precisely. The shift over time towards treatment-oriented responses seems to be driven by drugs that are believed to have most affected white communities.[21]

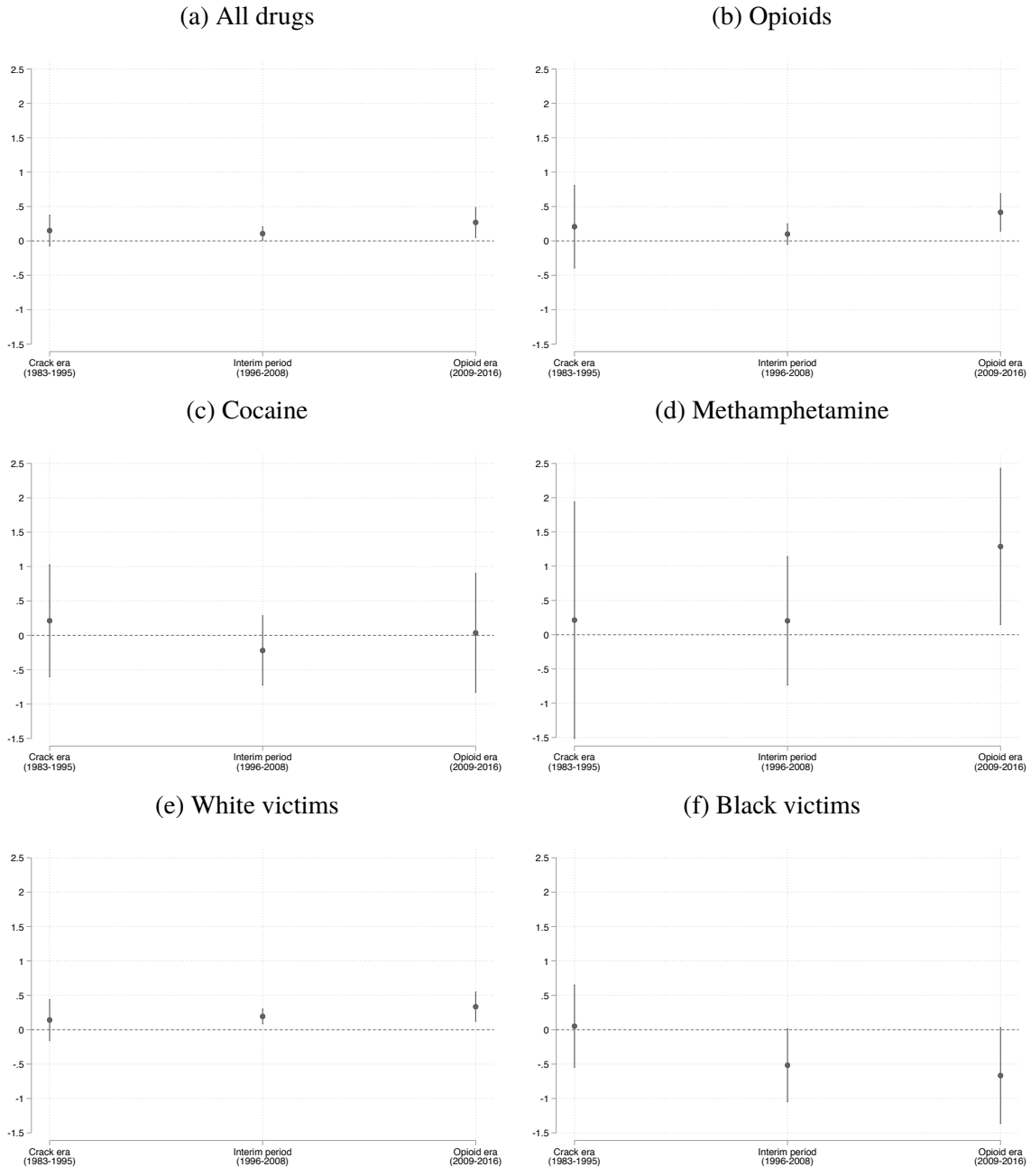
Similarly, there is a noticeable difference in treatment policy responses to drug deaths by victim race. Specifically, legislators are responsive to the deaths of white victims (Figure 3e) and not to black victims (Figure 3f) — a racial gap in treatment-related drug policy that is widest during the current opioid crisis.

None of the relationships we describe above are observed for punishment-oriented bills, however (Table A4). We find no significant association between prior-year drug deaths and bill sponsorship in any era for any measure. These results suggest that sponsorship of punishment-oriented bills is not a response to the local severity of drug use (legislators may instead be responding to other factors such as media coverage or public opinion).

We next consider the robustness of our results. The most plausible threat to our design

[21]The estimated marginal effect size is larger for methamphetamines, which likely reflects the reduced level of within-legislator variation in deaths compared to opioids.

Figure 3: Marginal effects of drug deaths on treatment sponsorship by drug type/victim race



Marginal effects of drug deaths on sponsorship of one or more bills related to treatment of drug use among members of the House of Representatives. Figures 3a, 3b, 3c and 3d correspond to models 1, 2, 3 and 4 in Table 3. Figures 3e and 3f correspond to models 6 and 7 in Table 3. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year (see Online Appendix for coding details). Data from the Congressional Bills Project (Adler and Wilkerson N.d.).

is that changes in drug deaths are correlated with other crimes and that our models pick up the effects of these non-drug related crimes. To address this concern, we calculate homicide rates at the district level (the measure of crime incidence that is most consistently measured across districts) and replicate all the models reported in the text above with this measure as a control variable. Our results, which are reported in Tables A5–A8 of the Online Appendix, are very similar to those discussed above.

Finally, we consider two possible moderators of the relationships we observe — political parties and media coverage. We first estimate whether the relationship between district-related drug deaths and sponsorship of treatment- or punishment-oriented legislation varies by party identification. Tables A9 and A10 in the Online Appendix show, however, that we cannot reject the null hypothesis of no difference in responsiveness (i.e., the relationship between district-level drug deaths and bill sponsorship) between Democrats and Republicans across all the measures of drug-related deaths considered above (i.e., by race and drug type). Similarly, we observe little consistent evidence that the relationship between drug deaths and legislative responsiveness varies by congruence between media markets and Congressional district boundaries (Tables A11–A12). Finally, responsiveness to deaths at the media market level is similar to deaths at the district level (Table A13) but these relationships again do not measurably vary by congruence (Tables A14–A15), providing little convincing evidence that media coverage drives responsiveness.

Conclusion

The opioid crisis has sparked a public debate over how policymakers have addressed illegal drug use in recent decades. Many have suggested that policy responses to the opioid crisis emphasize treatment and have speculated that race explains the changes (e.g., Peterson and Armour 2018), but lack convincing evidence for this claim. Our study provides the first

systematic comparison of the federal legislative policy response to the crack scare and the opioid crisis. Despite the massive increase in opioid overdose deaths since 2009, legislators were more likely to sponsor legislation related to illegal drugs during the crack scare. However, we do find that members of Congress have responded the opioid crisis by proposing more treatment-oriented policies. We focus specifically on legislator responsiveness to local drug deaths, which we find varies by type of drug and victim race (but not legislator party or factors that affect media coverage). Policymakers appear to respond to district-level drug mortality by increasing the likelihood that they propose treatment-oriented legislation, but this response is driven by responsiveness to victims of opioid overdoses (especially in recent years) and to white drug deaths. Punitive drug policies, by contrast, seem to be unrelated to district-level mortality rates. These results suggest that the political system is differentially sensitive to the suffering of white victims of the opioid crisis and is unusually willing to offer treatment-oriented policies on their behalf.

Of course, this study has limitations that should be noted. First, we do not consider Congressional voting, constituent service, floor speeches, or other forms of potential legislative responsiveness to district conditions. In addition, we focus on legislative responsiveness to drug-related deaths, not other harms from drug use. Our reliance on mortality data necessarily highlights opioids due to the greater likelihood of lethal overdoses from its use (especially with synthetic opiods like fentanyl). These data also span the 1999 transition from ICD-9 to ICD-10 cause of death codes, which may reduce the comparability of data between the crack scare and the opioid crisis (though we observe no evidence of discontinuities). Third, future research should seek to extend this approach to study drug policy responsiveness in the states, which play a critical role in both criminal justice and public health policy under the U.S. federal system. It would also be valuable to examine variation in responses by prosecutors, judges, public health agencies, and other federal and state actors to local-level drug mortality during the opioid crisis. Finally, scholars should devote further attention to possi-

ble changes over time in the content of media coverage of drug use, a possible mechanism of support for treatment-oriented policies (e.g., Harbin N.d.).

Still, this study represents an important step toward understanding the forces shaping the policy response to one of the most important issues in contemporary American politics. Given the staggering human toll of the opioid crisis, the stakes could hardly be higher.

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Online Appendix

Coding rules for drug-related legislation

- **Topic**: Code as 0 if bill summary exclusively involves alcohol, 1 otherwise (Cohen's kappa=.818)
- **Penalty**: Code as 1 if bill summary mentions criminal or civil penalty (e.g. jail/prison time, fines), 0 otherwise (Cohen's kappa=.776)
- **PenaltyDealer (code only if mentions penalty)**: Code as 1 if bill summary involves penalties for drug dealers or traffickers, 0 otherwise (Cohen's kappa=.702)
- **PenaltyLess (code only if mentions penalty)**: Code as 1 if bill summary discusses reduced penalties, 0 otherwise (Cohen's kappa=.819)
- **Treatment**: Code as 1 if bill summary mentions prevention, treatment, or rehabilitation, 0 otherwise (Cohen's kappa=.797)
- **Supplementary rules**:
  - Taxation: If bill summary concerns a tax on marijuana or other controlled substances, code as penalty=1, PenaltyDealer=0, PenaltyLess=0.
  - Legalization of drugs: If bill summary supports federal research or efforts to legalize drugs, code as penalty=1, PenaltyDealer=0, PenaltyLess=1. If bill summary opposes federal research or efforts to legalize drugs, code as penalty=1, PenaltyDealer=0, PenaltyLess=0.
  - Prescription drugs: If bill summary concerns prescribers or pharmacies (i.e., agents that distribute controlled substances but are not considered dealers), code as penalty=1, PenaltyDealer=0.
  - Controlled substance/prescription drug monitoring programs: If bill summary concerns efforts to collect data on controlled substances, code as penalty=0, treatment=1.
  - Methamphetamine lab remediation: If bill summary concerns guidelines or funding streams to clean up old methamphetamine labs, code as penalty=0, treatment=0.
  - Major drug offenses: If bill summary concerns the direction of federal resources to major drug offenses, code as penalty=1, PenaltyDealer=0, PenaltyLess=0.
  - Racketeering: If bill summary does not mention drug dealers but does mention drugs and racketeering, a crime usually committed by drug organizations, code as penalty=1, PenaltyDealer=1.
  - Exportation of controlled substances: If bill summary discusses trade concerns and legal exportation of controlled substances from the United States and elsewhere, code as penalty=0, treatment=0.

- Treatment restriction: If bill summary concerns restriction of federal support of treatment programs such as needle exchanges and methadone clinics, code as penalty=0, treatment=0.
- Procedural: If bill summary concerns procedural matters like the timing of a vote, code as penalty=0, treatment=0.

Table A1: ICD-9/ICD-10 coding rules

Category	**ICD-9**	**ICD-10**
Drug poisoning	E850, E851, E852, E853, E854, E855, E856, E857, E858, E950.0, E950.1, E950.2, E950.3, E950.4, E950.5, E962.0, E980.0, E980.1, E980.2, E980.3, E980.4, E980.5	X40, X41, X42, X43, X44, X60, X61, X62, X63, X64, X85, Y10, Y11, Y12, Y13, Y14
Opioid	965.0 E850.1, E850.2	T40.0, T40.1, T40.2, T40.3, T40.4, T.40.6
Cocaine	304.2, 305.6, 938.5, 968.5 E855.2	T40.5
Meth	304.4, 305.7, 965.7 E854.2	T43.6
Homicide	E960, E961, E962, E963, E964, E965, E966, E967, E968, E969	X92, X93, X94, X95, X96, X97, X98, X99, Y00, Y01, Y02, Y03, Y04, Y05, Y06, Y07, Y08, Y09

The ICD-10 coding scheme provides information about the underlying cause of death, which is the condition that initiated the chain of events leading to death, as well as intermediate or contributory conditions listed on the death certificate (multiple cause of death). Under ICD-10, we identify drug poisonings using the corresponding underlying cause codes. Deaths from individual drugs are identified using multiple cause codes, following Seth et al. (2018) and Doleac and Mukherjee (N.d.). To identify drug poisonings under ICD-9, we select all deaths with corresponding external cause codes (Fingerhut and Cox 1998). Identifying deaths related to specific drugs is somewhat more challenging under ICD-9 than under ICD-10. We use a combination of diagnosis and external cause codes to identify cocaine-, meth-, and opioid-related deaths, following Boylan and Ho (2004), Callaghan et al. (2012), and Unick et al. (2013), respectively.

Table A2: Descriptive statistics of key variables

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Drug bill sponsorship	14,762	0.044	0.204	0	1
Treatment bill sponsorship	14,762	0.013	0.112	0	1
Punishment bill sponsorship	14,762	0.015	0.120	0	1
Treatment bill cosponsorship	14,762	0.155	0.362	0	1
Punishment bill cosponsorship	14,762	0.159	0.365	0	1
Total drug deaths	14,762	0.082	0.063	0	0.609
Opioid deaths	14,762	0.041	0.047	0	0.528
Cocaine deaths	14,762	0.014	0.015	0	0.160
Methamphetamine deaths	14,762	0.005	0.009	0	0.104
White drug deaths	14,762	0.070	0.057	0	0.596
Black drug deaths	14,762	0.010	0.015	0	0.299
Media congruence	9,978	0.453	0.239	0.002	0.995

Legislative variables are binary measure of sponsorship or cosponsorship of one or more bills related to treatment of drug use each year among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. Media congruence is a measure of geographic match between congressional districts and local media markets, where 1 indicates a complete overlap between the two (Snyder and Strömberg 2010).

Table A3: Within-district variation in drug-related death rates

	Mean	SD	Min	Max
Total drug deaths	0.000	0.023	-0.160	0.372
Opioid deaths	0.000	0.019	-0.141	0.357
Cocaine deaths	0.000	0.007	-0.042	0.099
Methamphetamine deaths	0.000	0.003	-0.023	0.048
White drug deaths	0.000	0.021	-0.105	0.365
Black drug deaths	0.00	0.006	-0.118	0.124

Identifying within-district variation in drug-related death rates from all illegal drugs and from opioids and cocaine for victims of all races and in total drug deaths among white and black victims. Calculated as the residual when regressing death rates per 1,000 district residents on fixed effects by legislator and region-year per Mummolo and Peterson (2018). Death rates calculated using multiple cause of death data from the National Center for Health Statistics (see Online Appendix for coding details).

Table A4: Sponsorship of punishment-oriented drugs bills by time period and drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.070							
	(0.106)							
Total drug deaths × crack era	0.137							
	(0.173)							
Total drug deaths × opioid era	0.024							
	(0.103)							
Opioid deaths		-0.075			0.067			
		(0.117)			(0.101)			
Opioid deaths × crack era		0.011			-0.375			
		(0.354)			(0.422)			
Opioid deaths × opioid era		-0.006			-0.021			
		(0.125)			(0.105)			
Cocaine deaths			-0.422		-0.514			
			(0.392)		(0.456)			
Cocaine deaths × crack era			0.314		0.653			
			(0.410)		(0.535)			
Cocaine deaths × opioid era			-0.288		-0.296			
			(0.364)		(0.368)			
Meth deaths				-0.219	-0.126			
				(0.504)	(0.508)			
Meth deaths × crack era				0.728	0.762			
				(1.046)	(1.099)			
Meth deaths × opioid era				0.259	0.243			
				(0.619)	(0.695)			
White drug deaths						-0.113		-0.126
						(0.084)		(0.071)
White drug deaths × crack era						0.211		0.192
						(0.244)		(0.234)
White drug deaths × opioid era						0.083		0.099
						(0.084)		(0.082)
Black drug deaths							-0.058	0.008
							(0.451)	(0.444)
Black drug deaths × crack era							0.155	0.056
							(0.328)	(0.306)
Black drug deaths × opioid era							-0.413	-0.458
							(0.339)	(0.329)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

Table A5: Sponsorship/cosponsorship of treatment bills by prior drug deaths and homicides

(a) Sponsorship of treatment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.157							
	(0.089)							
Opioid deaths		0.263*			0.419***			
		(0.119)			(0.134)			
Cocaine deaths			-0.192		-0.793*			
			(0.310)		(0.372)			
Methamphetamine deaths				0.786	0.538			
				(0.482)	(0.474)			
White drug deaths						0.237*		0.292***
						(0.091)		(0.084)
Black drug deaths							-0.525	-0.787*
							(0.295)	(0.316)
Homicides	0.225	0.230	0.277	0.259	0.261	0.218	0.288	0.245
	(0.154)	(0.149)	(0.156)	(0.144)	(0.154)	(0.150)	(0.149)	(0.152)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

(b) Cosponsorship of treatment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.000							
	(0.216)							
Opioid deaths		0.344			0.742**			
		(0.243)			(0.278)			
Cocaine deaths			-0.800		-1.819**			
			(0.536)		(0.667)			
Methamphetamine deaths				-0.021	-0.375			
				(0.865)	(0.879)			
White drug deaths						0.091		0.174
						(0.238)		(0.232)
Black drug deaths							-1.016	-1.172
							(0.701)	(0.714)
Homicides	0.338	0.294	0.393*	0.338	0.369	0.321	0.386*	0.360
	(0.200)	(0.201)	(0.191)	(0.189)	(0.191)	(0.198)	(0.190)	(0.196)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome variables are binary measure of legislative sponsorship (Table 2(a)) or cosponsorship (Table 2(b)) of one or more bills related to treatment of drug use among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table A6: Sponsorship/cosponsorship of punishment bills by prior drug deaths and homicides

(a) Sponsorship of punishment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.055							
	(0.066)							
Opioid deaths		-0.090			0.004			
		(0.067)			(0.084)			
Cocaine deaths			-0.442		-0.450			
			(0.364)		(0.439)			
Methamphetamine deaths				0.012	0.101			
				(0.400)	(0.410)			
White drug deaths						-0.060		-0.057
						(0.054)		(0.043)
Black drug deaths							-0.103	-0.052
							(0.435)	(0.428)
Homicides	0.089	0.088	0.106	0.076	0.106	0.087	0.081	0.089
	(0.134)	(0.132)	(0.133)	(0.133)	(0.132)	(0.133)	(0.134)	(0.134)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

(b) Cosponsorship of punishment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.215							
	(0.131)							
Opioid deaths		0.417**			0.575**			
		(0.139)			(0.183)			
Cocaine deaths			0.110		-0.669			
			(0.489)		(0.628)			
Methamphetamine deaths				-0.171	-0.598			
				(1.017)	(1.016)			
White drug deaths						0.282*		0.319*
						(0.140)		(0.139)
Black drug deaths							-0.238	-0.524
							(0.599)	(0.625)
Homicides	0.217	0.215	0.262	0.270	0.244	0.216	0.281	0.233
	(0.189)	(0.187)	(0.193)	(0.186)	(0.191)	(0.188)	(0.191)	(0.191)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome variables are binary measure of legislative sponsorship (Table 3(a)) or cosponsorship (Table 3(b)) of one or more bills related to punishment of illegal drug use among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table A7: Sponsorship of treatment bills by time period, prior drug deaths, and homicides

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.096							
	(0.060)							
Total drug deaths × crack era	-0.149							
	(0.142)							
Total drug deaths × opioid era	0.166							
	(0.097)							
Opioid deaths		0.098			0.217*			
		(0.078)			(0.085)			
Opioid deaths × crack era		-0.271			-0.309			
		(0.374)			(0.304)			
Opioid deaths × opioid era		0.306*			0.341*			
		(0.125)			(0.153)			
Cocaine deaths			-0.177		-0.477			
			(0.253)		(0.308)			
Cocaine deaths × crack era			-0.124		0.179			
			(0.431)		(0.426)			
Cocaine deaths × opioid era			0.322		-0.635			
			(0.371)		(0.450)			
Methamphetamine deaths				0.102	0.096			
				(0.480)	(0.499)			
Meth deaths × crack era				0.063	0.431			
				(0.949)	(0.958)			
Meth deaths × opioid era				1.086*	0.569			
				(0.547)	(0.603)			
White drug deaths						0.170**		0.215***
						(0.063)		(0.062)
White drug deaths × crack era						-0.207		-0.168
						(0.194)		(0.167)
White drug deaths × opioid era						0.140		0.133
						(0.103)		(0.103)
Black drug deaths							-0.473	-0.704*
							(0.273)	(0.300)
Black drug deaths × crack era							0.084	0.183
							(0.284)	(0.270)
Black drug deaths × opioid era							0.086	0.008
							(0.293)	(0.309)
Homicides	0.045	0.063	0.128	0.092	0.085	0.041	0.161	0.115
	(0.130)	(0.130)	(0.146)	(0.126)	(0.145)	(0.126)	(0.138)	(0.138)
Homicides × crack era	0.225*	0.216*	0.178	0.186*	0.188	0.212*	0.137	0.141
	(0.102)	(0.098)	(0.097)	(0.084)	(0.097)	(0.094)	(0.097)	(0.098)
Homicides × opioid era	-0.110	-0.083	-0.125	-0.073	-0.021	-0.055	-0.113	-0.052
	(0.090)	(0.092)	(0.095)	(0.086)	(0.109)	(0.093)	(0.124)	(0.133)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

Table A8: Sponsorship of punishment bills by time period, prior drug deaths, and homicides

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.076							
	(0.101)							
Total drug deaths × crack era	0.258							
	(0.175)							
Total drug deaths × opioid era	-0.062							
	(0.119)							
Opioid deaths		-0.057			0.038			
		(0.120)			(0.121)			
Opioid deaths × crack era		0.207			-0.395			
		(0.364)			(0.569)			
Opioid deaths × opioid era		-0.057			-0.081			
		(0.146)			(0.148)			
Cocaine deaths			-0.305		-0.366			
			(0.385)		(0.438)			
Cocaine deaths × crack era			0.628		0.970			
			(0.477)		(0.721)			
Cocaine deaths × opioid era			-0.158		0.021			
			(0.450)		(0.505)			
Methamphetamine deaths				0.181	0.248			
				(0.736)	(0.753)			
Meth deaths × crack era				1.007	0.929			
				(1.523)	(1.557)			
Meth deaths × opioid era				-0.808	-0.750			
				(1.042)	(1.110)			
White drug deaths						-0.113		-0.122
						(0.097)		(0.098)
White drug deaths × crack era						0.426		0.459
						(0.251)		(0.279)
White drug deaths × opioid era						-0.025		-0.007
						(0.116)		(0.117)
Black drug deaths							-0.040	0.055
							(0.459)	(0.466)
Black drug deaths × crack era							0.138	-0.174
							(0.411)	(0.425)
Black drug deaths × opioid era							-0.518	-0.496
							(0.595)	(0.600)
Homicides	0.076	0.043	0.058	0.039	0.075	0.065	0.017	0.030
	(0.181)	(0.177)	(0.176)	(0.183)	(0.175)	(0.181)	(0.184)	(0.181)
Homicides × crack era	0.053	0.092	0.047	0.106	0.039	0.073	0.107	0.108
	(0.092)	(0.095)	(0.096)	(0.096)	(0.098)	(0.095)	(0.104)	(0.104)
Homicides × opioid era	-0.031	-0.036	-0.028	-0.041	-0.051	-0.051	0.119	0.094
	(0.184)	(0.188)	(0.193)	(0.192)	(0.200)	(0.191)	(0.194)	(0.196)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

Table A9: Sponsorship of treatment-oriented bills by legislator party and drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.211**							
	(0.075)							
Total drug deaths× Democrat	-0.030							
	(0.129)							
Opioid deaths		0.263*			0.299*			
		(0.114)			(0.147)			
Opioid deaths × Democrat		0.055			0.212			
		(0.166)			(0.214)			
Cocaine deaths			0.075		-0.369			
			(0.221)		(0.327)			
Cocaine deaths × Democrat			-0.188		-0.458			
			(0.397)		(0.516)			
Methamphetamine deaths				1.208*	1.062			
				(0.523)	(0.555)			
Meth deaths × Democrat				-0.852	-1.042			
				(0.642)	(0.642)			
White drug deaths						0.255***		0.261***
						(0.078)		(0.078)
White drug deaths × Democrat						0.044		0.134
						(0.142)		(0.142)
Black drug deaths							0.444	0.091
							(0.390)	(0.392)
Black drug deaths × Democrat							-0.945	-0.953
							(0.485)	(0.519)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238
Total N	12,944	12,944	12,944	12,944	12,944	12,944	12,944	12,944

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period (excludes party switchers). All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

Table A10: Sponsorship of punishment-oriented bills by legislator party and drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.011							
	(0.064)							
Total drug deaths× Democrat	-0.102							
	(0.089)							
Opioid deaths		-0.023			0.035			
		(0.083)			(0.103)			
Opioid deaths × Democrat		-0.092			-0.049			
		(0.108)			(0.149)			
Cocaine deaths			-0.249		-0.320			
			(0.251)		(0.277)			
Cocaine deaths × Democrat			-0.200		-0.107			
			(0.452)		(0.574)			
Methamphetamine deaths				0.178	0.195			
				(0.478)	(0.514)			
Meth deaths × Democrat				-0.382	-0.267			
				(0.475)	(0.518)			
White drug deaths						0.007		0.005
						(0.063)		(0.060)
White drug deaths × Democrat						-0.122		-0.122
						(0.090)		(0.089)
Black drug deaths							0.173	0.060
							(0.456)	(0.439)
Black drug deaths × Democrat							-0.277	-0.039
							(0.646)	(0.660)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238
Total N	12,944	12,944	12,944	12,944	12,944	12,944	12,944	12,944

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2016 period (excludes party switchers). All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year. The "crack era" is defined as 1983–1995 and the "opioid era" as 2009–2016 (reference category is 1996–2008).

Table A11: Sponsorship of treatment-oriented bills by congruence and prior drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Media market congruence	0.035	0.018	0.025	0.022	0.047	0.032	0.028	0.026	0.032
	(0.025)	(0.039)	(0.031)	(0.034)	(0.028)	(0.033)	(0.038)	(0.031)	(0.037)
Total drug deaths		-0.123							
		(0.275)							
Total drug deaths × congruence		0.331							
		(0.410)							
Opioid deaths			-0.280			-0.003			
			(0.344)			(0.162)			
Opioid deaths × congruence			0.596			0.203			
			(0.544)			(0.316)			
Cocaine deaths				-0.817		-0.869			
				(0.855)		(0.936)			
Cocaine deaths × congruence				1.419		1.316			
				(1.345)		(1.529)			
Meth deaths					2.006	2.617*			
					(1.114)	(1.094)			
Meth deaths × congruence					-3.318	-4.440*			
					(1.963)	(2.019)			
White drug deaths							0.011		0.249
							(0.318)		(0.238)
White drug deaths × congruence							0.184		-0.144
							(0.470)		(0.347)
Black drug deaths								-0.893	-1.097
								(0.725)	(0.639)
Black drug deaths × congruence								1.312	1.406
								(1.307)	(1.178)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,081	938	938	938	938	938	938	938	938
Total N	9,976	8,809	8,809	8,809	8,809	8,809	8,809	8,809	8,809

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2006 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table A12: Sponsorship of punishment-oriented bills by congruence and prior drug deaths

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Media market congruence	0.048	0.035	0.042	0.043	0.053*	0.039	0.038	0.046	0.035
	(0.025)	(0.035)	(0.026)	(0.029)	(0.024)	(0.028)	(0.034)	(0.027)	(0.035)
Total drug deaths		-0.224							
		(0.315)							
Total drug deaths × congruence		0.369							
		(0.478)							
Opioid deaths			-0.432			-0.378*			
			(0.387)			(0.179)			
Opioid deaths × congruence			0.740			0.542			
			(0.623)			(0.332)			
Cocaine deaths				-0.572		-0.158			
				(0.967)		(1.018)			
Cocaine deaths × congruence				1.375		0.664			
				(1.605)		(1.753)			
Meth deaths					-0.335	0.353			
					(1.142)	(0.936)			
Meth deaths × congruence					1.397	0.239			
					(2.180)	(1.891)			
White drug deaths							-0.253		-0.180
							(0.352)		(0.259)
White drug deaths × congruence							0.388		0.264
							(0.533)		(0.409)
Black drug deaths								-0.562	-0.394
								(0.877)	(0.745)
Black drug deaths × congruence								1.344	1.069
								(1.847)	(1.662)
Congruence									0.000
									(0.000)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,081	938	938	938	938	938	938	938	938
Total N	9,976	8,809	8,809	8,809	8,809	8,809	8,809	8,809	8,809

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2006 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table A13: Sponsorship of drug bills by prior DMA-level drug deaths

(a) Sponsorship of treatment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.262*							
	(0.108)							
Opioid deaths		0.369*			0.501***			
		(0.144)			(0.165)			
Cocaine deaths			0.112		-0.745*			
			(0.289)		(0.333)			
Meth deaths				0.990	0.651			
				(0.805)	(0.812)			
White drug deaths						0.323**		0.378***
						(0.119)		(0.121)
Black drug deaths							-0.339	-0.875*
							(0.319)	(0.373)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	13,003	13,003	13,003	13,003	13,003	13,003	13,003	13,003

(b) Sponsorship of punishment-oriented bills

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.053							
	(0.053)							
Opioid deaths		-0.056			-0.033			
		(0.062)			(0.101)			
Cocaine deaths			-0.171		-0.115			
			(0.282)		(0.384)			
Meth deaths				-0.051	-0.006			
				(0.515)	(0.551)			
White drug deaths						-0.061		-0.063
						(0.054)		(0.056)
Black drug deaths							-0.052	0.038
							(0.406)	(0.425)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
Total N	12,998	12,998	12,998	12,998	12,998	12,998	12,998	12,998

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome variables are binary measure of legislative sponsorship (Table 2(a)) or cosponsorship (Table 2(b)) of one or more bills related to treatment of drug use among members of the House of Representatives in the 1983–2016 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 district residents and lagged by one year.

Table A14: Sponsorship of treatment bills by DMA-level drug deaths and congruence

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	0.076							
	(0.229)							
Media market congruence	0.032	0.030	0.029	0.046	0.037	0.039	0.023	0.033
	(0.034)	(0.029)	(0.034)	(0.028)	(0.033)	(0.033)	(0.034)	(0.036)
Total drug deaths× congruence	0.111							
	(0.346)							
Opioid deaths		-0.092			0.050			
		(0.276)			(0.230)			
Opioid deaths× congruence		0.390			0.369			
		(0.472)			(0.431)			
Cocaine deaths			-0.512		-0.570			
			(0.833)		(0.983)			
Cocaine deaths× congruence			0.705		0.242			
			(1.389)		(1.690)			
Meth deaths				1.440	1.952			
				(1.174)	(1.217)			
Meth deaths× congruence				-2.958	-3.937*			
				(1.875)	(1.969)			
White drug deaths						0.217		0.406
						(0.247)		(0.233)
White drug deaths× congruence						-0.028		-0.293
						(0.359)		(0.314)
Black drug deaths							-1.016	-1.455
							(1.034)	(1.049)
Black drug deaths× congruence							1.851	2.187
							(2.094)	(2.081)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	938	938	938	938	938	938	938	938
Total N	8,804	8,804	8,804	8,804	8,804	8,804	8,804	8,804

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2006 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 county residents aggregated into DMA-level and lagged by one year.

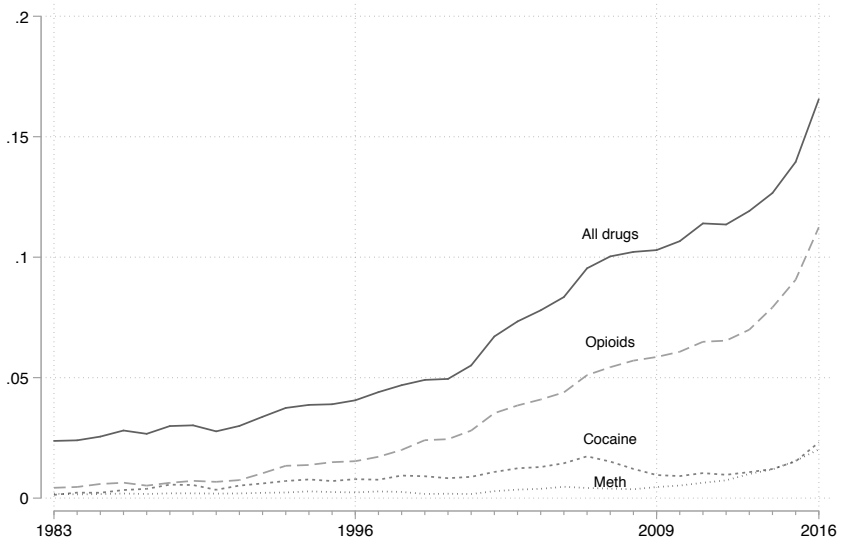
Table A15: Sponsorship of punishment bills by DMA-level drug deaths and congruence

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total drug deaths	-0.286							
	(0.232)							
Media market congruence	0.038	0.040	0.048	0.048	0.038	0.039	0.054	0.042
	(0.033)	(0.027)	(0.031)	(0.024)	(0.029)	(0.032)	(0.032)	(0.037)
Total drug deaths× congruence	0.346							
	(0.394)							
Opioid deaths		-0.521			-0.661*			
		(0.318)			(0.310)			
Opioid deaths× congruence		0.819			1.030			
		(0.544)			(0.573)			
Cocaine deaths			-0.493		0.420			
			(0.915)		(1.075)			
Cocaine deaths× congruence			0.854		-0.802			
			(1.533)		(1.887)			
Meth deaths				-1.003	-0.143			
				(1.422)	(1.484)			
Meth deaths× congruence				3.471	2.179			
				(2.889)	(2.948)			
White drug deaths						-0.318		-0.260
						(0.255)		(0.255)
White drug deaths× congruence						0.393		0.351
						(0.415)		(0.383)
Black drug deaths							-0.670	-0.325
							(1.121)	(1.125)
Black drug deaths× congruence							0.226	-0.311
							(2.643)	(2.546)
Legislator fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Region-year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Legislators	938	938	938	938	938	938	938	938
Total N	8,804	8,804	8,804	8,804	8,804	8,804	8,804	8,804

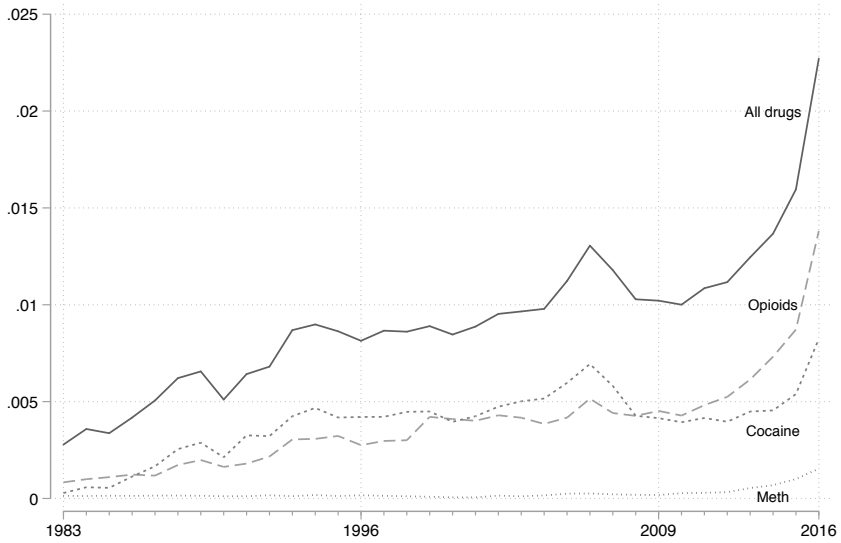
* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with two-way clustering by legislator and region-year (Cameron, Gelbach, and Miller 2011; Correia 2016). Constant is suppressed. Outcome is binary measure of legislative sponsorship of one or more treatment-oriented bills related to drug use or illegal drugs among members of the House of Representatives in the 1983–2006 period. All drug-related death variables are calculated from mortality records as deaths per 1,000 county residents aggregated into DMA-level and lagged by one year.

Figure A1: Yearly drug-related death rates by race per 1,000 Americans (all races)

(a) White Americans



(b) Black Americans



Total drug-related deaths per year from all illegal drugs and from opioids, methamphetamines, and cocaine. Calculated using multiple cause of death data from the National Center for Health Statistics (see Online Appendix for coding details). Values represent deaths by people of that race per 1,000 Americans of all races.