The Pandemic Policy U-Turn: Partisanship, Public Health, and Race in Decisions to Ease COVID-19 Social Distancing Policies in the United States

Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, Rachel Castellano, Megan Erickson and John Wilkerson

We explore the US states' evolving policy responses to the COVID-19 pandemic by examining governors' decisions to begin easing five types of social distancing policies after the initial case surge in March–April 2020. Applying event history models to original data on state COVID-19 policies, we test the relative influence of health, economic, and political considerations on their decisions. We find no evidence that differences in state economic conditions influenced when governors began easing. Governors of states with larger recent declines in COVID-19 deaths per capita and improving trends in new confirmed cases and test positivity were quicker to ease. However, politics played as powerful a role as epidemiological conditions, driven primarily by governors' party affiliation. Republican governors made the policy U-turn from imposing social distancing measures toward easing those measures a week earlier than Democratic governors, all else equal. Most troubling of all, we find that states with larger Black populations eased their social distancing policies more quickly, despite Black Americans' higher exposure to infection from SARS-CoV-2 and subsequent death from COVID-19.

In March 2020, it was clear to governors that the federal government would not take the lead in proposing social distancing policies to curb the spread of SARS-CoV-2 (Abutaleb et al. 2020). What emerged instead was a patchwork of state and local policies, most of which were issued by governors, that varied in substance, scope, and timing. For example, early on, some governors opted for limited restrictions such as reducing the size of gatherings (State of Oklahoma 2020) or closing restaurants and bars (State of Utah 2020). Other governors added more expansive closures of nonessential businesses (State of Massachusetts 2020)

*Data replication sets are available in Harvard Dataverse at https://doi.org/10.7910/DVN/9PFC7P

Christopher Adolph is Professor of Political Science at the University of Washington with a joint appointment in the Center for Statistics & the Social Sciences (cadolph@uw.edu). He specializes in political methodology, comparative public policy, and comparative political economy, with interests in health policy, fiscal policy, and monetary policy.

Kenya Amano is a PhD student in the Department of Political Science at the University of Washington studying comparative political economy. His research concerns the intersection of economic institutions and politics, with an emphasis on monetary policy, fiscal policy, and regulation. He is also interested in data science tools and methods, including causal influence techniques and text as data in political economy research.

Bree Bang-Jensen is a PhD candidate in the Department of Political Science at the University of Washington. In addition to her research on state responses to COVID-19, she studies factors that lead to deviation in international cooperation and the political effects of economic crisis.

doi:10.1017/S1537592721002036

and stay-at-home orders (State of Washington 2020). By early April, most states had converged on a multipronged approach using many or all of these measures.

The absence of federal leadership on social distancing policy also created a natural experiment in the states. On the one hand, voters' tendency to retrospectively evaluate elected officials' performance created strong incentives for governors to use the best available policy tools to combat the pandemic (Ashworth 2012; de Benedictis-Kessner and Warshaw 2020; Healy and Malhotra 2013). But there are reasons to doubt the strength of retrospective voting at the state level. The decline of state and local journalism and voters' inattention to down-ballot politics provide state elected officials more leeway where the median voter is concerned (Anzia 2011; Rogers 2016; Hopkins 2018). Above all, politics at the state level is becoming increasingly polarized along national party lines (Shor and McCarty 2011), whether due to voters, interest groups, or the politicians themselves. Until recently, partisan differences in state policy were small (Caughey, Xu, and Warshaw 2017; Erikson, Wright, and McIver 1993), but party control at the state level now predicts systematic differences across many policy areas (Adolph, Breunig, and Koski 2020; Grumbach 2018).

The evolution of state-level social distancing policies provides a unique opportunity to examine the role of partisan polarization in shaping elected leaders' response to a new, critical policy domain. In a previous article (Adolph et al. 2021), we examined when governors first adopted five types of social distancing policies at the beginning of the US epidemic. Many differences across the states, especially in reported COVID-19 cases, might plausibly explain why some governors acted sooner than others. However, we found that the effect of reported cases on policy timing was small. Instead, by far the most important factor was the party of the governor, with Republican governors acting two days slower than Democratic governors, all else equal. Thus, our previous work points to the near-immediate politicization of this public health crisis.

State-level social distancing policies were vital for slowing SARS-CoV-2 transmission (Amuedo-Dorantes, Kaushal, and Muchow 2021; Guy et al. 2021; Koo et al. 2020). By early April 2020, national daily case rates and deaths appeared to have plateaued, albeit with marked geographic variation. Though states had not yet "flattened the curve," support for continued social distancing mandates began to waver. President Trump insisted that social distancing policy, not the coronavirus, was preventing economic recovery. Republican governors followed the president's lead, with Gov. Kristi Noem of South Dakota suggesting that residents "put their positive pants on" as an alternative to implementing stricter safety measures and claiming that "about 95 percent of the population is not at risk for serious infection" (Li 2020). Public opposition to social distancing measures increased, and a growing minority of Americans began to view COVID-19 policies as unconstitutional infringements on their personal freedom.

In this article, we examine this second phase of the US COVID-19 epidemic by focusing on governors' decisions to begin easing the social distancing policies that they had enacted in March and early April 2020. By "easing," we

Nancy Fullman, MPH, is a PhD student in the Department of Global Health at the University of Washington. Her work on COVID-19 has included tracking US policy responses and supporting scientific communications on modeling efforts. Her research interests primarily involve impact evaluations of health service delivery and outcomes, health care access and utilization, vaccine coverage and vaccination determinants, and malaria control and elimination interventions.

Beatrice Magistro is a postdoctoral fellow at the University of Toronto and the Schwartz Reisman Institute for Technology and Society. She holds a PhD in political science from the University of Washington. Her research interests cover a broad range of topics in comparative political economy, political behavior, and public opinion, in particular on the attraction of citizens to populist movements.

Grace Reinke is a PhD candidate in the Department of Political Science at the University of Washington. Her dissertation research analyzes the intersections of feminist political theory, American politics, and extractive capitalist regimes using methods informed by social reproduction theory.

Rachel Castellano is a PhD student in the Department of Political Science at the University of Washington. Her research focuses on human trafficking, nonstate actors, and migration.

Megan Erickson is a PhD student in the Department of Political Science at the University of Washington whose research focuses on the dynamics of violence, governance, and social order in the context of political violence and organized crime.

John Wilkerson is Donald R. Matthews Distinguished Professor and chair of the Department of Political Science at the University of Washington. He specializes in legislative politics and computational methods.

mean that a policy was either rescinded or made less restrictive. In particular, we focus on easing that permitted increased activity in indoor public spaces, whether in bars, restaurants, other businesses, or gatherings. Thus, easing might include a decision to end a mandatory stay-at-home order or a policy change allowing restaurants to reopen for indoor dining at 25% capacity. We are interested in better understanding state variation in the timing and extent of easing and the degree to which these differences were driven by public health indicators, partisan politics, or other state characteristics.

Our study period begins on April 16, 2020, when the White House recommended a set of public health indicators as "gating" criteria for states to safely reopen their economies (White House 2020).[1] The next day, President Trump tweeted his support for armed groups protesting social distancing measures in several Democratic-led states (Shear and Mervosh 2020). At the same time, public health experts outside the Trump administration urged governors to maintain social distancing mandates to "flatten the curve" that was only then beginning to peak (Dastmalchi and Kagan 2020). Governors were thus forced to choose between exercising caution based on science and supporting a president who was urging a swift return to "normal" (BBC 2020). Republican governors faced direct pressure to ease from the White House (Miller, Suderman, and Freking 2020). The president ultimately offered governors and state governments a false choice: relaxing social distancing policies too soon risked a resurgence and even greater economic disruption down the road (Correia, Luck, and Verner 2020), and early easing turned out to yield no economic benefit (Chetty et al. 2020). On April 20, 2020, South Carolina allowed nonessential retail businesses to resume indoor services, becoming the first state to ease restrictions on indoor activity (State of South Carolina 2020).[2] By the end of our study period, July 6, 2020, governors of all 50 states had eased at least one social distancing policy to permit greater activity in public indoor spaces. In retrospect, many states eased too quickly. Cases were rising again by mid-June 2020—dramatically in some states—and increases in the number of deaths followed.

Our objective is to examine governors' decisions to begin easing social distancing policies. We define policy easing as the point at which a prior social distancing measure was relaxed to resume or increase indoor activity—an action we consider the clearest signal of each state's decision to change course from its initial COVID-19 restrictions. We assume these initial easing decisions are indicative of broader policy U-turns, signaling a shift in focus among state leaders from slowing the spread of SARS-CoV-2 to reopening their states' economies. Using original data on daily policy changes drawn directly from executive and public health orders, we pinpoint exactly when these U-turns began across five social distancing policies of critical importance: stay-at-home orders and restrictions on gatherings, bars, restaurants, and other businesses (Fullman et al. 2021). Following the approach of Adolph et al. (2021), we use event history models to test a large number of social, economic, and political explanations for these policy U-turns.

We find that public health indicators influenced when governors began to ease, but with greater emphasis on the politically salient (but lagging) indicator of COVID-19 death rates and less emphasis on more epidemiologically salient leading indicators like case and positivity trends. States at the 75th percentile of all three epidemiological indicators eased 14.2 days earlier than states at the 25th percentile, all else equal. We find no evidence that differences in states' economies or the measurable degree of economic disruption caused by the epidemic affected when first easing occurred. Partisan politics played a key role on par with public health indicators: Republican governors in states with more Trump constituents began easing much earlier—13.3 days earlier on average, all else equal.

Our most troubling finding suggests that *who* the virus most affected also mattered for the timing of easing. States with higher proportions of Black residents (those at the 75th percentile) eased 6.7 days earlier on average than states with smaller Black populations (those at the 25th percentile), all else equal. Although our approach cannot directly reveal the motives behind governors' decisions, this finding is consistent with the constitutive role of anti-Black racism in US politics, medicine, and society (Bailey and Moon 2020; Rosenbaum et al. 2021). In the spring 2020 easing phase of the US response, governors in many states may have discounted the epidemic's severity based on who was most affected.

The Pandemic Policy U-Turn in Context

When the first statewide social distancing mandates were issued on March 12, 2020, at least 121 Americans (Centers for Disease Control and Prevention [CDC] 2020a) had died from COVID-19.[3] By April 15, more than 30,000 Americans had died. By then, scientists agreed that the virus was spread via aerosols, as well as by asymptomatic carriers (Furukawa, Brooks, and Sobel 2020), and that some Americans were more at risk for exposure than others. People in densely populated areas accounted for 80% of the deaths through May 2020 (McMinn, Talbot, and Eng 2020). Black Americans were dying at twice the rate as whites, whereas Latinos and Native Americans were 40% more likely to die than whites (APM Research Lab 2020; CDC 2020a; Mackey et al. 2021). Another important development was the epidemic's visible toll on the economy. The nation's unemployment rate jumped from 4.4% to 14.7% from March to April 2020 (Trading Economics 2020). By the third week in March, the S&P 500 had lost one-third of its value and was still down by 15% in mid-April.

Given the stakes and their relative inexperience managing epidemic policy, governors of both parties could have chosen to heed the advice of public health experts. However, new information about the economic costs and unequal health effects of COVID-19 may have pulled Republican and Democratic governors in opposite directions. In March 2020, just 33% of Republicans agreed the virus was a major threat to the health of the US population, compared to 59% of Democrats (Deane, Parker, and Gramlich 2021). Although concern among both Democrats and Republicans grew by May 2020, so did the gap between partisans (43% of Republicans versus 82% of Democrats), which persisted into the summer and fall (Deane, Parker, and Gramlich 2021). At the same time, strong bipartisan support in late March 2020 for social distancing mandates had fractured by early April. At that critical juncture, 81% of Democrats (but only 51% of Republicans) were concerned about easing too quickly, and the gap expanded in May (87% to 47%: Deane, Parker, and Gramlich 2021). Studies during the period of March to July 2020 also demonstrated that Republicans were less likely to practice social distancing, less concerned about becoming seriously ill, and more likely to agree that "the worst is behind us" (Allcott et al. 2020; Barrios and Hochberg 2020).

The revelation that the pandemic disproportionately affected Blacks, Latinos, and Native Americans could also be viewed through a partisan lens. The day after it was first reported that Black Americans were dying at much higher rates than white Americans, Fox News host Brit Hume opined that "the disease turned out not to be quite as dangerous as we thought" (Serwer 2020).

President Trump's push for a quick return to "normal" may have been driven by worries about the suffering stock market and its reelection consequences, while Republican governors came under increasing pressure from small business owners (Blau 2020). On March 24, Texas lieutenant governor Dan Patrick endorsed a laissez-faire approach to social distancing mandates and suggested that senior citizens preferred increased personal risk to the potential economic cost of short-term business closures.

At the same time, the political dynamics that encouraged Republican governors to downplay COVID-19 may have made it easier for Democratic governors to act deliberately. President Trump was as unpopular among Democrats as he was popular among Republicans. Democratic identifiers were more likely to practice social distancing, less likely to think that the worst was "behind us," and more likely to update their views when provided with additional information about the virus (Acharya, Gerring, and Reeves 2020; Druckman et al. 2020).

Most of the policies we study were applied statewide by public health and emergency officials; in other cases, state officials coordinated phases of easing or expansion of mandates across substate units (usually counties). Within the United States, state governments have been the most important units in setting social distancing policy.[4] Governors comprise a set of actors with similar powers who simultaneously confronted an unexpected and unprecedented crisis. Thus, a focus on state-level policy decisions by governors not only provides a unique opportunity to learn about the US pandemic response but also provides an opportunity to learn more about executive policy making at the state level.

Tracking Easing across Five Social Distancing Policies

In March through early April 2020, states eventually implemented fairly similar suites of social distancing policies, albeit with some differences. For instance, some states required the closure of all nonessential businesses, whereas others only closed sectors considered at high risk for virus transmission (e.g., gyms, personal care services, nightclubs; Adolph et al. 2021). Starting on April 20, 2020, states began to ease some of these mandates to allow the resumption of indoor activity in public spaces.

These initial easing decisions were heterogeneous. Easing could entail relaxing capacity limits for public gatherings, bars, or restaurants; reopening indoor service for businesses generally or by sector; replacing mandates with recommendations; or some combination thereof. There was also variation in the pace and order of easing decisions. For instance, New York gradually relaxed its business closures over several months while coordinating a regional approach based on epidemiological indicators. In contrast, Missouri simply removed its 10-person limit on all types of gatherings in a single statewide order (State of Missouri 2020). Whereas most states kept gyms closed longer than other nonessential businesses, Arkansas reopened gyms first (Arkansas Department of Health 2020).

Because states varied in their initial policy decisions and given the absence of common phases of easing across states—or even of common definitions of business sectors—it is difficult to construct a useful single-value index of the degree to which states eased at any given time. Instead, we seek to pinpoint when each state began to relax, either statewide or by county, each of its social distancing policies to resume or increase indoor activity in public spaces, which by April 2020 was increasingly evident as a key risk for SARS-CoV-2 transmission.[5] In particular, we track the U-turn to easing in five policy areas[6]:

Gatherings restrictions: the statewide restriction of gatherings, including formal mandates or executive orders that use language such as "prohibits all mass gatherings" or "constituents must avoid large gatherings," as well as recommendations to limit mass gatherings or events. Many policies imposed specific numeric limits on gatherings that were later relaxed or removed altogether. In our baseline model, we focus on easing that increased the number of people allowed to participate indoors at nonreligious

gatherings either statewide or at least in some counties, or that replaced mandates with recommendations.

Business closures: a statewide mandate to fully close all nonessential businesses or to restrict the onsite operations of any category of business other than restaurants and bars. We consider policies to mandate business closures only if the relevant executive order uses language indicative of a mandate (e.g., "casinos must close" or "operations at fitness centers and entertainment venues must cease"). We consider this policy eased when at least one sector is allowed to resume indoor services onsite to the public, including allowing customers to resume indoor patronage of businesses, at least in some counties.

Stay-at-home orders: a statewide mandate for individuals to "stay at home" or "shelter in place," except to participate in essential activities (which may vary by state). To count as mandates, stay-at-home orders must use corresponding language (e.g., "must stay at home"); otherwise, these policies are regarded as advisory and do not enter our analysis. We consider this policy eased when it changed to a recommendation or narrowed in scope, either by excluding certain counties from the order or by restricting the mandate to people at higher risk for worse outcomes from COVID-19.

Restaurant restrictions: the statewide restriction of restaurants and other venues where food is purchased and consumed on-premises. Classifying a state as restricting restaurants requires a formal restriction on operations (e.g., offsite consumption only or limiting services to only takeaway, delivery, or curbside drop-off). We consider this policy eased when indoor consumption is no longer prohibited, at least in some counties.

Bar restrictions: the statewide restriction of bars, breweries, wineries, tasting rooms, or other venues whose primary function is the sale of alcoholic beverages for onsite consumption.[7] To count as a restriction on bars, there must be a formal restriction on operations (e.g., full closure, offsite consumption only, or limiting services to only takeaway, delivery, or curbside drop-off). We consider this policy eased when indoor consumption is no longer prohibited, at least in some counties.

Figure 1 displays when each state first eased indoor restrictions for each of the five policies examined. By July 6, 2020, every state except for New Jersey began either statewide or substate indoor easing of restaurant restrictions, and all but six states began to reopen bars to indoor consumption, at least in some counties. Similarly, every state had eased restrictions on indoor activity for at least one other business sector, and every state that had issued a mandatory statewide stay-at-home order had ended that order, at least in some counties. All but five states had increased the maximum allowed size of indoor, nonreligious gatherings by the same date. Nevertheless, there were systematic differences across policy areas in the rate at which states began to ease. Business restrictions were eased most quickly, suggesting these closures were the most politically painful. On average, states were slower to begin easing indoor gathering and bar restrictions—appropriately, given the clear risks for heightened spread posed by these activities.[8]

Modeling Governors' Social Distancing Policy Easing Decisions

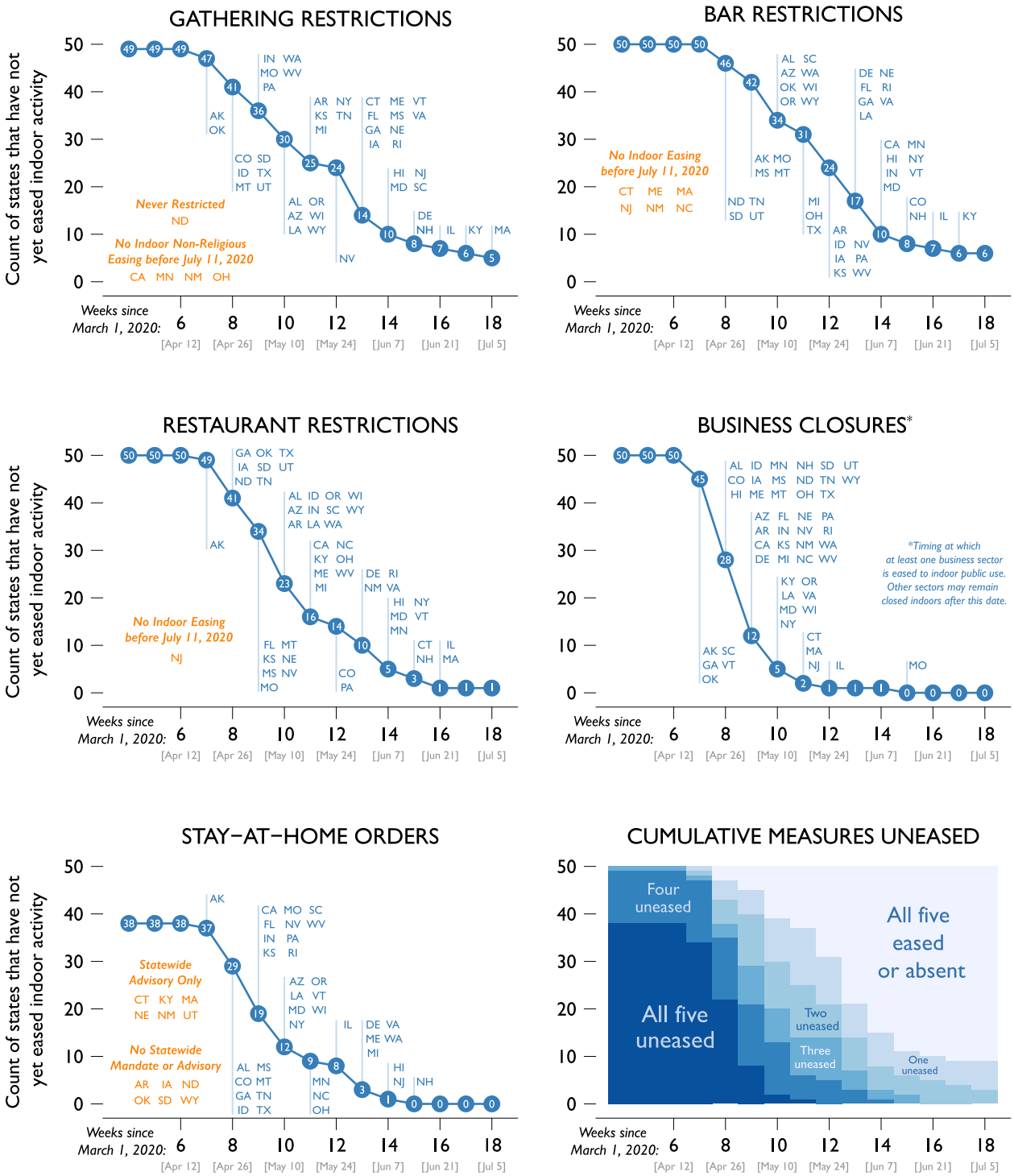
Modeling the factors influencing governors' decisions to ease social distancing measures presents several challenges. First, the COVID-19 pandemic is continuously evolving, with daily developments in scientific research, federal policy, the economy, social behavior, and the course of the pandemic itself. Second, the policy outcome of easing is highly heterogeneous. States adopted differing sets of social distancing policies in March and early April 2020; subsequently, the set of policies that could potentially be eased varied markedly across states. Then, from the middle of April into early July, states chose to ease those policies at varied rates in different ways. Despite differences in timing for specific policies, there were two broad phases: every state adopted at least three of the five policies by mid-April, and every state began to ease all or most of these policies by the middle of July.

To address the first challenge, we employ semiparametric event history models in which the baseline hazard rate flexibly captures nationwide trends, such as the shared tendency of states to maintain or ease social distancing policies in response to new information about the way SARS-CoV-2 spreads, national trends in epidemiological indicators, or new federal policies and announcements, while leaving cross-state variation to be explained by covariates.

Regarding the second challenge, we exploit the clear break between the escalating and easing periods shared by all states, focusing our attention on the latter period. Our key assumption is that the timing of a state's decision to make a U-turn from maintaining a particular social distancing measure to easing that policy is a good proxy for the latent tendency of the state to shift policy from reducing to increasing physical contact among citizens. Combined with daily data that allow us to pinpoint the moment that this U-turn occurred for each policy area, this assumption permits us to make inferences without attempting to arbitrarily quantify the degree to which gradually modified policies remained in effect over this period.

We employ Cox proportional hazard models to predict the timing of the first substantial easing of social distancing policies across US states from April 16 to July 6, 2020.[9] For each state, we identify which of the five social distancing policies shown in Figure 1 had been adopted by April 16. We pool the extant policies within and across states and model the expected number of days until each state first eases each policy area to allow indoor activity in public spaces. We stratify baseline hazards across the extant

Figure 1
The date of first indoor easing for gathering restrictions and recommendations, bar restrictions, restaurant restrictions, business closures, and stay-at-home orders and the cumulative count of uneased measures across the states.



Note: Authors' original data collection (Fullman et al. 2021). Data available at http://covid19statepolicy.org.

policies to account for potentially varying tendencies to ease certain policies faster than others (a strategy known as a Wei-Lin-Weissfeld marginal model; Wei, Lin, and Weissfeld 1989).

States also differed in whether their initial efforts to ease a given policy took place via the statewide relaxation of measures or through coordinated, substate-specific easing. We stratify the baseline hazard along this dichotomy as well, because the first easing of different regions within a state may proceed on a different (presumably faster) pace than blanket statewide policy changes. Finally, we cluster standard errors by state to account for interdependence between states' choices to ease different policy areas.

Using this modeling strategy, we are able to investigate which factors influenced the decision to ease, including epidemiological indicators, economic conditions, demographic characteristics, and partisan politics. We present a baseline model, estimated both for all 50 states and for subsamples of states with Democratic or Republican governors, respectively. We also consider a wide variety of sensitivity analyses employing alternative or additional measures, alternative samples of policies, or alternative measures of the easing outcome.

Our baseline model includes seven covariates in total. Two of these are political variables: whether the governor is a Republican and Trump's vote share in the 2016 presidential election in the state. We expect both to accelerate easing. Elected officials face pressure to win reelection, and Republican governors may have been more responsive to popular pressure from their voter bases to allow business activity to return to normal, especially given Republican voters' lower concern regarding COVID-19. Throughout the crisis, President Trump often downplayed the severity of the pandemic and encouraged a rapid return to normal. Thus, Republican governors may have experienced pressure from both above and below.

Our model includes three epidemiological variables. Two are leading indicators of whether the epidemic was worsening or improving in a state: the two-week trend in the moving average of confirmed COVID-19 cases in the state and the two-week trend in the moving average of positive results from COVID-19 tests reported in the state.[10] Both of these variables were key components of the White House's guidelines for phased easing of social distancing mandates, though states may have been influenced by these indicators whether or not they chose to follow these guidelines.

Death rates were not a component of the White House's guidelines for easing—perhaps because deaths are a lagging indicator of the epidemic—but high death rates are a politically salient factor that may either discourage governors from easing or give them political cover to maintain stringent social distancing measures even as new cases decrease. We therefore include in the model a third epidemiological variable: the (logged, seven-day moving average) rate of deaths from COVID-19 (CSSE 2020).[11]

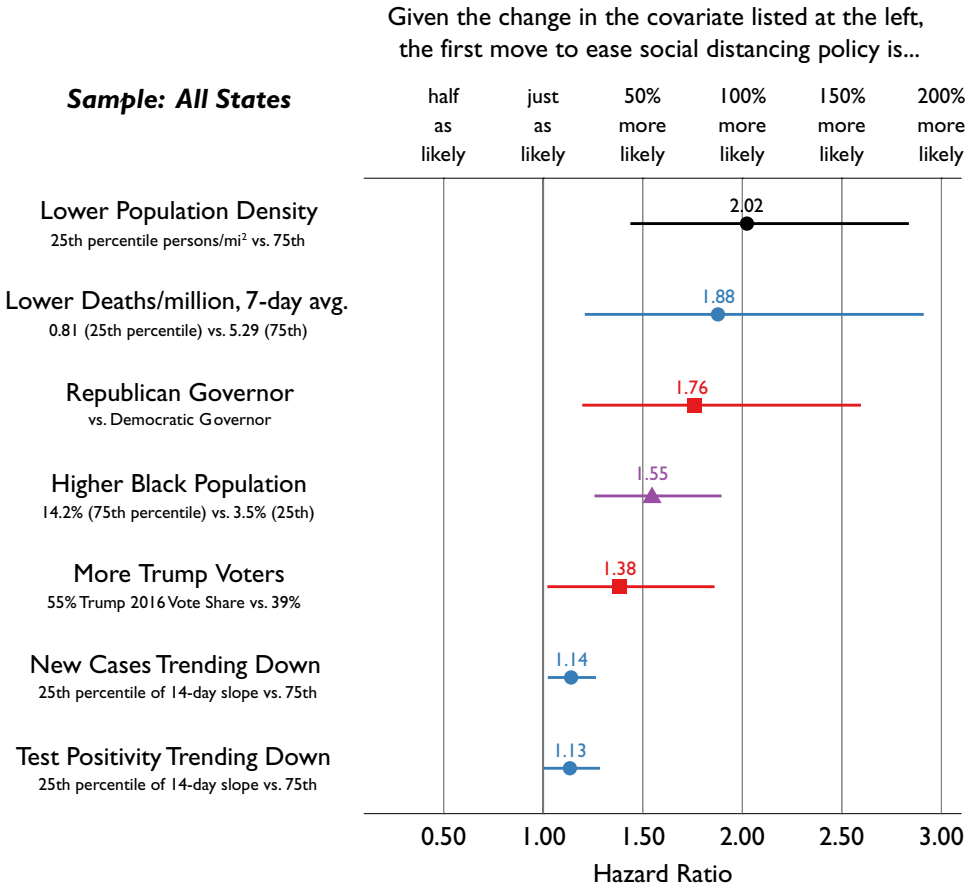
Our baseline model includes two demographic variables: population density (in logged persons per square mile, from the US Census [2017]) and the percentage of the population identifying as Black (US Census 2019a). Because SARS-CoV-2 transmission risk is higher in crowded indoor spaces, governors may consider higher population density as a factor in their decisions to delay easing of social distancing measures.

Finally, Black and Latino communities in the United States have been disproportionately affected by COVID-19 and experience higher death rates than white communities (Ford, Reber, and Reeves 2020; Kolata 2020). As a result of structural racism, these communities experience disparities in economic resources and health care access and quality, as well as higher rates of diabetes, heart disease, and other conditions, all of which increase the risk of severe COVID-19 and worse outcomes (CDC 2020c; Williams and Rucker 2000; Yancy 2020). In particular, Black and Latino Americans are more likely to live in dense areas and multigenerational households (Mikolai, Keenan, and Kulu 2020; Pew Research Center 2011) and to work in "essential" occupations or those where social distancing is not an option (Gould and Wilson 2020; Grooms, Ortega, and Rubalcaba 2020). The result is an environment in which the effects of the public health crisis are not experienced equally across demographic groups. By including these demographic variables in our model, we investigate whether, and in what contexts, elected officials were responsive to the health needs of marginalized constituents. On public health and equity grounds, governors of states with larger Black and Latino populations had more reason to delay easing. But if COVID-19 is in fact "a new gear" in the "old machine" of American racism (Johnson and Martin 2020), the size of a state's nonwhite population—and the share of Black Americans in particular (Citrin and Sears 2013; Zou and Cheryan 2017)—might have no impact or even lead states to ease sooner. This latter possibility seems most likely for Republican governors who can count few minority voters among their supporters.

Results

We present results for the baseline model, representing each estimated relationship in two ways. First, we report hazard ratios, which represent the degree to which each factor increases the likelihood that a state will take its first noteworthy step toward easing a particular social distancing policy on a given day (Figure 2; see Supplemental Materials for tabular results). For continuous covariates, we show the hazard ratio associated with an interquartile shift in the covariate across the sample, as recommended by Harrell (2015). Second, we simulate the average marginal effect of each covariate across the extant policies for

Figure 2
Relative risk of first indoor easing of social distancing measures, by factor.



Note: Estimated hazard ratios obtained from a stratified Cox proportional hazards model of the first indoor easing in each of five categories of social distancing measures by states initially adopting the measures. Social distancing measures include recommendations and restrictions on public gatherings, restrictions on bars, restrictions on restaurants, business closures, and stay-at-home orders; analysis includes all states from April 16 to July 6, 2020. Red squares indicate political covariates; blue circles, epidemiological conditions; purple triangles, the percent Black population; and black circles, other covariates. Horizontal lines are 95% confidence intervals. Solid, shaded, and open symbols indicate significance at the 0.05 level, 0.1 level, and nonsignificance, respectively.

the 50 states (Harden and Kropko 2019), expressed as the number of days earlier we would expect the average state to first ease its social distancing policies if that factor were present in every state (Figure 3). As an illustration, we might ask: If every state had a Republican governor but were otherwise unchanged in the values of its covariates, how much sooner or later would the average state have eased its social distancing measures?

To answer this question, we start with the sample of all extant policies in all 50 states, a set of 237 policies at risk of being eased starting on April 16, 2020. The most important single variable predicting easing was straightforward: states with more dispersed populations were 2.02 times more likely to ease on a given day (95% CI: 1.44 to 2.83 times), and on average a low-density state could be expected to begin easing indoors 11.7 days faster than a high-density state (95% CI: 10.9 to 12.6 days).

Governors also appear to have taken epidemiological conditions in their states into account in two ways. First, higher COVID-19 deaths rates were the second most powerful predictor of delayed U-turns. States with lower death rates over the prior week were 1.88 (95% CI: 1.22 to 2.90) times more likely to ease than states with higher deaths, for an average acceleration of 10.2 days (95% CI: 9.5 to 10.8 days). Although deaths are a lagging indicator, they appear to have either given governors cover to continue social distancing mandates or at least discouraged them from easing these policies. At the same time, the association between easing and trends in test positivity and new cases was significant but small, despite the forward-looking nature of these indicators. States with improving trends in new confirmed cases were just 1.14 times more likely to ease than states where trends were worsening (95% CI: 1.03 to 1.26, or 2.0 days earlier); trends in test

Figure 3
Expected acceleration of first indoor easing of social distancing measures, by factor.

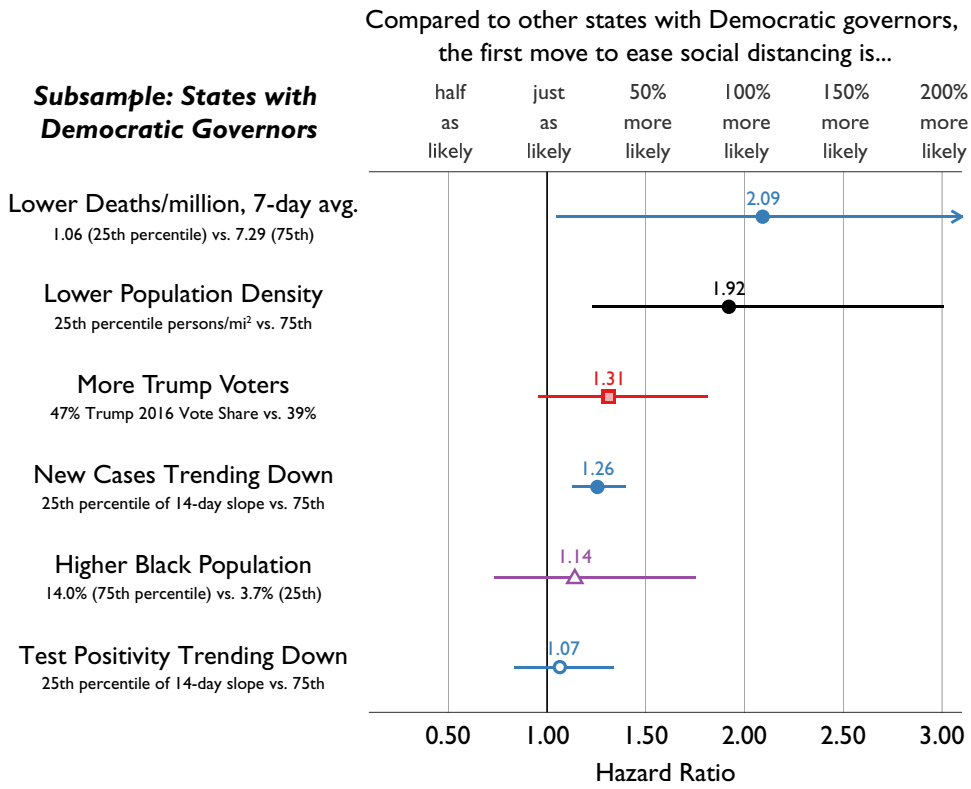
Note: Estimated average marginal effects obtained by post-estimation simulation from a stratified Cox proportional hazards model of the first indoor substantive easing in each of five categories of social distancing measures by states initially adopting the measures. See notes to Figure 2 for further details.

positivity had a similarly small impact. Taking these epidemiological effects together, we find that on average, a state with lower deaths per capita and improving trends in cases and test positivity is expected to ease 14.1 days (95% CI: 13.3 to 15.0 days) earlier than states with high deaths and rising cases and test positivity.

Politics' role in easing rivals that of public health itself. The third most important single predictor of easing was the party of the governor. All else equal, states with Republican governors were 1.76 (95% CI: 1.20 to 2.59) times more likely to begin easing on any given day when compared to their Democratic peers. On average across states, Republican governors could be expected to begin easing social distancing policies 8.9 days earlier (95% CI: 8.3 to 9.4 days) than Democratic governors. Holding all else equal, including the party of the governor, states with more Trump voters were 1.38 (95% CI: 1.03 to 1.85) times more likely to begin easing on a given day, implying easing would begin 5.2 days earlier (95% CI: 4.9 to 5.5 days) in those states. Combined, states with both Republican governors and more Trump voters were expected to begin easing more than two weeks—or 14.5 days (95% CI: 13.5 to 15.5 days)—earlier than blue states with Democratic governors. This combined political effect is on par with the combined effect of the epidemiological indicators. As a result of this acceleration, many Republican states timed the initial indoor easing of social distancing policies to occur when new cases per day were still high, rather than maintaining policies until cases fell to levels that could be better contained through testing, contact tracing, and case-based isolation.

The fourth most powerful predictor of easing is race. By April 2020, it was widely understood that, because of

Figure 4
Comparing the relative risk of first indoor easing of social distancing measures across states with Democratic governors.



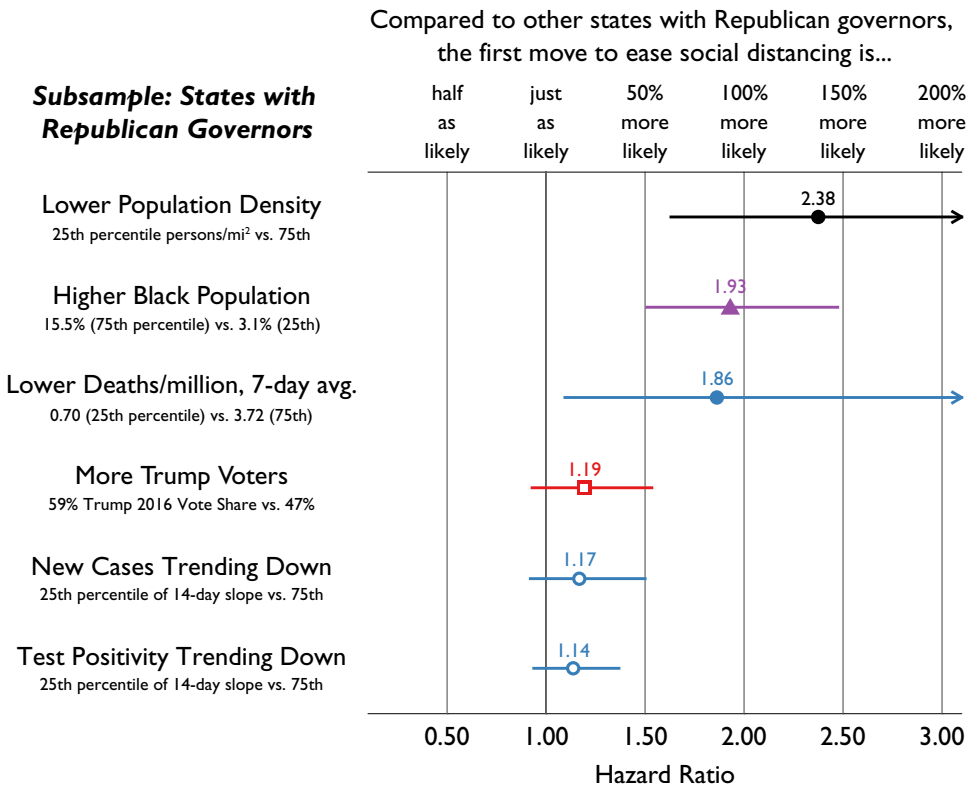
Note: Estimated hazard ratios obtained from a stratified Cox proportional hazards model of the first indoor nonreligious easing from April 16 to July 6. 2020, for Democratic-governed states in each of five categories of social distancing measures by states initially adopting the measures. Arrows indicate confidence intervals that extend beyond the plotted region. See notes to Figure 2 for further details.

increased exposure and social, economic, and health inequalities stemming from systemic racism, Black populations were at higher risk of infection and poor outcomes from COVID-19. Yet all else equal, states with high Black populations were 1.55 times more likely to ease (95% CI: 1.26 to 1.89), compared with states where the proportion of Black residents was low. This hazard ratio suggests that on average, having a larger Black population would lead a state to ease indoors nearly a week earlier (6.7 days, 95% CI: 6.3 to 7.0), all else equal.

To better understand the role of epidemiology and race in governors' easing decisions, we split our sample into two halves: the 24 states with Democratic governors (Figure 4) and the 26 states with Republican governors (Figure 5). We estimate the baseline model again on these subsamples, omitting only governor partisanship from the explanatory variables. Because our samples are now smaller, we are less certain of our results; however, we found one striking difference. In states with a high percentage of Black residents, Republican governors were 1.93 times more likely to ease, all else equal (95% CI: 1.51 to 2.47), equivalent to easing 9.2 days earlier on average (95% CI: 7.6 to 10.9 days). For Democratic governors, the hazard ratio is 1.14, indicating a slightly greater willingness to ease in states with large Black populations, all else equal; however, this result is not statistically significant (95% CI: 0.74 to 1.74) and equates to a 2.1 day acceleration on average. Thus, there is some evidence that Republican governors were more likely to neglect Black constituents' desire to maintain key public health measures[12]; this negligence is especially troubling given a greater vulnerability to COVID-19 within the Black community. At the same time, we cannot discount the possibility that, regardless of partisan electoral motives, all states with sizable Black populations may share at least some tendency to ease more quickly, suggesting a systematic disregard of Black Americans.

The results from our baseline model prove to be highly robust. Returning to the 50-state sample presented in

Figure 5
Comparing the relative risk of first indoor easing of social distancing measures across states with Republican governors.



Note: Estimated hazard ratios obtained from a stratified Cox proportional hazards model of the first indoor easing from April 16 to July 6. 2020, for Republican-governed states in each of five categories of social distancing measures by states initially adopting the measures. Arrows indicate confidence intervals that extend beyond the plotted region. See notes to Figure 2 for further details.

Figure 2, we consider how alternative epidemiological indicators, political variables, demographic controls, economic controls, the diffusion of easing across states, alternative samples, or alternative outcome measures might change our results. Nothing alters the finding that Republican governors ease much earlier than Democrats, and our results on COVID-19 deaths and race prove highly stable as well. We collect all our robustness checks for these key explanatory variables in Figure 6, which allows quick assessment of the variability of results across all versions of the model. We also discuss each category of robustness check in turn.

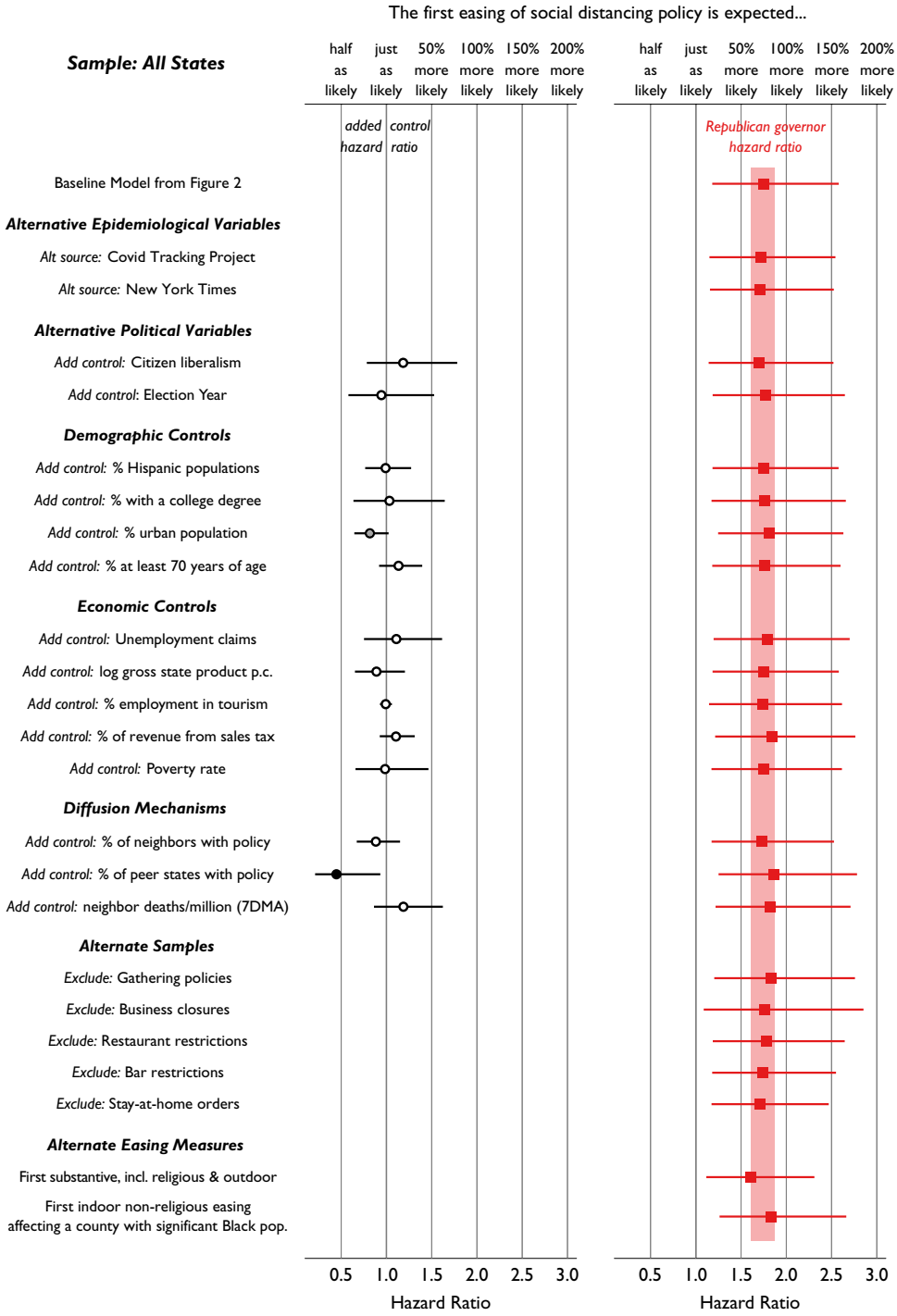
Alternative Epidemiological Variables

Governors had multiple data sources available for assessing and tracking COVID-19 in their states. Our baseline model highlights three of the most salient measures—trends in new confirmed cases of COVID-19, trends in test positivity rates, and the moving average of COVID-19 death rates—of which the last proved most important. Although we cannot be certain which data sources each governor used to make decisions, we took our case and death data from Johns Hopkins University (CSSE 2020), the most prominent data source in the early months of the epidemic. There were two other widely followed sources: the COVID Tracking Project (COVID Tracking Project 2020) and the *New York Times* (*New York Times* 2020). The second row of Figure 6 shows how our key results would change if we instead used daily case and death data from the COVID Tracking Project, and the third row shows our estimates using *New York Times* data. Regardless of which source we use, our results on partisan governors, deaths, and race are virtually unchanged from the baseline model.

Alternative Political Variables

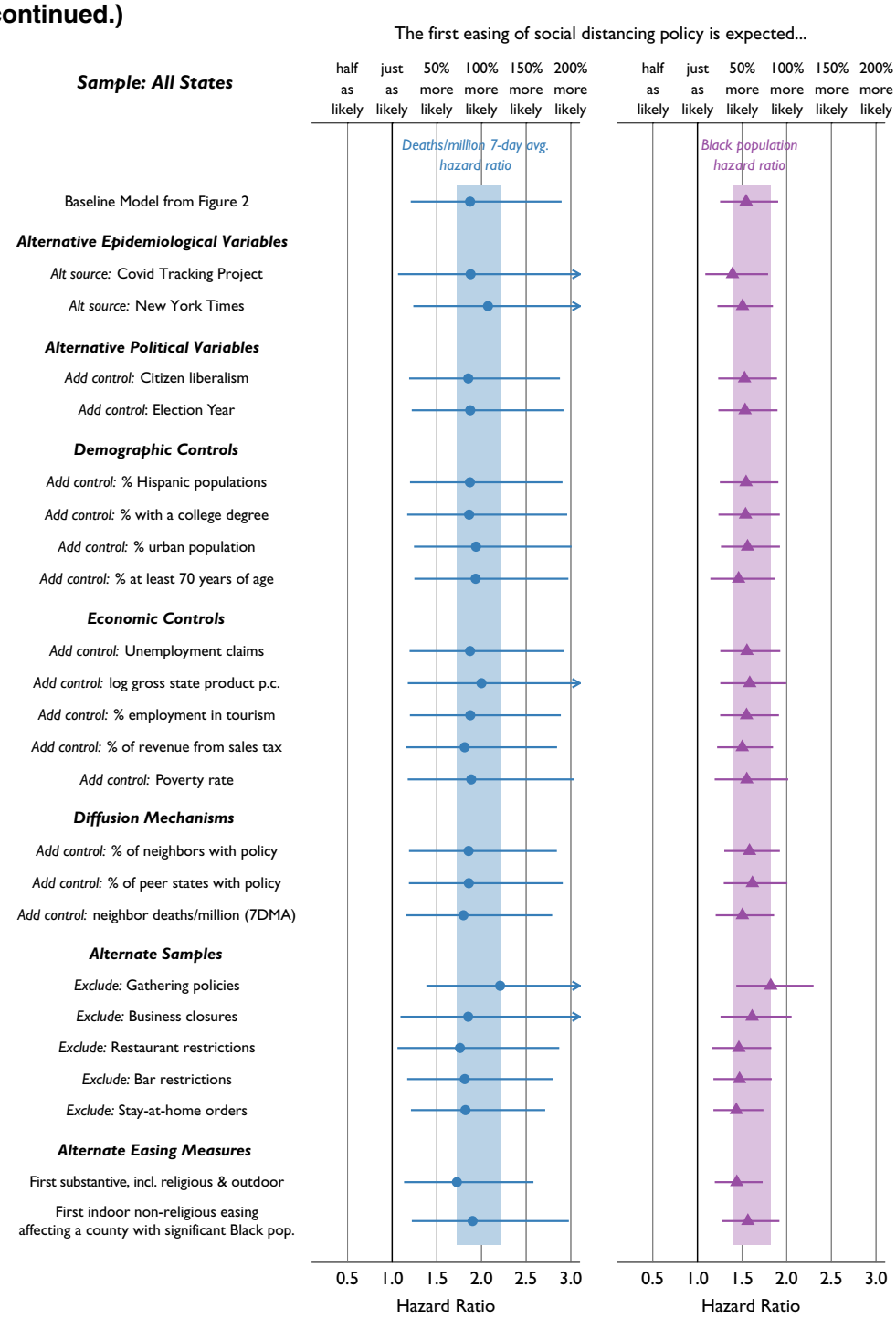
The tendency of many Americans to oppose government regulation is frequently offered as an explanation of their

Figure 6
Robustness of main results to alternative measures, controls, samples, and easing measures.



Note: The four columns of plots show the estimated hazard ratios of initial easing of social distancing measures for four types of variables: newly added controls (black circles), Republican governors (red squares), lower COVID-19 deaths rates (blue circles), and percent Black population (purple triangles). Each row of results represents an alternative Cox proportional hazards model that either substitutes different sources of epidemiological variables, adds listed control variables, removes policy categories from the sample, or employs alternative coding rules for establishing the date of first easing of a given policy. Horizontal lines are 95% confidence intervals; arrows indicate intervals that extend beyond the plotted region. Solid, shaded, and open symbols indicate significance at the 0.05 level, 0.1 level, and nonignificance, respectively. Shaded rectangles indicate the full range of point estimates across all sensitivity checks.

Figure 6 (continued.)



resistance to social distancing mandates. To directly test this possibility, we add a control for the liberalism of citizens in each state (Fording 2018). Controlling for the party of the governor and the percentage of Trump voters in a given state, liberalism has no statistically significant effect on the timing of easing, nor do our other results change. Eleven states had gubernatorial elections in November 2020, and the shadow of those upcoming elections meant some governors faced more immediate consequences for their COVID-19 actions and policy decisions than others—though it is unclear whether that would discourage or encourage faster easing. States with an

upcoming gubernatorial election were no faster or slower to ease than other states, and controlling for elections did not affect our other results.

Demographic Controls

We consider four additional demographic variables. First, we expect that Latinos, who also experienced a disproportionate burden from COVID-19 cases and deaths, might also suffer from similar neglect as Black populations. To test this, we add census data on the percentage of each state's residents who identify as Hispanic (US Census 2019a). Somewhat surprisingly, we find no relationship (and our other results remain unchanged). We suspect this may reflect the overrepresentation of Latinos in occupations and jobs, such as agriculture and meatpacking, that were often deemed essential by states or even the federal government (Mason and Polansek 2020; Swanson, Yaffe-Bellany, and Corkery 2020); this renders the politics of protecting Latinos outside the scope of an analysis of easing such policies. This result clearly deserves further exploration.

Second, we add the percentage of college graduates to the model, using data from the US Census (American Cpmmunities Survey, 2018). College graduates are more likely to have occupations with remote work opportunities and may be better informed about the pandemic (Clements 2020); however, we find no relationship between their presence and the timing of social distancing easing, nor does including this variable affect other results. Third, although our baseline model finds that population density is strongly associated with earlier easing, this measure may not fully capture the effects of urban concentration on easing decisions. When we add to the model the percentage of population living in urban areas using data from the 2010 US Census, we find an additional association with slower easing, but the result is only significant at the 0.1 level. Inclusion of this control does not alter our main findings on parties, epidemiological conditions, or race. Finally, we include the percentage of the population aged 70 or older (Institute for Health Metrics and Evaluation 2017). Because COVID-19 case fatality is strongly related to age (CDC 2020b), governors with large elderly populations could have been motivated to delay easing. Although the hazard ratio for age is greater than 1, it is not statistically significant, and its inclusion has no effect on our other findings.

Economic Controls

A prominent explanation for states' reluctance to maintain social distancing measures is the great economic cost of these policies. For example, states may struggle to pay for the tide of unemployment claims induced by the closure of restaurants, bars, and other businesses; and states that depend more heavily on tourism or sales taxes may be more eager to return to business as usual. Likewise, states with lower per capita gross state product or higher poverty rates may struggle to maintain social distancing mandates for as long as states whose residents have greater personal resources.

When we add measures of each of these economic factors to the baseline model, we find none of them explains the tendency of states to ease more or less quickly, nor does their inclusion alter our main results on parties, epidemiological indicators, or race.[13] We offer two possible explanations for this nonresult. First, the unemployment and paycheck protection provisions of the CARES Act may have worked as intended, diminishing both the sensitivity of the public to the economic consequences of social distancing mandates and the degree to which public sensitivity varied across states. Second, even as a four-week moving average, state-specific administrative difficulties in processing the unprecedented number of unemployment claims filed in this period may render any weekly measure of state-level unemployment inadequate.

Diffusion Mechanisms

In the normal course of policy making, states may borrow ideas from either neighboring states or from state-specific networks of innovative peers. Prior research suggests that the pandemic developed too suddenly for systemic learning to occur across states, given that the initial adoption of social distancing measures took place over a matter of days (Adolph et al. 2021). Policy easing, which took place over a series of weeks, provided more latitude for learning from other states, and we test three diffusion mechanisms in this context. Nevertheless, we find no evidence of policy diffusion across the borders of neighboring states, and states may even be less likely to ease when peer-states across the country they most commonly imitated in the past ease their own policies (Desmarais, Harden, and Boehmke 2015).[14] Finally, contagion in state policy may operate in a more direct way: not through policy imitation but from a concern for the spread of the virus across borders. Thus, we add a measure for the seven-day moving average rate of deaths per million in neighboring states. This control produces a hazard ratio in the expected direction, but the result is not significant, nor does including this covariate alter our main results.

Alternative Samples

Our main model pools (but allows differing baseline hazards for) the five social distancing policy types. To ensure our results are not an artifact of any single policy area, we re-estimate our model omitting each of the five policy areas in turn. The effects of partisan governors, deaths, and race are robust across each of the different samples. If anything, each of these variables appears to

have a stronger impact when we exclude gathering restrictions, which have been among the most persistent social distancing policies across states.

Alternative Easing Measures

We also consider alternative definitions of policy easing—in effect, different "tripwires" for when a state is counted as having first eased a given policy. To this point, all of our models have examined the first efforts to expand activity in nonreligious indoor public spaces. Our measures of policy easing allow us to systematically identify cases in which bars, restaurants, and other businesses were eased to allow greater outdoor activity (such as allowing takeaway or outdoor seating where either had been previously forbidden). Including easing that expands either outdoor activity or greater indoor religious activity does not change our main results.

Our final robustness check addresses the potential for substate easing to create an ecological fallacy. Some states began by easing social distancing mandates indoor in specific counties, whereas other states eased indoor restrictions statewide. If there is a correlation between states with higher Black populations and those states that employed substate easing—which was more common in large, diverse states like California and New York—and if these states eased first in rural, heavily white counties, then it is possible that states with higher Black populations eased earlier, without actually easing restrictions in those areas where most Black residents live. To address this possibility, we construct an alternative tripwire for easing that counts a policy in a state as eased only when a county with a substantial Black population began to allow indoor, nonreligious activity.[15] Using this alternative measure leaves all of our main results, including the effect of race, unchanged from the baseline model, confirming that early indoor easing in states with higher Black populations did affect at least significant portions of those communities.

Although we have accounted for a number of alternative model specifications, our analysis has several important limitations. As noted earlier, we cannot be certain what public health information was available to governors and other state leaders when they were making decisions regarding social distancing policy. In addition, our dataset captures substate policy variation only when mandated by the governor or coordinated at the state level. This allows us to identify first easings that applied only to certain regions of a state, even though our unit of analysis, the decision to begin easing somewhere in the state, remains a state-level decision. Thus, we cannot capture variation in municipal decision making where states devolved decision-making responsibility to local elected officials, who were often important players in the response to COVID-19.

Discussion

In this article we examined governors' decisions to begin easing social distancing policies first imposed in March to early April 2020. All governors faced considerable pressure to reopen their economies, but with cases doubling every few days, reopening too soon could have dire consequences for public health and longer-term economic recovery. Given the rapid politicization of the crisis at the elite level, we were interested in the relative influence of public health and political considerations on governors' easing decisions. We find that both factors were important.

Epidemiological indicators, including declining COVID-19 deaths, cases, and test positivity rates, were predictive of when states began to ease—though by itself, this does not necessarily imply that those conditions had improved sufficiently to warrant the amount of easing that occurred. We tested other potentially confounding factors, such as population density, the size of the state's elderly population, or its economic circumstances. Aside from population density, these variables had little impact on when states began to ease.

Instead, partisan politics, indicated by the governor's party affiliation and the share of Trump voters in the state, played a role on par with the severity of the epidemic itself. All else equal, Republican governors eased a week earlier than Democratic governors. For example, under the leadership of its Republican governor, Georgia was among the first states to ease social distancing policies. The state soon became the focus of national media attention for its surging cases (as much as a 25% increase in a single day; Georgia Department of Public Health 2020). At the end of September 2020, Georgia was still far from bringing cases and deaths down to where they were when the state began to ease (Miller 2020). There were, of course, exceptions. Massachusetts also had a Republican governor but was one of the last to begin easing. It did not experience a substantial surge during the summer, and by fall its new cases and deaths remained low relative to spring 2020 peaks.

The importance of partisan politics is not surprising in light of events since spring 2020. President Trump's dismissal of the public health threat and his lock on Republican voters (Gallup 2020) put Republican elected officials in a bind. They could maintain social distancing measures until their states could more safely reopen, or they could support the president and the Republican base at the risk of prolonging economic disruption (Correia, Luck, and Verner 2020). Most, though not all, Republicans prioritized partisan politics over public health. Other recent studies similarly find a strong link between partisanship and public attitudes and behavior toward COVID-19 and social distancing measures (Druckman et al. 2020; Gadarian, Goodman, and Pepinsky 2021), with Democrats more likely to identify the pandemic as severe and to report higher support

for social distancing compared to Republicans (Allcott et al. 2020; Grossman, Kim, and Thirumurthy 2020; Makridis and Rothwell 2020).

Another troubling finding appears to cut across party lines, at least in part. By the time states were considering easing, it was well known that Black Americans were dying from COVID-19 at higher rates than white Americans (CDC 2021). We might therefore hope that states with higher proportions of Black residents would be slower to ease. In contrast, we find that states led by Republican governors with higher proportions of Black residents eased more, not less, quickly than their peers. We find the same pattern in Democratic-led states, although the effect is weaker and not statistically significant. Given the growing knowledge of these disproportionate effects in our observation period, this finding points to a potential willingness among governors to push for reopening even as it became clear their Black constituents were among those most at risk.

A long-standing literature on racial resentment demonstrates that white state-level elected officials of both major parties systematically pay less attention to Black constituent demands (Butler and Broockman 2011). The United States also has a long history of resistance to social policies perceived to benefit Black Americans (Gilens 2003, 2009; Kinder and Sanders 1996; Miller 2008), including, recently, opposition to the Affordable Care Act (Tesler 2012). In addition, Black Americans are underrepresented across parties in elected offices at both the state and federal levels (Guinier 1995; Rocha et al. 2010).

Given this well-documented history, it is plausible that political leaders—and their white constituents—would be less supportive of costly social distancing measures to the extent that they perceived that other racial groups were bearing the brunt of COVID-19. Indeed, recent survey research finds that racial resentment is associated with lower support for mitigation strategies aimed at containing COVID-19 (Hetherington et al. 2020). There are also reasons to expect this race effect to be stronger in Republican-led states. The contemporary Republican Party has fewer Black supporters to lose, and implicit racial messaging aimed at white voters has been a hallmark of its electoral strategy (Kinder and Kam 2010; Parker and Barreto 2014; Tesler 2016).

Is it possible that governors of states with higher Black populations were easing faster in response to demands from Black communities themselves? This is unlikely, especially given the absence of federal or state support to do so safely. Black Americans are more likely to be employed in service-sector jobs most affected both by social distancing policies and reduced demand from the pandemic itself. However, there is little evidence these communities demanded faster reopening as a solution to this economic problem. Contemporary polling found that, compared to whites, both Black and Latino respondents were *more* supportive of staying the course on social distancing (Rouse 2020; Thomson-DeVeaux and Cox 2020; Williams 2020).

Puzzlingly, the percentage of state residents who identified as Hispanic in the census did not influence when states first eased, even though Latinos are also at higher risk of dying from COVID-19. This non-finding deserves further investigation. Politically, Hispanics are much more likely to identify as Republican than African Americans (about one-third of Hispanics identify as Republicans compared to fewer than 10% of Black Americans). In addition, research on "black exceptionalism" finds that Latinos are less likely to be "othered": they are more likely to be integrated into nearly all aspects of American society than Black Americans (Citrin and Sears 2013; Sears 2015; Zou and Cheryan 2017).

Although President Trump downplayed the threat of COVID-19 from the beginning of the US epidemic (Woodward 2020), there may have been a brief window in March 2020 when it was possible to imagine a more robust federal response and greater support for and coordination across the states. Trump began to engage with, and perhaps even listen to, the public health experts on his Coronavirus Taskforce. But by April 2020, Trump had become increasingly dismissive of public health experts, and his political allies engaged in disinformation campaigns downplaying the seriousness of SARS-CoV-2 (Serwer 2020). Although this attack on science clearly came from the Trump-aligned Right, it likely altered the broader public conversation by successfully raising doubts about the necessity of inconvenient and economically costly preventive measures, especially given that benefits of prevention are harder for the public to perceive the more successful they are. A critical opportunity to curb the rapid spread of SARS-CoV-2, build up states' capacity for testing and contact tracing, and contain the virus was lost, and the sacrifices of millions of Americans were squandered.

This failure is neither unique nor likely to be a one-time event. Partisan polarization and federalism appear to be a dangerous mix for managing epidemics. Whereas most rich countries had already established robust national authority over public health emergencies and managed COVID-19 social distancing policies effectively, the US system leaves these critical decisions in the hands of resource-constrained states that are tempted to wait for a federal savior (Adolph, Greer, and da Fonseca 2012; Greer 2020). Partisan resistance to scientific advice, as well as systematic disregard for the disparate impacts of epidemics on marginalized communities, means federal coordination may arrive too late, do too little, or fail to occur at all. Although some federal systems like Germany managed to coordinate policy successfully, other countries that combined presidential federalism with populist leadership, such as Mexico and Brazil, also failed to coordinate social distancing policies across regions; as in the United States, their failure appears

to be the result of pressure on state executives from populist presidents (Bennouna et al. 2020).

Some leaders seem to have learned and applied costly lessons: in March 2020, the United Kingdom's Boris Johnson eschewed social distancing mandates in favor of a controversial "herd immunity" strategy (Boseley 2020; Scally, Jacobson, and Abbasi 2020). After this approach failed and Johnson himself suffered a severe case of COVID-19, his government shifted course to implement broad social distancing mandates—especially in response to the Alpha variant during the first three months of 2021 (BBC 2021). In April 2021, with the United Kingdom performing better than the rest of Europe in both vaccination rates and the spread of the virus (Apuzzo, Gebrekidian, and Pronczuk 2021), Johnson stood by his reversal on social distancing mandates, insisting, "Of course the vaccination programme has helped, but the bulk of the work in reducing the disease has been done by the lockdown" (Makoni 2021). The relatively centralized powers of the UK prime minister made Johnson's about-face politically feasible. Nevertheless, the example of the United Kingdom suggests another path was possible even in the United States, though the price of early politicization was high and difficult to overcome in a federal system. Once President Trump had mobilized Republican voters to oppose social distancing mandates, the 26 Republican governors who had to make easing decisions faced a difficult coordination problem if they wished to resist Trump's agenda and the threat of being "out-Trumped" by colleagues in South Dakota, Georgia, and Florida.

Even when the current crisis ends, its lessons will remain critical not just for future pandemics but also the even greater challenge of climate change. Like the COVID-19 pandemic, climate change also involves the clash of scientific expertise and partisan aims, the need for coordinated sacrifice across political jurisdictions, and disparate impacts for communities of color (Patnaik et al. 2020). If COVID-19 represents an initial test of the United States' ability to respond to the complex crises of the twenty-first century, the result so far is a warning that partisanship and inequality stand increasingly in the way of collective solutions.

Supplementary Materials

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/S1537592721002036.

Acknowledgement

The authors thank Abraham Flaxman, Marc Hetherington, Ryan Panchadaram, Christopher Sebastian Parker, David Pigott, Thomas Plümper, Richard Snyder, and Sophia Jordán Wallace for their helpful comments and suggestions and are indebted to Carolyn Dapper, Rebecca Walcott, and Christianna Parr for policy coding assistance and Erika Steiskal for graphic design assistance. We gratefully acknowledge support from the Center for Statistics and the Social Sciences at the University of Washington and from the Benificus Foundation. All errors and omissions are the authors' own. State social distancing policy data are available at http://covid19statepolicy.org.

Notes

1 The White House attributed these guidelines to the CDC but had actually rewritten CDC recommendations to set a low bar, thereby encouraging more rapid easing; the CDC later disavowed these guidelines (Dearen and Stobbe 2020).
2 On the same date, Vermont allowed limited indoor construction work (State of Vermont 2020).
3 These first policies included gathering restrictions in eight states: Connecticut, Indiana, Maryland, Michigan, New Mexico, New York, Ohio, and Oregon.
4 Per Dillon's rule, most states expressly define the scope of local government authority.
5 See the Supplemental Materials for further details of our data collection process, including how we trace business restriction levels through the process of substate easing by county.
6 These categories differ somewhat from our previous study, which collapsed bar and restaurant restrictions into a single category and also tracked the closure of schools. We omit schools from this analysis because the summer holidays gave states greater latitude to delay decisions on reopening, making dating those decisions particularly error-prone. We separate bars and restaurants because by May 2020 the additional risks associated with social mixing in bars became clearer, leading to more policy divergence in the treatment of these establishments than earlier in the pandemic (Fisher et al. 2020).
7 The regulation of restaurants that also contain bars or serve alcoholic beverages is captured under "restaurant restrictions" in our coding scheme, provided that less than half of their revenue comes from the sale of alcoholic beverages.
8 Bar restrictions were also the principal area in which a handful of states imposed new restrictions on indoor activity over the summer of 2020; see the Supplemental Materials.
9 The precise end and start dates of our analysis are necessarily somewhat arbitrary, though our results are not sensitive to small changes in these dates. The essential requirement is to bracket the period in which states made the shift to easing policies after their initial adoption in March and April 2020.
10 We measure state-level trends in cases using the slope coefficient from a bivariate linear regression of cases

against time for the prior 14 days, using data from the Center for Systems Science and Engineering, Johns Hopkins University (2020), and we measure state-level trends in tests using the slope coefficient from a linear regression of test positivity on time for the prior 14 days, using data from the COVID Tracking Project (2020).

11 We also add a dummy variable for states where deaths were exactly zero for the previous seven days. Inclusion of this dummy variable allows us to avoid issues surrounding logging zeros by exactly estimating the effect of a zero count. The usual alternative of "adding a small number" to a zero count can produce varied results depending on the (arbitrary) amount added. The use of this dummy variable does not affect our results.

12 Surveys from the Pew Research Center found that, throughout the observation period, Black Americans showed on average more concern about the risks of the disease and a greater desire to maintain social distancing policies in the name of public safety (Funk and Tyson 2021).

13 We measure jobless claims using the four-week moving average of the percentage of the labor force currently claiming unemployment benefits (US Department of Labor 2020). We measure tourism dependence using the percentage of state employment dependent on tourism (Burnett 2017) and sales tax dependence as the percentage of state revenue generated by general sales taxes (Urban-Brookings Tax Policy Center 2017). We take data on gross state product per capita from the US Bureau of Economic Analysis (2020), and data on poverty rates from the US Census (2019b).

14 This is consistent with the contemporaneous adoption of state mask mandates, where there is also no evidence that adoption by neighbors or peers made states more likely to adopt policies (Adolph et al. 2021).

15 We define counties with substantial Black populations as those above the average percentage of Black population for the state *and* with a total population at least as large as the average county in the state. Tracking the average level of business restrictions in these two groups of counties suggests the timing of easing was mostly similar; see the Supplemental Materials.

References

Abutaleb, Yasmeen, Ashley Parker, Josh Dawsey, and Philip Rucker. 2020. "The Inside Story of How Trump's Denial, Mismanagement and Magical Thinking Led to the Pandemic's Dark Winter." *Washington Post*, December 19. https://www.washingtonpost.com/graphics/2020/politics/trump-covid-pandemic-dark-winter/?itid=hp-top-table-main.

Acharya, Arnab, John Gerring, and Aaron Reeves. 2020. "Is Health Politically Irrelevant? Experimental Evidence during a Global Pandemic." *BMJ Global Health* 5: e004222.

Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, and John Wilkerson. 2021. "Pandemic Politics: Timing State-Level Social Distancing Responses to COVID-19." *Journal of Health Politics, Policy and Law* 46 (2): 211–32.

Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, and John Wilkerson. 2021. "Governor Partisanship Explains the Adoption of Statewide Mask Mandates in Response to COVID-19." *State Politics & Policy Quarterly*. https://doi.org/10.1017/spq.2021.22

Adolph, Christopher, Christian Breunig, and Chris Koski. 2020. "The Political Economy of Budget Trade-Offs." *Journal of Public Policy* 40 (1): 25–50.

Adolph, Christopher, Scott L. Greer, and Elize Massard da Fonseca. 2012. "Allocation of Authority in European Health Policy." *Social Science and Medicine* 75 (9): 1595–1603.

Allcott, Hunt, Levi Boxell, Jacob Conway, Matthew Gentzkow, Michael Thaler, and David Yange. 2020. "Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic." *Journal of Public Economics* 191. https://doi.org/10.1016/j.jpubeco.2020.104254.

American Communities Survey, US Census. 2018. "Population Distribution by Age." Data File. https://www.census.gov/topics/population/age-and-sex/data/tables.html.

Amuedo-Dorantes, Catalina, Neeraj Kaushal, and Ashley N. Muchow. 2021. "Timing of Social Distancing Policies and COVID-19 Mortality: County-Level Evidence from the US." *Journal of Population Economics*. doi: 10.1007/s00148-021-00845-2.

Anzia, Sarah F. 2011. "Election Timing and the Electoral Influence of Interest Groups." *Journal of Politics* 73 (2): 412–27.

APM Research Lab. 2020. "The Color of Coronavirus: COVID-19 Deaths by Race and Ethnicity in the U.S." https://www.apmresearchlab.org/covid/deaths-by-race.

Apuzzo, Matt, Selam Gebrekidian, and Monika Pronczuk. 2021. "Where Europe Went Wrong in Its Vaccine Rollout, and Why." *New York Times*, March 20. https://www.nytimes.com/2021/03/20/world/europe/europe-vaccine-rollout-astrazeneca.html.

Arkansas Department of Health. 2020. "Directive." Directive for Gym, Fitness Center, Athletic Club and Weight Room Reopening. May 4. Archived at http://covid19statepolicy.org as Policy Source Arkansas0014.

Ashworth, Scott. 2012. "Electoral Accountability: Recent Theoretical and Empirical Work." *Annual Review of Political Science* 15 (1): 183–201.

Bailey, Zinzi D., and J. Robin Moon. 2020. "Racism and the Political Economy of COVID 19: Will We Continue to Resurrect the Past?" *Journal of Health Politics, Policy and Law* 45 (6): 937–50.

Barrios, John M., and Yael Hochberg. 2020. "Risk Perception through the Lens of Politics in the Time of the COVID-19 Pandemic." NBER Working Paper (27008). https://www.nber.org/papers/w27008.

BBC. 2020. "Coronavirus: President Trump Defends Tweets against US States' Lockdowns." April 18. https://www.bbc.com/news/world-us-canada-52330531.

BBC. 2021. "Covid: Boris Johnson Set to Announce New England Lockdown." January 4. https://www.bbc.com/news/uk-55534999.

Bennouna, Cyril, Agustina Giraudy, Eduardo Moncada, Eva Rios, Richard Snyder, and Paul Testa. 2020. "Policy Coordination in Presidential Federations during the Pandemic: Explaining Subnational Responses to COVID-19 in Brazil, Mexico, and the United States." *Unpublished manuscript*, accessed October 1, 2020.

Blau, Max. 2020. "One Governor's Actions Highlight the Strengths—and Shortcomings—of State-Led Interventions." Pew Charitable Trusts, March 27. https://www.pewtrusts.org/en/research-and analysis/blogs/stateline/2020/03/27/onegovernors-actions-highlight-the-strengths-and-shortcomings-of-state-ledinterventions.

Boseley, Sarah. 2020. "Herd Immunity: Will the UK's Coronavirus Strategy Work?" *The Guardian*, March 13. https://www.theguardian.com/world/2020/mar/13/herd-immunitywill-the-uks-coronavirus-strategy-work.

Burnett, Jennifer. 2017. "Tourism Generates Billions in Tax Revenue for States." Council for State Governments, August 29. https://knowledgecenter.csg.org/kc/content/tourismgenerates-billions-tax-revenue-states.

Butler, Daniel M., and David E. Broockman. 2011. "Do Politicians Racially Discriminate against Constituents? A Field Experiment on State Legislators." *American Journal of Political Science* 55 (3): 463–77.

Caughey, Devin, Yiqing Xu, and Christopher Warshaw. 2017. "Incremental Democracy: The Policy Effects of Partisan Control of State Government." *Journal of Politics* 79 (4): 1342–58.

Center for Systems Science and Engineering, Johns Hopkins University. 2020. 2019 Novel Coronavirus COVID-19 (2019-nCoV) Data Repository. https://github.com/CSSEGISandData/COVID-19.

Centers for Disease Control and Prevention (CDC). 2020a. "Demographic Trends of COVID-19 Cases and Deaths in the US Reported to CDC." https://covid.cdc.gov/covid-datatracker/#demographics.

Centers for Disease Control and Prevention (CDC). 2020b. "Older Adults and COVID-19." https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/olderadults.html.

Centers for Disease Control and Prevention (CDC). 2020c. "People with Certain Medical Conditions." https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html.

Centers for Disease Control and Prevention (CDC). 2021. "Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity." https://www.cdc.gov/coronavirus/2019-ncov/coviddata/investigations discovery/hospitalization-death-by-raceethnicity.html.

Chetty, Raj, John N. Friedman, Nathaniel Hendren, Michael Stepner, Camille Baker, Harvey Barnhard, Matthew Bell, *et al.* 2020. "The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data." NBER Working Paper (27431). http://www.nber.org/papers/w27431.

Citrin, Jack, and David O. Sears. 2013. *The Politics of Multiculturalism and the Crisis of American Identity*. Cambridge: Cambridge University Press.

Clements, John M. 2020. "Knowledge and Behaviors toward COVID-19 among US Residents during the Early Days of the Pandemic: Cross-Sectional Online Questionnaire." *JMIR Public Health and Surveillance* 6 (2): e19161.

Correia, Sergio, Stephan Luck, and Emil Verner. 2020. "Pandemics Depress the Economy, Public Health Interventions Do Not: Evidence from the 1918 Flu." *SSRN*. https://ssrn.com/abstract=3561560.

COVID Tracking Project. 2020. "States Current and Historical Data." https://covidtracking.com/data/api.

Dastmalchi, Nedda, and Heather J. Kagan. 2020. "Flattening the Coronavirus Curve: It's Happening, but it's Not Over Yet." *ABC News*, April 15. https://abcnews.go.com/Health/flattening-coronavirus-curve-happening/story?id=70119118.

Deane, Claudia, Kim Parker, and John Gramlich. 2021. "A Year of U.S. Public Opinion on the Coronavirus Pandemic." Pew Research Center, March 5. https://www.pewresearch.org/2021/03/05/a-year-of-u-s-public-opinion-on-the-coronavirus-pandemic/.

Dearen, Jason, and Mike Stobbe. 2020. "Trump Administration Buries Detailed CDC Advice on Reopening." *AP*, May 6. https://apnews.com/article/7a00d5fba3249e573d2ead4bd323a4d4.

de Benedictis-Kessner, Justin, and Christopher Warshaw. 2020. "Accountability for the Local Economy at All Levels of Government in the United States Elections." *American Political Science Review* 114 (3): 660–76.

Desmarais, Bruce, Jeffrey J. Harden, and Frederick J. Boehmke. 2015. "Persistent Policy Pathways: Inferring Diffusion Networks in the American States." *American Political Science Review* 109 (2): 392–406.

Druckman, James N., Samara Klar, Yanna Krupnikov, Matthew Levendusky, and John Barry Ryan. 2020. "Affective Polarization, Local Contexts and Public Opinion in America." *Nature Human Behavior* 5: 28–38.

Erikson, Robert S., Gerald C. Wright, and John P. McIver. 1993. *Statehouse Democracy: Public Opinion and Policy in the American States*. Cambridge: Cambridge University Press.

Fisher, Kiva A., Mark W. Tenforde, *et al.* 2020. "Community and Close Contact Exposures Associated with COVID-19 among Symptomatic Adults ≥18 Years in 11 Outpatient Health Care Facilities—United States, July 2020." *MMWR Morbidity and Mortality Weekly Report* (69): 1258–64.

Ford, Tiffany N., Sarah Reber, and Richard V. Reeves. 2020. "Race Gaps in COVID-19 Deaths Are Even Bigger than They Appear." Brookings [blog], June 16. https://www.brookings.edu/blog/up-front/2020/06/16/race-gaps-in-covid-19-deathsare-even-bigger-than-they-appear/.

Fording, Richard C. 2018. "Updated Measures of Citizen and Government Ideology." https://rcfording.com/state-ideology-data/.

Fullman, Nancy, Bree Bang-Jensen, Grace Reinke, Beatrice Magistro, Rachel Castellano, Megan Erickson, Rebecca Walcott, Carolyn Dapper, Kenya Amano, John Wilkerson, and Christopher Adolph. 2021. "State-Level Social Distancing Policies in Response to COVID-19 in the US." Version 1.124, April 7, 2021. http://www.covid19statepolicy.org/.

Funk, Cary, and Alec Tyson. 2021. "Growing Share of Americans Say They Plan to Get a COVID-19 Vaccine—or Already Have." Pew Research Center, March 5. https://www.pewresearch.org/science/2021/03/05/growing-share-of-americans-saythey-plan-to-get-a-covid-19-vaccine--or-already-have/.

Furukawa, Nathan W., John T. Brooks, and Jeremy Sobel. 2020. "Evidence Supporting Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 while Presymptomatic or Asymptomatic." *Emerging Infectious Diseases* 26 (7). https://doi.org/10.3201/eid2607.201595.

Gadarian, Shana Kushner, Sara Wallace Goodman, and Thomas B. Pepinsky. 2021. "Partisanship, Health Behavior, and Policy Attitudes in the Early Stages of the COVID-19 Pandemic." *PLoS ONE*. https://doi.org/10.1371/journal.pone.0249596.

Gallup. 2020. "Presidential Approval Ratings–Donald Trump." https://news.gallup.com/poll/203198/presidential-approval-ratings-donald-trump.aspx.

Georgia Department of Public Health. 2020. "County Indicator Report." https://countyindicatororeport.s3.amazonaws.com/county_indicator_report+9-21-2020.html#cases.

Gilens, Martin. 2003. "How the Poor Became Black: The Racialization of American Poverty in the Mass Media." in *Race and the Politics of Welfare Reform*, ed. Sanford F. Schram, Joe Soss, and Richard C. Fording, 101–30. Ann Arbor: University of Michigan Press.

Gilens, Martin. 2009. *Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy*. Chicago: University of Chicago Press.

Gould, Elise, and Valerie Wilson. 2020. "Black Workers Face Two of the Most Lethal Preexisting Conditions for Coronavirus—Racism and Economic Inequality." Economic Policy Institute, June 1. https://www.epi.org/publication/black-workers-covid.

Greer, Scott L. 2020. "Debacle: Trump's Response to the COVID-19 Emergency." In *Four Years of Trump: The US and the World*, ed. Paolo Magri, and Mario del Pero, 88–111. Milan: Istituto per gli Studi di Politica Internazionale.

Grooms, Jevay, Alberto Ortega, and Joaquin Alfredo-Angel Rubalcaba. 2020. "The COVID-19 Public Health and Economic Crises Leave Vulnerable Populations Exposed." *Brookings* [blog], August 13. https://www.brookings.edu/blog/up-front/2020/08/13/the-covid-19public-health-and-economic-crises-leave-vulnerable-populations-exposed/.

Grossman, Guy, Soojong Kim, and Jonah M. Rexerand Harsha Thirumurthy. 2020. "Political Partisanship Influences Behavioral Responses to Governors' Recommendations for COVID-19 Prevention in the United States." *PNAS* 117 (39): 24144–53.

Grumbach, Jacob M. 2018. "From Backwaters to Major Policymakers: Policy Polarization in the States, 1970–2014." *Perspectives on Politics* 16 (2): 416–35.

Guinier, Lani. 1995. "The Representation of Minority Interests." In *Classifying by Race*, ed. Paul E. Peterson, 21–49. Princeton: Princeton University Press.

Guy, Gery P. Jr., Florence Lee, Gregory Sunshine, Russell McCord, Mara Howard-Williams, Lyudmyla Kompaniyets, Christopher Dunphy, *et al.* 2021. "Association of State-Issued Mask Mandates and Allowing On-Premises Restaurant Dining with County-Level COVID-19 Case and Death Growth Rates—United States, March 1–December 31, 2020." *MMWR Morbidity and Mortality Weekly Report* 70 (10): 350–54.

Harden, Jeffrey J., and Jonathan Kropko. 2019. "Simulating Duration Data for the Cox Model." *Political Science Research and Methods* 7 (4): 921–28.

Harrell Jr., Frank E. 2015. *Regression Modeling Strategies: With Applications to Linear Models, Logistic and Ordinal Regression, and Survival Analysis*. 2nd ed. New York: Springer.

Healy, Andrew, and Neil Malhotra. 2013. "Retrospective Voting Reconsidered." *Annual Review of Political Science* 16 (1): 285–306.
Hetherington, Marc J., Leah Christiani, Pamela Conover, Michael MacKuen, Graeme Robertson, and Emily Wager. 2020. "University of North Carolina–Chapel Hill Covid Survey, Waves 1 and 2." Unpublished dataset.
Hopkins, Daniel J. 2018. *The Increasingly United States: How and Why American Political Behavior Nationalized*. Chicago: University of Chicago Press.
Institute for Health Metrics and Evaluation. 2017. "Global Burden of Disease Study 2017 Population Estimates 1950–2017." http://ghdx.healthdata.org/record/ihmedata/gbd-2017-population-estimates-1950-2017.
Johnson, Akilah, and Nina Martin. 2020. "How COVID-19 Hollowed out a Generation of Young Black Men." *ProPublica*, December 22. https://www.propublica.org/article/how-covid-19-hollowed-out-a-generation-of-young-black-men.
Kinder, Donald R., and Cindy D. Kam. 2010. *Us against Them: Ethnocentric Foundations of American Opinion*. Chicago: The University of Chicago Press.
Kinder, Donald R., and Lynn M. Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
Kolata, Gina. 2020. "Social Inequities Explain Racial Gaps in Pandemic, Studies Find." *New York Times*, December 9. https://www.nytimes.com/2020/12/09/health/coronavirusblack-hispanic.html.
Koo, Joel R., Alex R. Cook, Minah Park, Yinxioahe Sun, Haoyang Sun, Jue Tao Lim, *et al.* 2020. "Interventions to Mitigate Early Spread of SARS-CoV-2 in Singapore: A Modelling Study." *Lancet: Infectious Diseases* 20 (6): 678–88.
Li, David K. 2020. "Gov. Kristi Noem Asks South Dakotans to Put on 'Positive Pants' to Fight Coronavirus." *NBC News*, August 14. https://www.nbcnews.com/news/us-news/gov-kristinoem-asks-south-dakotans-put-positive-pants-fight-n1236747.
Mackeyetal, Katherine *et al.* 2021. "Racial and Ethnic Disparities in COVID-19–Related Infections, Hospitalizations, and Deaths: A Systematic Review." *Annals of Internal Medicine* 174 (3): 362–73.
Makoni, Abbianca. 2021. "Lockdown, Not Vaccines, Responsible for Fall in Covid-19 Cases, Says Boris Johnson." *Evening Standard*, April 13. https://www.standard.co.uk/news/uk/lockdown-covid-19-cases-pandemic-boris-johnson-b929418.html.
Makridis, Christos, and Jonathan T. Rothwell. 2020. "The Real Cost of Political Polarization: Evidence from the COVID-19 Pandemic." *SSRN*. https://ssrn.com/abstract=3638373.
Mason, Jess, and Tom Polansek. 2020. "Trump Orders U.S. Meat-Processing Plants to Stay Open despite Coronavirus Fears." *Reuters*, April 28. https://www.reuters.com/article/ushealth-coronavirus-trump-liability/trump-orders-u-s-meat-processing-plants-tostay-open-despite-coronavirus-fears-idUSKCN22A2OB.
McMinn, Sean, Ruth Talbot, and Jess Eng. 2020. "Deaths: Small Cities and Towns Bear a Growing Share." *NPR*, September 22. https://www.npr.org/sections/healthshots/2020/09/22/914578634/americas-200-000-covid-19-deaths-small-cities-andtowns-bear-a-growing-share.
Mikolai, Julia, Katherine Keenan, and Hill Kulu. 2020. "Intersecting Household Level Health and Socio-Economic Vulnerabilities and the COVID-19 Crisis: An Analysis from the UK." *SSM-Population Health* 12: 100628.
Miller, Andy. 2020. "Georgia Surpasses 200,000 COVID-19 Cases, Hot Spots Remain." *Georgia Public Broadcasting*, August 6. https://www.gpb.org/news/2020/08/06/georgiasurpasses-200000-covid-19-cases-hot-spots-remain.
Miller, Lisa L. 2008. *The Perils of Federalism: Race, Poverty, and the Politics of Crime Control*. Oxford: Oxford University Press.
Miller, Zeke, Alan Suderman, and Kevin Freking. 2020. "Trump Gives Governors 3-Phase Plan to Reopen Economy." *AP*, April 16. https://apnews.com/article/420a38ec14101eab70e07be367ee6422.
New York Times. 2020. "Coronavirus (Covid-19) Data in the United States." https://github.com/nytimes/covid-19-data.
Parker, Christopher S., and Matt A. Barreto. 2014. *Change They Can't Believe in: The Tea Party and Reactionary Politics in America*. Princeton: Princeton University Press.
Patnaik, Aneesh, Jiahn Son, Alice Feng, and Crystal Ade. 2020. "Racial Disparities and Climate Change." *PSCI Princeton*, August 15. https://psci.princeton.edu/tips/2020/8/15/racial-disparities-and-climate-change.
Pew Research Center. 2011. "Demographics of Multi-Generational Households." https://www.pewsocialtrends.org/2011/10/03/chapter-3-demographics-of-multigenerational-households/.
Rocha, Rene R., Caroline J. Tolbert, Daniel C. Bowen, and Christopher J. Clark. 2010. "Race and Turnout: Does Descriptive Representation in State Legislatures Increase Minority Voting?" *Political Research Quarterly* 63 (4): 890–907.
Rogers, Steven. 2016. "National Forces in State Legislative Elections." *Annals of the American Academy of Political and Social Science* 667 (1): 207–25.
Rosenbaum, Sara, Morgan Handley, Rebecca Morris, and Maria Casoni. 2021. "How the Trump Administration's Pandemic Health Care Response

Failed Racial Health Equity: Case Studies of Structural Racism and a Call for Equity Mindfulness in Federal Health Policymaking." *Journal of Health Politics, Policy and Law* 19: 9155963. doi: 10.1215/03616878-9155963.

Rouse, Stella M. 2020. "New Data Finds Black and Hispanic Americans More Likely to Take Precautions against Coronavirus." *Washington Post*, August 10. https://www.washingtonpost.com/politics/2020/08/10/new-data-finds-black-hispanicamericans-more-likely-take-precautions-against-coronavirus/.

Scally, Gabriel, Bobbie Jacobson, and Kamran Abbasi. 2020. "The UK's Public Health Response to Covid-19." *British Medical Journal* 369: m1932.

Sears, David O. 2015. "The American Color Line and Black Exceptionalism." In *Social Psychology and Politics*, ed. Joseph P. Forgas, Klaus Fiedler, and William D. Crano, 321–36. New York: Psychology Press.

Serwer, Adam. 2020. "The Coronavirus Was an Emergency until Trump Found Out Who Was Dying." *The Atlantic*, May 8. https://www.theatlantic.com/ideas/archive/2020/05/americas-racial-contract-showing/611389/.

Shear, Michael D., and Sarah Mervosh. 2020. "Trump Encourages Protest against Governors Who Have Imposed Virus Restrictions." *New York Times*, April 17. https://www.nytimes.com/2020/04/17/us/politics/trump-coronavirus-governors.html.

Shor, Boris, and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *American Political Science Review* 103 (3): 530–51.

State of Massachusetts. 2020. "Order Assuring Continued Operation of Essential Services in the Commonwealth, Closing Certain Workplaces, and Prohibiting Gatherings of More than 10 People." Order No. 13, March 23. Archived at http://covid19statepolicy.org as Policy Source Massachusetts0008.

State of Missouri. 2020. "Guidance." Show Me Strong Recovery Plan—Guidance, June 23. Archived at http://covid19statepolicy.org as Policy Source Missouri0013.

State of Oklahoma. 2020. "Executive Order." Fourth Amended Executive Order 202007, March 24. Archived at http://covid19statepolicy.org as Policy Source Oklahoma0009.

State of South Carolina. 2020. "Executive Order." 2020-28, April 20. Archived at http://covid19statepolicy.org as Policy Source SouthCarolina0011.

State of Utah. 2020. "Public Health Order." State Public Health Order, March 17. Archived at http://covid19statepolicy.org as Policy Source Utah0005.

State of Vermont. 2020. "Executive Order." Addendum 10 to Executive Order 01-20, April 20. Archived at http://covid19statepolicy.org as Policy Source Vermont0010.

State of Washington. 2020. "Proclamation." Proclamation Stay at Home Stay Healthy 20-25 by the Governor Amending Proclamation 20-05, March 23. Archived at http://covid19statepolicy.org as Policy Source Washington0009.

Swanson, Ana, David Yaffe-Bellany, and Michael Corkery. 2020. "Pork Chops vs. People: Battling Coronavirus in an Iowa Meat Plant." *New York Times*, May 10. https://www.nytimes.com/2020/05/10/business/economy/coronavirus-tyson-plant-iowa.html.

Tesler, Michael. 2012. "The Spillover of Racialization into Health Care: How President Obama Polarized Public Opinion by Racial Attitudes and Race." *American Journal of Political Science* 56 (3): 690–704.

Tesler, Michael. 2016. *Post-Racial or Most-Racial? Race and Politics in the Obama Era*. Chicago: University of Chicago Press.

Thomson-DeVeaux, Amelia, and Daniel Cox. 2020. "Many White Americans Are Ready to Reopen the Economy. Black Americans Aren't." FiveThirtyEight, June 16. https://fivethirtyeight.com/features/black-americans-were-hit-hard-by-stateshutdowns-but-are-worried-about-reopening-too/.

Trading Economics. 2020. "United States Unemployment Rate." https://tradingeconomics.com/united-states/unemployment-rate.

Urban-Brookings Tax Policy Center. 2017. "State and Local General Revenue, Percentage Distribution, FY 2017." https://www.taxpolicycenter.org/statistics/stateand-local-general-revenue-percentage-distribution.

US Bureau of Economic Analysis. 2020. "Gross State Product." https://www.bea.gov/data/gdp/gdp-state.

US Census. 2010. "Urban Percentage of the Population for States, Historical." https://www.icip.iastate.edu/tables/population/urban-pct-counties.

US Census. 2017. "Population Density." https://www.census.gov/data/tables/time-series/dec/density-data-text.html.

US Census. 2019a. "Current Population Survey, 2018." https://census.gov/cps/data/cpstablecreator.html.

US Census. 2019b. "Income and Poverty in the United States: 2018." https://www.census.gov/topics/income-poverty/poverty/data/data-tools.html.

US Department of Labor. 2020. "Unemployment Insurance Weekly Claims Data." https://oui.doleta.gov/unemploy/claims.asp.

Wei, Lee-Jen, Danyu Lin, and Lisa Weissfeld. 1989. "Regression Analysis of Multivariate Incomplete Failure Time Data by Modeling Marginal Distributions." *Journal of the American Statistical Association* 84 (408): 1065–73.

White House. 2020. "Opening up America Again: Guidelines." https://www.whitehouse.gov/openingamerica/.

Williams, David R., and Toni D. Rucker. 2000. "Understanding and Addressing Racial Disparities in Health Care." *Health Care Financing Review* 21 (4): 75–90.

Williams, Vanessa. 2020. "A Poll Finds African Americans and Latinos Are More Worried about the Coronavirus; a Public Health Expert Explains Why." *Washington Post*, March 26. https://www.washingtonpost.com/nation/2020/03/27/poll-finds-african-americanslatinos-more-worried-about-covid-19-doctor-explains-why/.

Woodward, Bob. 2020. *Rage*. New York: Simon & Schuster.

Yancy, Clyde W. 2020. "COVID-19 and African Americans." *Journal of the American Medical Association* 323 (19): 1891–92.

Zou, Linda X., and Sapna Cheryan. 2017. "Two Axes of Subordination: A New Model of Racial Position." *Journal of Personality and Social Psychology* 112 (5): 696–717.

Supplement A.

Measuring the Easing of COVID-19 Social Distancing Policies in the US States

To supplement Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, Rachel Castellano, Megan Erickson, and John Wilkerson. Forthcoming. "The Pandemic Policy U-Turn: The role of partisanship, public health, and race in decisions to ease COVID-19 social distancing policies in the U.S." *Perspectives on Politics*.

In April and May of 2020, governors began to relax the social distancing mandates they had imposed in the preceding weeks. We identify the timing of first easing of social distancing policies to allow indoor activity as especially important in determining the overall degree of policy easing. Additionally, by tracing this first indoor policy easing, we are able to capture a policy decision that is more comparable across a varied state policy landscape.

In this supplement, we explain the data collection process we used to track social distancing policies in the states and to identify the U-turn towards easing. We then discuss the measurement challenges posed by substate easing and the techniques we developed to address them. Finally, we support our decision to focus on indoor, non-religious easing as the best available indicator of the policy U-turn that took place in spring 2020, in particular showing that the first steps to ease indoor activity presaged the overall degree of easing through the spring and summer of 2020.

Data Collection Process

Our ongoing data-collection process consists of the following steps: (1) regular monitoring of official state websites for COVID-19 social distancing policy executive orders and public health orders; (2) identification of relevant social distancing policies from within those orders; (3) determination of the level of restrictions each policy entails; (4) tracing "policy chains" linking new policies and past policies; and, (5) tracking state-coordinated phased easing across substate units, as applicable.

Policy Monitoring

Our data collection process begins with regular monitoring of official websites for each state and the District of Columbia to check for policy updates or developments. We rely primarily on Executive Orders (EOs) and Public Health Orders (PHOs) to code social distancing policy mandates, though in cases where states provides policy updates only through press releases or policy guidance documents, we use the best available official documentation. We only code policies that are directed at the state level, meaning policies that apply statewide, or which are coordinated by the state government across substate units (typically counties). We do not monitor or code independent action by local authorities.

Identifying Type of Policy

Second, we review the EO or PHO to determine which types of tracked policies it contains (if any). For this memo, we focus on five types of restrictions:

Gatherings Restrictions. We record absolute numeric limits for indoor or outdoor gatherings, as well as for religious venues or gatherings. For example, we might note that a state limits indoor non-religious gatherings to 10 people maximum.

Restaurant Restrictions. Restrictions on the activities of restaurants and other venues where food is served for consumed on-premises. We define establishments that serve both food and alcoholic beverages as "restaurants" if they earn less than 50% or more of their revenue from the sale of alcoholic beverages unless specified otherwise (e.g., the restaurant threshold in Michigan are those establishments that earn no more than 70% of their gross receipts from alcohol sales).

Bar Restrictions. Restrictions on the activities of bars, breweries, wineries, tasting rooms, and other venues where alcoholic beverages are consumed on-premises. We define establishments that serve both food and alcoholic beverages as "bars" if they earn more than 50% or more of their revenue from the sale of alcoholic beverages, unless they have a food licence and are allowed by the state to operate as restaurants regardless of their sources of revenue.

Business Closures. Restrictions on businesses or sectors deemed as non-essential other than bars and restaurants. Because states often applied different restrictions to businesses operating in different sectors, and because the definition of business sectors var-

ied widely across states (and even within states over time), there may be multiple overlapping business closures in place at a given time in a given state. As a result, the initial indoor easing of businesses may have taken place in phases in a state (e.g., fitness centers and gyms on 13 May 2020; casinos and entertainment venues on 15 May 2020; and personal service businesses like barbers and nail salons on 19 May 2020).

Stay-At-Home Orders. Mandates requiring individuals to stay at home for all non-essential activities, the definition of which varies from state to state. "Shelter-in-place" and "stay-at-home orders" are considered to be equivalent.[1]

Of these policies, business restrictions pose the most substantive coding challenge. Each state has different categorizations for various business sectors, making it very difficult to create universal business categories in our coding scheme. For example, New Mexico defines a broad category for close-contact businesses, which includes group fitness classes, personal training services, barbershops, hair salons, tattoo parlors, nail salons, spas, massage therapy services, esthetician clinics, tanning salons, guided raft tours, guided balloon tours, bowling alleys, and ice skating rinks. On the other hand, Oregon breaks these businesses into at least two categories: recreation and fitness establishments (gyms, fitness organizations, recreational sports, pools, personal training, school sports, dance, campsites) and personal care services. Moreover, New Mexico groups bars with close contact recreational facilities (which also includes indoor movie theaters, indoor museums, miniature golf, arcades, amusement parks, aquariums, casinos, concert venues, professional sports venues, event venues, performance venues, go-kart courses, automobile racetracks, and adult entertainment venues), a categorization not seen in any other state. Because the vast majority of these sectors would pose heightened risk of SARS-CoV-2 transmission if allowed operate unrestricted indoors, we focus here on whether any of them have been opened. We leave the task of creating and validating comparable business closures by sector to future research.

1 States may also issue non-mandated stay-at-home advisories, such as Connecticut: "At this critical time it is essential that everyone just stay home so we can contain the spread of this virus while keeping essential services running." We include these as a stay-at-home recommendation. While these recommendations are recorded in our dataset, only the easing of stay-at-home mandates enter the analysis in the main paper.

Identifying the Level of Restrictions

Third, we quantify the level of restrictions using four variables applicable to all policies, as well as special variables relevant only to specific policy types:

Mandate. Whether the policy is a mandate (1) or a recommendation (0) . For example, "residents are advised to stay at home and avoid unnecessary travel" is a stay at home recommendation, whereas "residents shall stay at home and avoid unnecessary travel" is a stay at home mandate.

Statewide geography. Whether the policy is applied for all geographic units of the state (1) or just specific sub-state areas, typically a set of counties (0).

Statewide population. Whether the policy is applicable to the state's entire population (1) or just particular demographics, such as individuals aged 65 and older, or individuals with chronic and/or severe health conditions (0).

Statewide. Coded as (1) if the policy applies both to all geographical areas and all demographics, and (0) otherwise.

For bar restrictions, restaurant restrictions, and closures of other businesses, we also identify the level of business restriction the policy requires. This ordered variable reflects key differences in permitted business operations that have emerged over the course of the pandemic:

Full closure. Businesses are required to fully close service to customers and in-person operations, excepting only minimal business operations deemed to be essential. In these cases, the public could not access services and workers could not engage in typical operations beyond functions allowing for minimum basic operations.

Takeaway only. Businesses are permitted to have curbside, take-away or take-out, delivery, drive-through, and like modes of service. Customers or patrons are not allowed on-premises with the exception of picking up items ordered.

Outdoor allowed. In addition to take-away services, businesses are permitted to provide in-person services and/or to have patrons visit their premises, but only outdoors.

Indoor allowed. Businesses are permitted to provide in-person services and/or to have patrons visit their premises indoors. In some cases, indoor capacity may be limited,

social distancing may be mandated, and certain indoor areas may remain restricted even when indoor services are permitted (such as bar areas in restaurants).

For gathering restrictions, we record an absolute numeric limit for indoor and outdoor religious and non-religious gatherings. We do not code relative capacity limits (e.g., indoor gatherings at religious venues may operate at up to 33% capacity). If gatherings are only restricted by relative capacity limits, we leave the absolute numeric limits blank and capture the restrictions in policy coding notes. Thus, we capture gathering limits with the following:

Indoor non-religious gathering limit. The maximum number of people allowed in an indoor gathering, excluding religious gatherings of any kind. Coded as (0) when no gatherings of any size are permitted, and left blank to indicate policies which do not impose absolute numeric limits on gatherings.

Outdoor non-religious gathering limit. The maximum number of people allowed in an outdoor gathering, excluding religious gatherings of any kind. Coded as (0) when no gatherings of any size are permitted, and left blank to indicate policies which do not impose absolute numeric limits on gatherings.

Indoor religious gathering limit. The maximum number of people allowed in an indoor gathering for a religious purpose, including gatherings at houses of worship. Coded as (0) when no gatherings of any size are permitted, and left blank to indicate policies which do not impose absolute numeric limits on gatherings.

Outdoor religious gathering limit. The maximum number of people allowed in an outdoor gathering for a religious purpose. Coded as (0) when no gatherings of any size are permitted, and left blank to indicate policies which do not impose absolute numeric limits on gatherings.

Tracing policy chains

States frequently amended their emergency policies on COVID-19; moreover, in many states, limitations on the maximum duration of emergency orders required states to frequently reissue orders unchanged to prevent their expiration. As a result, over the course of the pandemic, tracing the course of a specific policy area – such as a given state's restrictions on restaurants – involves the parsing of a sequence of orders, each of which could amend, extend, or end the current restaurant restrictions.

To better track the evolution of each policy area in each state, after we identify the policy type and level of restrictions associated with the text contained in a newly issued EO or PHO, we assign the new provisions with a unique policy ID (PID). Each PID consists of the state's postal abbreviation and an arbitrary four digit code (e.g., a new policy issued by Utah might be assigned UT0035).[2] The unique PID assigned to each policy allows us to link successively issued policies in a "policy chain," indicating how new policies modify a previous policy of the same type. For example, a new policy extending the expiration date on restaurant restrictions would link back to the PID of the prior policy it extends.

Specifically, for each new policy, we code whether it acts on a previous policy by listing the prior policy's PID under one of the following variables:

Extends. Continues the previous level of restrictions as tracked, with potential minor amendments (e.g., on 28 April 2020, Alabama extended a 10-person indoor gathering limit but also began allowing drive-in gatherings; this is an extension because the underlying gathering restriction remained the same, and amendments for vehicle gatherings were captured in coding notes).

Expands. Shifts to a higher restriction level compared to the prior policy. For example, the new policy might require the closure of previously-permitted in-person services, or lower the numeric gathering limit (e.g., the new policy might allow only 30 people to gather, whereas the prior policy allowed up to 50 people to gather).

Eases. Shifts to a lower restriction level compared to the prior policy. For example, the new policy might re-open in-person services where previously only take-away was permitted, or might raise the numeric gathering limit (e.g., the new policy might allow 10 people to gather, whereas the prior policy banned gatherings completely).

Ends. All restrictions are lifted, ending a policy chain. In our dataset, this could mean the complete ending of all emergency policy (e.g., the end of all emergency COVID-19 restrictions on restaurants), the easing of those restrictions to a level we do not track (e.g., we do not track non-mandatory recommendations on business operations), or that the state devolved authority to counties and thus restrictions were no longer coordinated at the state level.

2 The numbers associated with each PID are arbitrary and do not reflect the ordering of policy implementation, nor do they reflect the total number of mandates enacted by a given state.

Recording Substate Easing and Expansion

The process outlined above is sufficient for maintaining complete histories of the level of restrictions for social distancing policies in states that only enacted policies statewide across all geographic units. However, a number of states employed phased expansion and/or easing of policies which allowed for different levels of restriction in different areas of the state, almost always defined by county. Policy chains that involve substate variation contain all the variables defined above (such as whether the policy is a mandate, and any relevant levels of restriction) but also contain a machine readable list of the counties to which the policy applies.

As an example, consider Utah's gathering restrictions. The policy recorded under UT0035 imposed a statewide gathering recommendation, with suggested 20 person limits on indoor and outdoor gatherings in all counties. The next gathering policy adopted by Utah divided the state into two sets of counties, which in our database splits the policy chain into two separate branches. For counties classified as Public Health Risk Status Orange, the prior statewide policy of recommended 20 person limits was extended under as UT0031. For counties classified as Public Health Risk Status Yellow, the new policy relaxed recommended limits on social gatherings to 50 people or fewer. Thus, for these counties, the prior policy was eased. This branch of the policy chain was recorded as UT0032.

Our database, and in particular the concept of policy chains linked by PIDs, allows the tracking of particular counties as the move through different tiers (and thus potentially levels of restriction) over time. Over the course of the epidemic, states that employed substate easing moved counties across tiers more or less frequently. In some cases, the resulting patchwork of differing restrictions varied in complex ways over time and geography; in other states, substate variation was muted. But overall, substate phased easing and expansion makes tracking the policy map of state social distancing measures increasingly complex from April onward, when many states started implementing substate restrictions.

Measurement Challenges for Policy Chains

In our paper, we focus on the first easing of social distancing mandates to allow the public to resume greater indoor activity. We argue this step constitutes the clearest signal of a U-turn towards policies that seek to resume greater economic activity, as well as a step of particular epidemiological significance given the greater transmission

risk of SARS-CoV-2 indoors. However, identifying the first indoor policy easing in each state is often challenging because of changes in the geographical and sectoral scope of each policy over time.

The problem of sectoral scope is a current limitation of the data, but is specific to business restrictions, and does not apply to restrictions on gatherings, bars, or restaurants. For other non-essential businesses, states set different policies for widely different groupings of business sectors, and shifted those groupings frequently over time to selectively ease or expand restrictions on specific types of businesses. While we have not yet disaggregated by business sector, we may imagine tracking easings across four broad business categories – retail, entertainment, personal care services, and fitness centers. This allows us to gain analytical purchase over Oregon, which draws on these sectors for categorizing various businesses. However, in Colorado's most recent business categorization, disaggregation would be more complex as we see many disparate sectors, including non-critical manufacturing, offices, smoking lounges, gyms and fitness centers, retail, personal services, outdoor guided services, casinos, bounce houses and ball pits, and events and amusement centers. It is thus difficult to create analytically useful broad business categories that apply across all the states. Instead, we chose to focus on the first indoor easing of any business sector in a state as a less arbitrary indicator of the U-turn of business restrictions.

The problem of substate easing is general, applying to all five of our policy types. Although most social distancing policies adopted in March and April of 2020 were statewide, in many cases governors allowed some counties to ease their policies earlier than other counties. Going a step further, some states created systems of"phases", sorting counties into risk-based tiers based on epidemiological indicators, with different levels of restriction associated with each tier. Counties could then progress to gradually more relaxed tiers, or sometimes even return to earlier phases with heavier levels of restriction. As noted in the last section, our database accommodates both patchwork easing by county, as well as more formal phased easing by tiers, by tracing out the movement of each county through a branching set of policy chains. This means that in states that employed substate easing to relax initial statewide policies, we must simultaneously trace out each "branch" of counties that breaks off from the initial statewide policy chain in order to determine which counties first eased to allow the resumption of indoor activity.

An example helps illustrate these challenges. Figure S1 shows the evolution of restaurant restrictions in the state of New York. The first order issued by the state required all restaurants to close for onsite indoor and outdoor consumption, allowing only take-

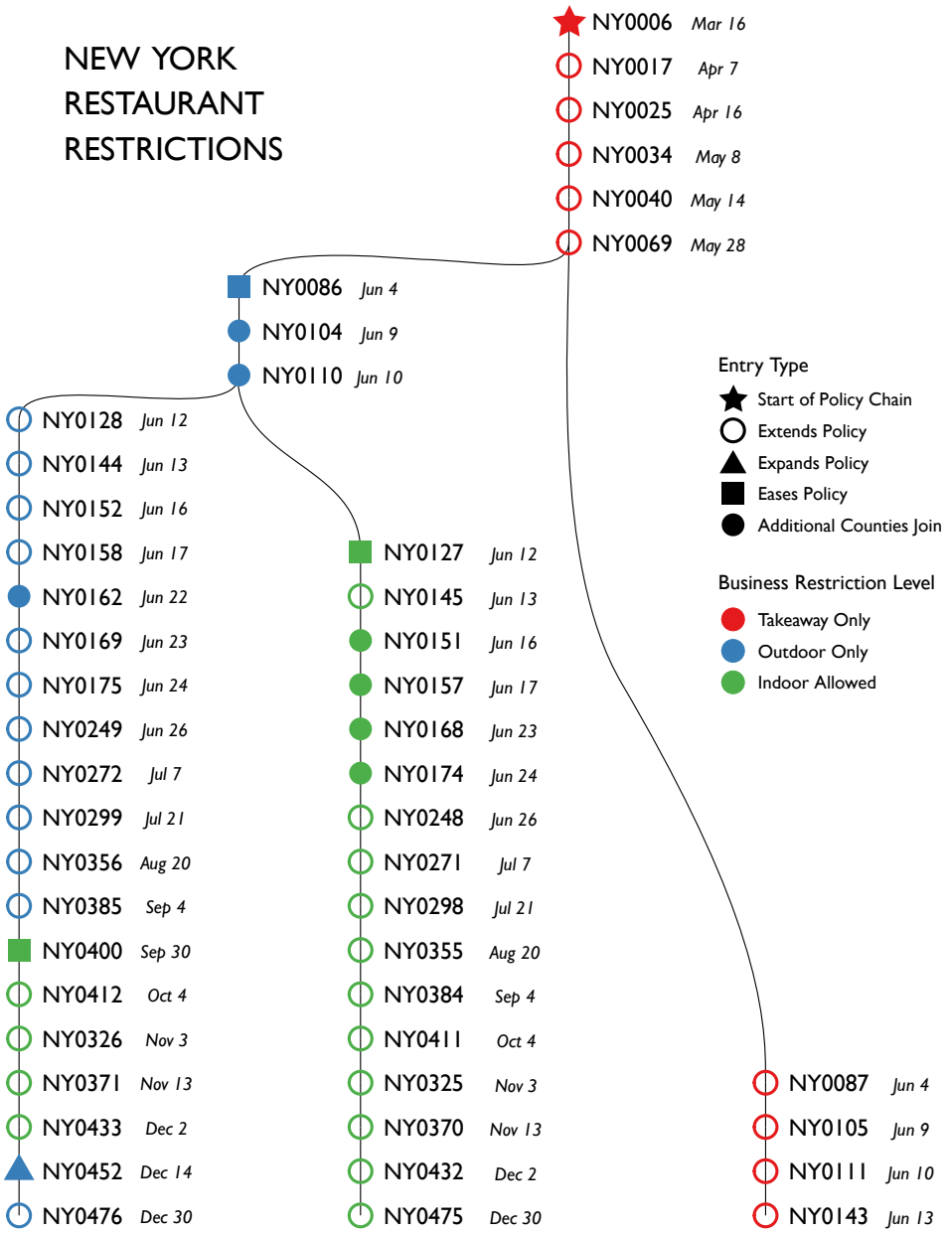


Figure A1. *The policy chain of restaurant restrictions in New York.* The evolution of New York state's restaurant restrictions, by restriction level and county grouping. Source: Authors' original data (Fullman, Bang-Jensen, Reinke, Magistro, Castellano, Erickson, Walcott, Dapper, Amano, Wilkerson, and Adolph, 2021). Data available at `http://covid19statepolicy.org`.

away service. This order, issued and enacted on 16 March 2020, is recorded as NY0006 at the head of the policy chain at the top of the figure. This statewide restriction was extended five times, the last on 28 May 2020, recorded a policy NY0069.

On 4 June, the governor split the state into two groups of counties, easing restaurant restrictions on one group to allow outdoor seating[3] while maintaining take-away only restrictions in the remaining counties[4]. The first group of eased counties follows the left branch of the first fork in the PID chain (NY0086); the second group of counties follows the far right branch (NY0087). The first branch is extended twice, then branches again, splitting into NY0128, a set of counties where outdoor only restrictions are extended, and NY0127,[5] a group of counties where indoor seating at restaurants is allowed as of 12 June 2020[6]. This latter group of counties are the first to experience indoor easing of restaurants in the state of New York, and the date at which they were eased – 12 June 2020 – is the date used for New York's indoor easing of restaurants in our baseline model. Beyond identifying this specific data of first indoor easing, policy chains allow us to capture greater nuance in the evolution of each policy over time and substate regions.

Aside from being potentially very complex to trace, this geographic patchwork raises several questions for measurement. For states where easing occurred at the substate level rather than statewide, should we count as the initial indoor easing the date on which the state first allowed increased indoor activity in a single county? Or should we wait for every county to ease? In our paper, we focus on initial easing in any county, as

3 This group of counties included Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, and Yates counties

4 Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, and Westchester counties.

5 Albany, Allegany, Cattaraugus, Chautauqua, Columbia, Dutchess, Erie, Greene, Nassau, Niagara, Orange, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Suffolk, Sullivan, Ulster, Warren, Washington, and Westchester counties.

6 These counties are Broome, Cayuga, Chemung, Chenango, Clinton, Cortland, Delaware, Essex, Franklin, Fulton, Genesee, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, and Yates counties

we are interested in the moment when policy begins to change course. Moreover, epidemiologically, easing some counties where SARS-CoV-2 has already achieved wide community spread creates at least the possibility for spillovers. But in our robustness checks, we also focus on groups of counties with shared demographic characteristics; for example, we might ask when a state first eased a county with a significant Black or Latino population.

Why Focus on Initial Indoor, Non-Religious Easing?

We suggest the timing of initial easing to expand indoor activity in non-religious settings is the best available indicator of policy U-turns – or persistent shifts from policies seeking to restrict social interaction towards policies attempting to expand economic activity. In this section, we explain our reasoning for excluding religious gatherings, focusing on resuming indoor activity, and emphasizing initial efforts to ease.

Why exclude religious gatherings? The earliest executive orders restricting gatherings were often unclear as to whether religious gathers were exempt. Consequently, many of the earliest policies easing gathering restrictions made no change other than to create or clarify exemptions for religious purposes (see for example State of North Carolina (2020) or State of Tennessee (2020)). Even where the applicability of early policies to religious gatherings was clearly state, the initial easing of limits on religious gatherings appears to follow a different policy track from other easing decisions, as a result of early confusion over state's powers to restrict such gatherings as well as efforts to forestall legal challenges around the First Amendment.[7] To the extent religious easing reflects pressures from First Amendment concerns or from courts instead of a marked U-turn in state policy, we consider non-religious gathering restrictions to be a more re-

7 For example, in May 2020, the former mayor of the city of Bothell in Washington State sued Governor Jay Inslee for violating his First Amendment rights of freedom of religion, assembly, and speech by restricting private gatherings for Bible study in his home. This example additionally demonstrates the perceived – and, ultimately, real – pressure from courts that challenged restrictions on religious gathering. Indeed, in December 2020, *Calvary Chapel Dayton Valley v. Steve Sisolak* was brought to the U.S. 9th Circuit Court of Appeals. The Calvary Chapel held that Governor Steve Sisolak of Nevada's religious gathering limits led to a disparate treatment between religious establishments and other secular businesses. The court ruled that the numeric cap of religious gatherings was to be lifted and instead churches were to be held to the same percent capacity standards of other businesses such as casinos, bars, and restaurants.

liable metric for states' easing tendencies. In any case, including the easing of religious gatherings in our analysis does not change our results.

Why focus on initial indoor easing? As noted in the main text, indoor public spaces present the greatest risk for the spread of SARS-CoV-2, a fact that was understood by May 2020 (Lewis, 2020). Thus the decision to allow indoor activity to resume is of clear epidemiological significance. It is also sharply measurable and comparable across states in a way that more granular policy details are not, given the various ways states defined degrees of allowed capacity and the difficulty of aggregating dissimilar policy measures into a single metric. For example, it is unclear how to assess the relative "stringency" of a 50 percent capacity limit for outdoor dining and a 15 percent capacity limit for indoor dining. On the other hand, the shift from allowing only outdoor dining to allowing indoor dining at all can be clearly measured and compared across policies and states.

Does initial indoor easing signal a genuine U-turn in restrictions? At the time of writing – in April 2021 – the United States has passed through three surges in COVID-19 cases. The first surge occurred in March–April 2020. Afterwards came the period of easing that is the subject of this study, followed by a second surge in the summer of 2020. The third surge, in the fall and winter of 2020-2021, clearly involved new or expanded social distancing mandates in numerous states (Fullman et al., 2021). With that context in mind, it is reasonable to ask whether the policy U-turn we identify in the spring of 2020 endured into the summer of 2020. Did a state's choice to ease indoor social distancing mandates earlier than other states in April–May 2020 make it more likely that a state would resist re-expanding those mandates in the summer, as cases again climbed in much of the United States? Or were early easings unrelated to the level of restrictions in place later in the summer?

To address this question, we look at the evolution of restaurant restrictions over the summer months. Restaurant restrictions are epidemiologically important (Rabin, 2021) and also tend to apply across the same clearly defined group of businesses in all states, making them a good candidate for comparison across this scope. For states that issued only statewide policies on restaurants, we simply track changes in the level of business restrictions applied to restaurants (as before, with four levels indicating whether restaurants were fully closed, were allowed to provide take-away service only, were allowed to open to outdoor service on-premises, or were allowed to open for indoor dining). For states that imposed different restrictions across different geographical regions – including states which eased initially statewide restrictions at different rates in different

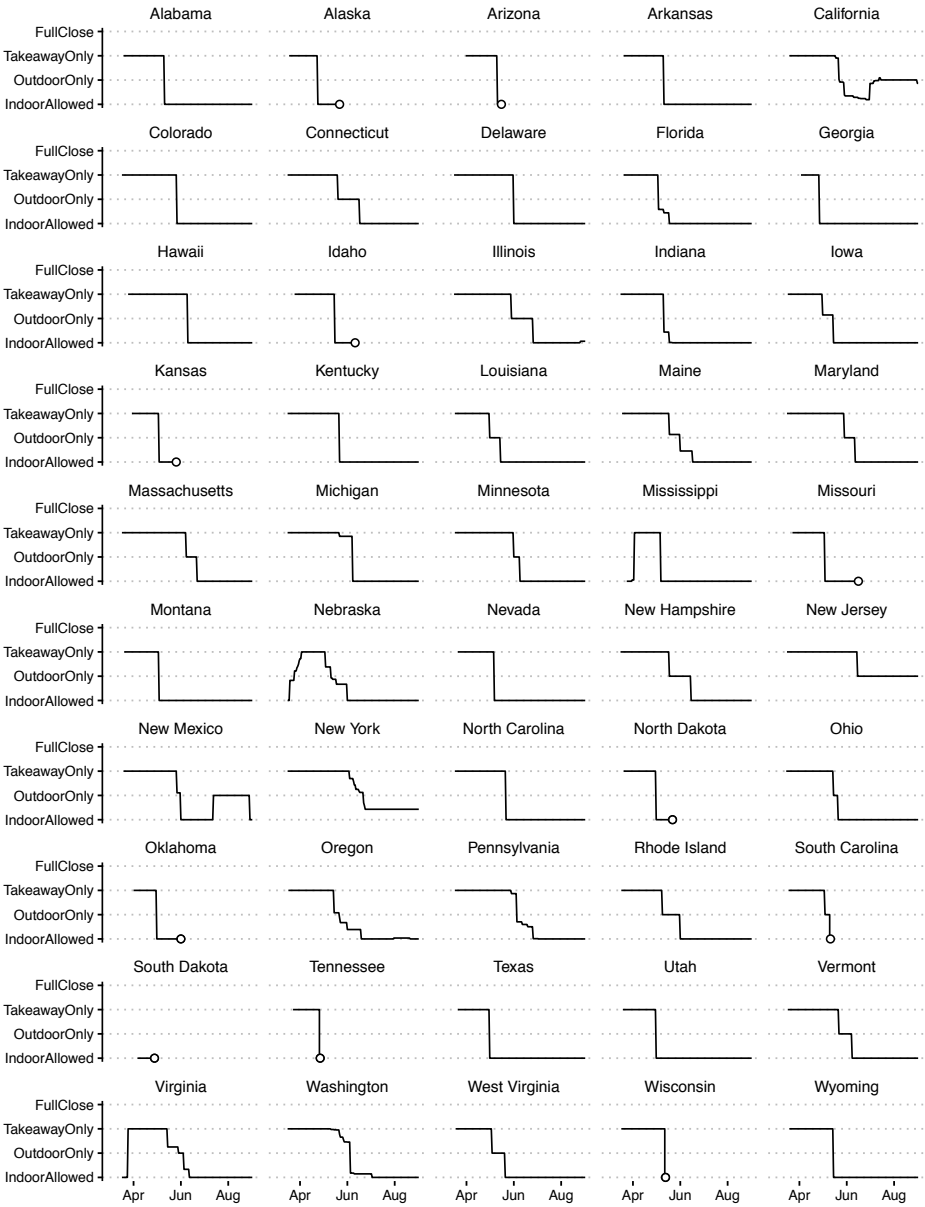


Figure A2. *Level of restaurant restrictions over time.* Only restrictions imposed or coordinated by the state government are shown. For states with varying restriction levels by county, plots show population-weighted averages across counties, treating the level of restrictions as an interval-level variable. An open circle indicates the end of all restrictions (e.g., an end to capacity limits and social distancing mandates for restaurants). Source: Authors' original data collection (Fullman et al., 2021). Data available at `http://covid19statepolicy.org`.

counties – we must trace the path of each county over time through the restaurant restriction policy chain, as we did for New York in Figure A1. At each point in time, we use county population weights to identify the weighted-average level of restaurant restrictions that applied to each state's residents.

Figure A2 collects the time series of restaurant restriction levels for every state. At the start of our study period, every state other than South Dakota restricted restaurants to providing take-away service only. But as part of the policy U-turn, states rapidly reduced the level of restaurant restrictions to allow resumed in-person dining, albeit typically with requirements for social distancing and/or reduced capacity. Tellingly, very few states including California and New Mexico raised their level of business restrictions over the summer of 2020 to re-impose bans on indoor dining. Through the end of August 2020 at least, the U-turn persisted for restaurants.[8]

How did states respond to the second wave? Aside from adopting mask mandates (Adolph, Amano, Bang-Jensen, Fullman, Magistro, Reinke, and Wilkerson, Forthcoming), some states chose to impose or maintain higher levels of restrictions on bars. Thus looking at whether states reversed course on bar restriction levels over summer 2020 provides a tough test for the policy U-turn. Figure A3 shows how the level of bar restrictions evolved over this period, and does indeed show ten states reversed course on bars after initially easing to re-open indoors[9] But even for bar restriction, the policy most prominently associated with renewed restrictions in summer 2020, the vast majority of states resisted re-expanding restrictions in terms of the four levels measured here.

8 As marked in Figures A2 and A3 with open circles, some states completely ended their restaurant and/or bar restrictions during the summer of 2020 (that is, they removed all remaining capacity and social distancing requirements for indoor service), possibly devolving such regulations to local governments. It is worth noting that some of these states later re-instituted at least some restrictions. If these restrictions involved a 25 percent capacity limit (or lower) or 10 person limit per room indoors, they were reviewed as reinstating a robust social distancing mandate for restaurants or bars. An example shown in Figure A3 is Arizona's re-imposition of takeaway only for bars on 29 June 2020 (State of Arizona, 2020*a*). If comparatively less restrictive policies were reinstated, these policies were not captured in the current dataset. For example, Arizona's re-imposed a 50 percent capacity limit while continuing to permit indoor dining on 11 July 2020; this policy is not shown in Figure A2 (State of Arizona, 2020*b*). For more details on the dataset's codebook and inclusion criteria, please refer to the documentation available at `http://covid19statepolicy.org/` (Fullman et al., 2021).

9 These states are Arizona, California, Colorado, Florida, Michigan, Nevada, Pennsylvania, Texas, and Washington, as well as Kentucky, although only briefly.

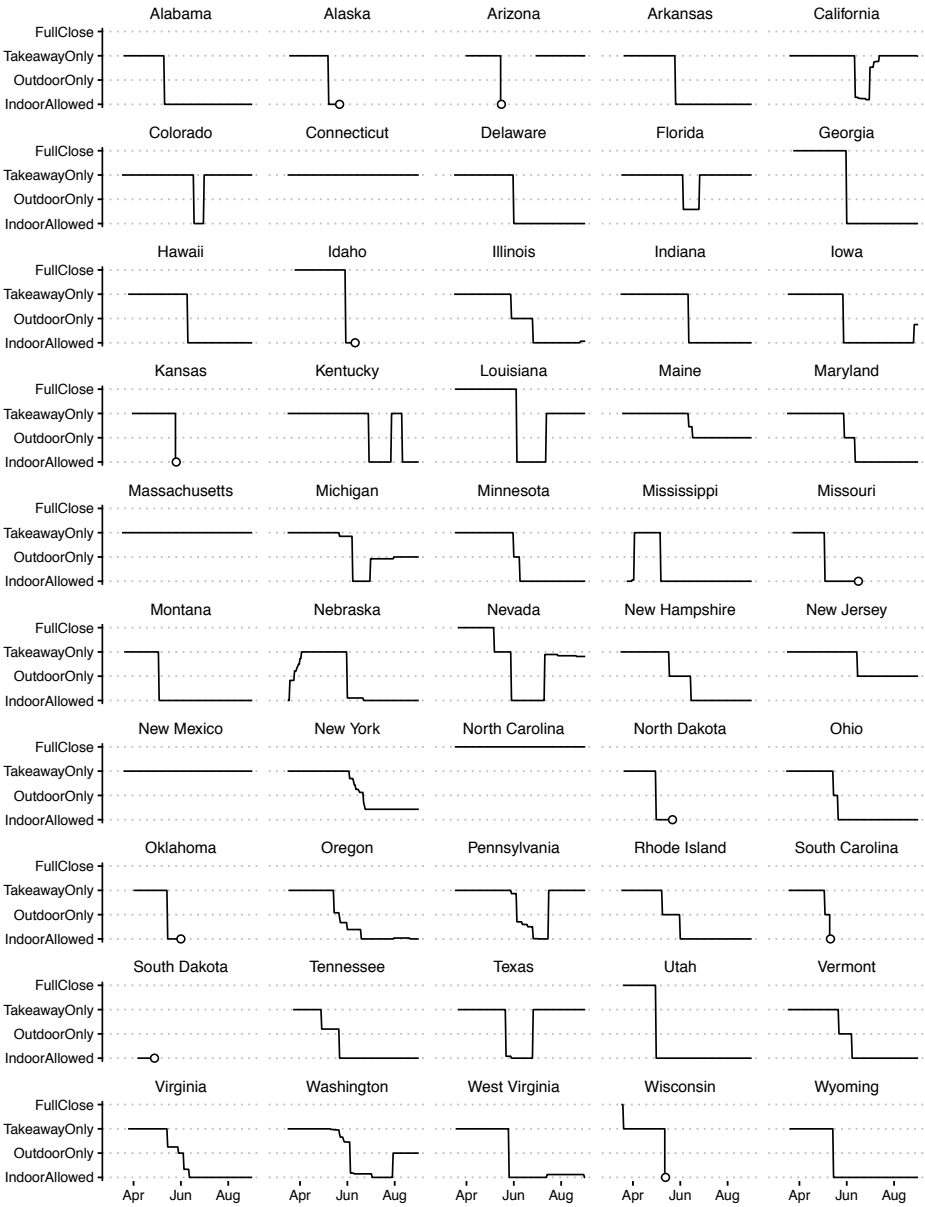


Figure A3. *Level of bar restrictions over time.* Only restrictions imposed or coordinated by the state government are shown. For states with varying restriction levels by county, plots show population-weighted averages across counties, treating the level of restrictions as an interval-level variable. An open circle indicates the end of all restrictions (e.g., an end to capacity limits and social distancing mandates for bars). Source: Authors' original data collection (Fullman et al., 2021). Data available at `http://covid19statepolicy.org`.

We conclude that the initial decision to ease indoor restrictions in April and May 2020 was for the most part a durable one through the end of August and, while necessarily an imperfect measure, is still the best available comparable indicator of whether and when a state began the policy U-turn from increasing restrictions to reducing them.

How similar was easing in counties with varying levels of Black population?

Tracing the evolution of coordinated sub-state policy restrictions also helps answer an important question relevant to our main paper's findings on race and the timing easing: in states with varied sub-state policies, did the level of restrictions apply differently to residents by race? In particular, did counties with higher proportions of Black residents ease faster, slower, or at the same rate as counties with lower proportions of Black residents, at least in terms of our measured level of business restrictions? (One reason this might be the case is if states chose to maintain higher levels of restriction in counties which denser populations, compared rural populations.)

To answer this question, we compute the population-weighted-average level of restrictions separately for counties with an above average percentage of Black residents, compared to the state as a whole. Figure A4 reports these results for restaurant restrictions (top panel) and bar restrictions (bottom panel), in each case showing only states which coordinated sub-state easing for that policy type. Looking at restaurant restrictions, it is striking how similar the level of applied restrictions were within states by the racial composition of counties. New York – which maintained higher restrictions on the New York City area for an extended time – is the main exception. Turning to bar restrictions, New York is joined by Nevada cases where counties with a higher percentage of Black residents tended to have higher levels of restriction for longer periods of time. Tennessee, on the other hand, moved to ease indoor restrictions on bars more quickly in counties with higher Black populations. But again, within most states, counties with either above or below average percentages of Black residents have similar levels of restriction at each point in time.

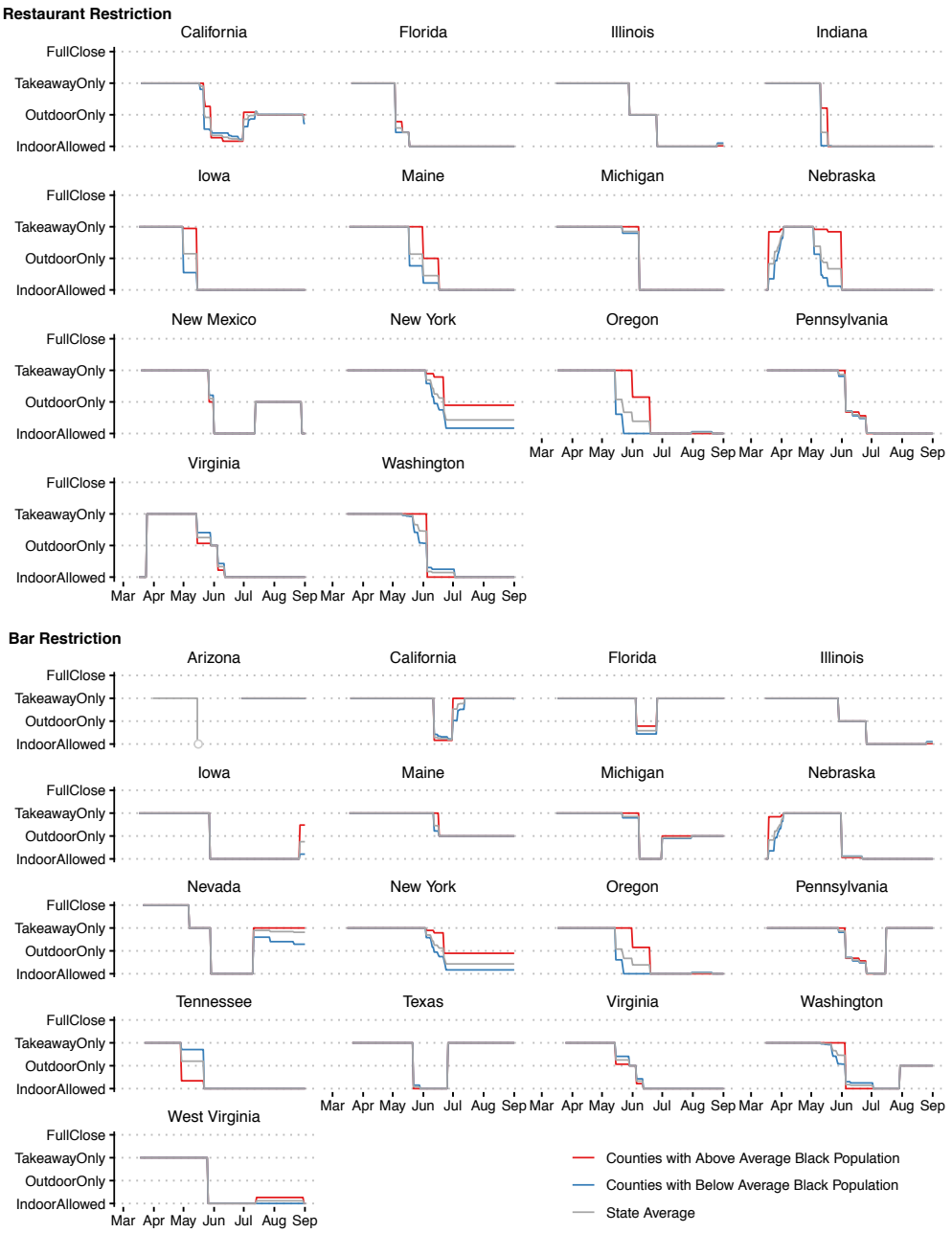

Restaurant Restriction
California
Florida
Illinois
Indiana
Iowa
Maine
Michigan
Nebraska
New Mexico
New York
Oregon
Pennsylvania
Virginia
Washington
FullClose
TakeawayOnly
OutdoorOnly
IndoorAllowed
Mar Apr May Jun Jul Aug Sep
Bar Restriction
Arizona
California
Florida
Illinois
Iowa
Maine
Michigan
Nebraska
Nevada
New York
Oregon
Pennsylvania
Tennessee
Texas
Virginia
Washington
West Virginia
Counties with Above Average Black Population
Counties with Below Average Black Population
State Average

Figure A4. *Level of bar and restaurant restrictions over time by racial composition of affected counties.* For each policy area, only states which at some point had state-coordinated policies that varied by region are shown. The gray line in each plot shows the restrictions present in the population-weighted-average county. Red lines show the weighted-average level of restriction applied to counties with a percentage of Black residents *above* the state average. Blue lines show the weighted-average level of restriction applied to counties with a percentage of Black residents *below* the state average. Where only the gray line is visible, all counties have the same level of state-coordinated restrictions. Source: Authors' original data collection (Fullman et al., 2021). Data available at `http://covid19statepolicy.org`.

References

Adolph, Christopher, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, and John Wilkerson. Forthcoming. "Governor partisanship explains the adoption of statewide mask mandates in response to COVID-19." *State Politics & Policy Quarterly* .

Fullman, Nancy, Bree Bang-Jensen, Grace Reinke, Beatrice Magistro, Rachel Castellano, Megan Erickson, Rebecca Walcott, Carolyn Dapper, Kenya Amano, John Wilkerson, and Christopher Adolph. 2021. "State-level social distancing policies in response to COVID-19 in the US." Version 1.124, April 7. `http://www.covid19statepolicy.org/`.

Lewis, Tanya. 2020. "How coronavirus spreads through the air: what we know so far." *Scientific American* .

Rabin, Roni Caryn. 2021. "The C.D.C. links restaurant dining and a lack of mask mandates to the virus' spread in the United States." *New York Times* (March 5). `https://www.nytimes.com/2021/03/05/world/cdc-masks-dining-virus.html`.

State of Arizona. 2020*a*. "Pausing of Arizona's Reopening: Slowing the Spread of COVID-19." Executive Order 202-43. June 29. Archived at `http://covid19statepolicy.org` as State Policy Source Arizona0017.

State of Arizona. 2020*b*. "Reducing the Risk, Slowing the Spread: Limiting Indoor Dining." Executive Order 202-47. July 9. `https://azgovernor.gov/file/35221/download?token=dcqvammZ`.

State of North Carolina. 2020. "Executive Order." Executive Order No. 128. May 5. Archived at `http://covid19statepolicy.org` as State Policy Source NorthCarolina0010.

State of Tennessee. 2020. "Executive Order." Executive Order No. 30. April 28. Archived at `http://covid19statepolicy.org` as State Policy Source Tennessee0026.

Supplement B.

Regression Tables

To supplement Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, Rachel Castellano, Megan Erickson, and John Wilkerson. Forthcoming. "The Pandemic Policy U-Turn: The role of partisanship, public health, and race in decisions to ease COVID-19 social distancing policies in the U.S." *Perspectives on Politics*.

Table B1. Cox proportional hazards model of first indoor, non-religious easing of five social distancing measures, 16 April to 6 July 2020, all states.

	Counterfactuals		hazard	95% CI	
Covariate	***pre***	***post***	**rate**	***lower***	***upper***
log(Population density, persons/mi^2)	277.4	53.3	2.05	1.44	2.83
log(Daily deaths/million, 7-day moving average)	5.29	0.81	1.92	1.22	2.90
Daily deaths/million is exactly zero	No	Yes	1.67	0.87	3.19
Republican governor	0	1	1.79	1.20	2.58
Black population (%)	3.5	14.2	1.55	1.26	1.89
Trump vote share in 2016	39.1	54.9	1.40	1.03	1.85
Slope of trend in new cases, last 14 days	+1.28	−1.42	1.14	1.03	1.26
Slope of trend in test positivity, last 14 days	+0.04	−0.15	1.14	1.01	1.28
Total state-policy-days at risk			8194		
Total state-policies at risk			237		
Total events			225		
AIC			1049.4		
Concordance index (Harrell's *c*)			0.768		

Each row shows the hazard ratio for (the counterfactual change in) the covariate listed at the left. To simplify comparison across covariates with different scales of measurement, hazard ratios for the interquartile range are shown for continuous covariates. Covariates with both 95 confidence limits above 1.0 significantly increase the chance of first-time substantive easing of a given policy. Baseline hazards are stratified across both the five pooled social distancing measures (recommendations and restrictions on gatherings, bar restrictions, restaurant restrictions, business closures, and stay-at-home orders) *and* whether the state employed coordinated substate easing for the relevant policy area. Standard errors used to compute confidence intervals are clustered by state. The concordance index shows the proportion of all pairs of states for which the model correctly predicts which state-policy will ease first. The Efron method is used to resolve ties.

Table B2. Cox proportional hazards model of first indoor, non-religious easing of five social distancing measures, 16 April to 6 July 2020, Democratic-governed states.

Covariate	Counterfactuals *pre*	Counterfactuals *post*	hazard rate	95% CI *lower*	95% CI *upper*
log(Daily deaths/million, 7-day moving average)	7.29	1.06	2.22	1.05	4.20
Daily deaths/million is exactly zero	No	Yes	0.85	0.38	1.90
log(Population density, persons/mi^2)	277.4	64.0	1.96	1.24	3.01
Trump vote share in 2016	38.9	47.2	1.33	0.96	1.80
Slope of trend in new cases, last 14 days	+1.24	−1.79	1.26	1.14	1.39
Black population (%)	3.7	14.0	1.17	0.74	1.74
Slope of trend in test positivity, last 14 days	+0.04	−0.19	1.07	0.84	1.33
Total state-policy-days at risk			4765		
Total state-policies at risk			117		
Total events			107		
AIC			376.6		
Concordance index (Harrell's *c*)			0.705		

Each row shows the hazard ratio for (the counterfactual change in) the covariate listed at the left. To simplify comparison across covariates with different scales of measurement, hazard ratios for the interquartile range are shown for continuous covariates. Covariates with both 95 confidence limits above 1.0 significantly increase the chance of first-time substantive easing of a given policy. Baseline hazards are stratified across both the five pooled social distancing measures (recommendations and restrictions on gatherings, bar restrictions, restaurant restrictions, business closures, and stay-at-home orders) *and* whether the state employed coordinated substate easing for the relevant policy area. Standard errors used to compute confidence intervals are clustered by state. The concordance index shows the proportion of all pairs of states for which the model correctly predicts which state-policy will ease first. The Efron method is used to resolve ties.

Table B3. Cox proportional hazards model of first indoor, non-religious easing of five social distancing measures, 16 April to 6 July 2020, Republican-governed states.

Covariate	Counterfactuals *pre*	Counterfactuals *post*	hazard rate	95% CI *lower*	95% CI *upper*
log(Population density, persons/mi^2)	280.8	53.3	2.42	1.63	3.45
Black population (%)	3.1	15.5	1.95	1.51	2.47
log(Daily deaths/million, 7-day moving average)	3.72	0.70	1.93	1.10	3.13
Daily deaths/million is exactly zero	No	Yes	1.52	0.55	4.20
Trump vote share in 2016	46.6	58.8	1.20	0.93	1.53
Slope of trend in new cases, last 14 days	+1.36	−0.94	1.18	0.92	1.50
Slope of trend in test positivity, last 14 days	+0.05	−0.13	1.14	0.94	1.37
Total state-policy-days at risk			3429		
Total state-policies at risk			120		
Total events			118		
AIC			419.4		
Concordance index (Harrell's *c*)			0.730		

Each row shows the hazard ratio for (the counterfactual change in) the covariate listed at the left. To simplify comparison across covariates with different scales of measurement, hazard ratios for the interquartile range are shown for continuous covariates. Covariates with both 95 confidence limits above 1.0 significantly increase the chance of first-time substantive easing of a given policy. Baseline hazards are stratified across both the five pooled social distancing measures (recommendations and restrictions on gatherings, bar restrictions, restaurant restrictions, business closures, and stay-at-home orders) *and* whether the state employed coordinated substate easing for the relevant policy area. Standard errors used to compute confidence intervals are clustered by state. The concordance index shows the proportion of all pairs of states for which the model correctly predicts which state-policy will ease first. The Efron method is used to resolve ties.