

The Effect of Local COVID-19 Fatalities on Americans' Political Preferences

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Abstract

Between early March and July 1, COVID-19 took the lives of over 130,000 Americans. Here, we examine the political consequences of these fatalities for President Donald Trump and other Republican candidates for federal offices. We leverage granular data on COVID-19 fatalities and the attitudes of the American public. We find that COVID-19 has led to significant political damage for President Trump and other Republican candidates. States and local areas with higher levels of COVID-19 fatalities are less likely to support President Trump and Republican candidates for House and Senate. Our results show that President Trump and other Republican candidates would benefit electorally from a reduction in COVID-19 fatalities. This implies that a greater emphasis on social distancing, masks, and other mitigation strategies would benefit the president and his allies.

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Between early March and July 1, COVID-19 took the lives of over 130,000 Americans. COVID-19 has killed nearly four times as many Americans as were killed in the Korean War, over twice as many as in Vietnam, and thirty times as many Americans as were killed in the entire Iraq War. Americans broadly disapprove of the President's handling of the pandemic.¹ But, as of yet, there has been no clear causal evidence about whether the rise in COVID-19 fatalities has led Americans to turn away from President Trump.

A large academic literature has shown that the American public holds presidents accountable for their performance in office (Ashworth 2012; Healy and Malhotra 2013). Among other things, the public penalizes a president and others in their party for casualties in war. Areas with more local casualties, for example, were among the first to turn against the Vietnam War between 1965-1972 (Gartner, Segura, and Wilkening 1997); and during the Iraq War, people who knew someone who died on 9/11 or in the Iraq War were consistently more likely to disapprove of George W. Bush (Gartner 2008). As a result, states with greater losses were more likely to vote against President Bush in the 2004 presidential election (Karol and Miguel 2007). Voters also punished Republican candidates at other levels of office: areas with higher casualties from the War in Iraq were more likely to support Democratic House and Senate candidates in the 2006 midterm elections (Grose and Oppenheimer 2007; Kriner and Shen 2007). Finally, areas with higher casualties in the War in Afghanistan penalized Barack Obama's Democratic successor in 2016, Secretary of State Hillary Clinton, by supporting Donald Trump in greater numbers (Kriner and Shen 2020).

The U.S. President has likened his battle against COVID-19 to that of a "war-time president."² Voters may also see him that way. Based on previous studies of the political costs of war-time casualties, we hypothesize that the American public will be less likely to support President Trump and other Republican candidates for federal offices in areas with higher levels of COVID-19 fatalities.

1. <https://abcnews.go.com/Politics/approval-trumps-coronavirus-response-underwater-returns-campaign-trail/story?id=71351241>

2. See <https://www.politico.com/news/2020/03/18/trump-administration-self-swab-coronavirus-tests-135590>

We examine whether Americans are penalizing the president and other Republicans for the fatalities due to COVID-19 using several granular data sources. We leverage both temporal and geographic variation in the magnitude of the COVID-19 pandemic using local-level data on fatalities gathered by the *New York Times*. We use the Democracy Fund + UCLA Nationscape Project to measure the attitudes of the American public at a local level. This survey includes the responses of over 300,000 people between the summers of 2019 and 2020 (Tausanovitch and Vavreck 2020).

We find that states and local areas with higher levels of COVID-19 fatalities are less likely to support President Trump and Republican candidates for House and Senate. A doubling of local COVID-19 deaths in the past 60 days (a .7 point increase on the natural log scale) leads to roughly a .15-.5% reduction in President Trump’s approval rating. It also makes Americans about .15-.3% less likely to support Trump in the presidential election. Furthermore, it makes voters between .22-.45% less likely to support Republican House candidates and between .3-.9% less likely to support Republican Senate candidates. Overall, our results show that both President Trump and Senate Republicans are performing several percentage points worse in local areas with the most COVID-19 fatalities than in areas that have barely been touched by the epidemic.

Our findings suggest that President Trump and other Republican candidates would benefit electorally from a reduction in COVID-19 fatalities. This implies that a greater emphasis on social distancing, masks, and other mitigation strategies would benefit the president and his allies.

Research Design

This section describes the methods and data we use in our analysis. The first building block of our study is granular data on COVID-19 fatalities across geography and time. For this, we use data that the *New York Times* has collected based on state websites and databases.³

3. <https://github.com/nytimes/covid-19-data>

We then aggregate the county-level data on COVID-19 deaths at the county and state levels.

The next building block is data on attitudes of the American public about President Trump and vote intentions for the 2020 elections. For this, we use the Democracy Fund + UCLA Nationscape Project to measure the attitudes of the American public at a local level (Tausanovitch and Vavreck 2020). This survey includes the responses of over 300,000 people, about 6,400 of whom were interviewed each week between the summers of 2019 and 2020. The survey is fielded online and is representative of the nation as a whole (Tausanovitch et al. 2019). Owing to its large size, Nationscape can be disaggregated to reflect opinions at the state and local levels. The survey asks about a variety of political attitudes and preferences. We use four specific questions from the survey. First, we use data about whether respondents’ approve of President Trump’s job performance. We collapse this four-point question to a dichotomous variable. Second, we use data about whether people would vote for President Trump or Joseph R. Biden in a head-to-head match-up in the 2020 presidential election. Third, we use data about whether respondents plan to vote for the Republican or Democratic candidate in the 2020 House election in their district. Finally, we use data about whether respondents plan to vote for the Republican or Democratic candidate in the 2020 Senate elections in their state (if they have one). For each, we are excluding individuals who answered “Not sure.”

We report the results of two sets of analyses. The next two sections describe the details for these analyses.

Association between COVID-19 deaths and changes in political preferences at the state-level

First, we look at the state-level association between COVID-19 fatalities and Americans’ attitudes about President Trump and their vote intentions in the 2020 election. For this analysis, the independent variable is the natural log of the number of COVID-19 fatalities per 100,000 people in each state before June 1, 2020. The outcome variable is the change in

the public’s attitudes prior to the COVID-19 pandemic (defined as the first two months of 2020) and their attitudes after the arrival of COVID-19, between June 1 and July 2, 2020. We use the appropriate state-level sampling weights to calculate the public’s state-level attitudes in each time period. We then graph the relationship between COVID-19 fatalities and the changes in political attitudes in each state. By focusing on changes in political attitudes, our analysis implicitly accounts for time-invariant confounders (omitted variables) in each state and common shocks that affect all states. However, there is large sampling variability at the state-level, particularly in smaller states, which we will address in further analyses.

Causal effect of COVID-19 deaths on political preferences for various offices

Next, we move to a more rigorous difference-in-differences regression design. We use a linear probability model to examine the effect of COVID-19 fatalities over the past 60 days in each survey respondent’s state or county on their attitudes about President Trump and other politicians. For this analysis, the independent variable is the natural log of the number of COVID-19 fatalities per 100,000 people in the last 60 days (relative to the date each respondent was interviewed) in each geographic area. A one unit increase on the natural log scale can be interpreted as approximately a doubling of fatalities (Gelman and Hill 2006). Here, we use fixed effects for geography and survey wave (week) to account for area- and time-specific confounders and to identify the causal effects of COVID-19 deaths on political attitudes (Angrist and Pischke 2008). The geographic fixed effects account for the tendency of different areas to have varying levels of baseline support for President Trump and other Republican candidates. The temporal fixed effects account for national-level changes in political attitudes due to the pandemic, the economy, and national events such as the Black Lives Matters Movement. We also control for a host of individual-level pre-treatment attributes of the survey respondents. These are not crucial for our identification strategy, but they reduce the variance in our results (Hopkins and Parish 2019). Specifically, we control

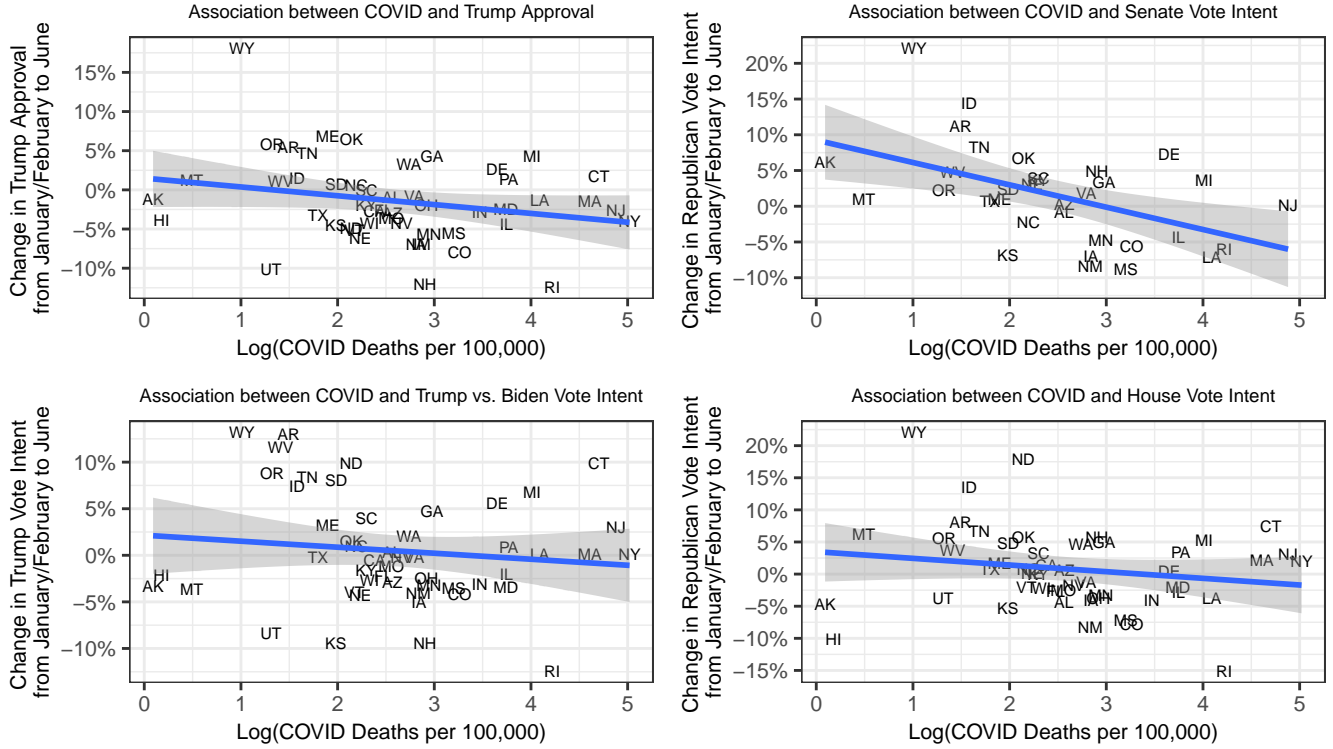
for respondents' gender, race/ethnicity, education, Hispanic ancestry, and their vote choice in the 2016 presidential election. The standard errors in our regression results are clustered at the state or county level depending on the model. We use national sampling weights in all our analysis: our results are representative of the American public at the national level. While our main analyses use linear probability models, we find substantively similar results using logistic regression models.

Results

Figure 1 (below) examines the state-level association between cumulative COVID-19 fatalities as-of May 31, 2020 and changes in Americans' attitudes between the first two months of 2020 and June 1, 2020. It shows that states with more COVID-19 fatalities were less likely to support Republican candidates. For example, people in the states with the most fatalities were about 6% less likely to approve of President Trump's performance in office than people in the states with the lowest level of fatalities. The states with the highest level of fatalities were about 3.5% less likely to support President Trump's re-election in the presidential race against Democrat Joseph R. Biden. The hardest hit states were nearly 15% less likely to support Republican Senate candidates and about 5% less likely to support Republican House candidates.

These associations could be confounded by other state-level factors and may be affected by sampling variability at the state level (particularly for smaller states). Thus, we move next to a more rigorous difference-in-differences regression design to assess the causal effect of COVID-19 fatalities on political preferences. This approach examines the effect of COVID-19 fatalities over the past 60 days in each respondent's state or county on their attitudes about President Trump and other politicians. In addition to providing a more granular test, county-level results characterize the impact of the information environment surrounding the pandemic relative to the actual number of fatalities. We use fixed effects for geography and

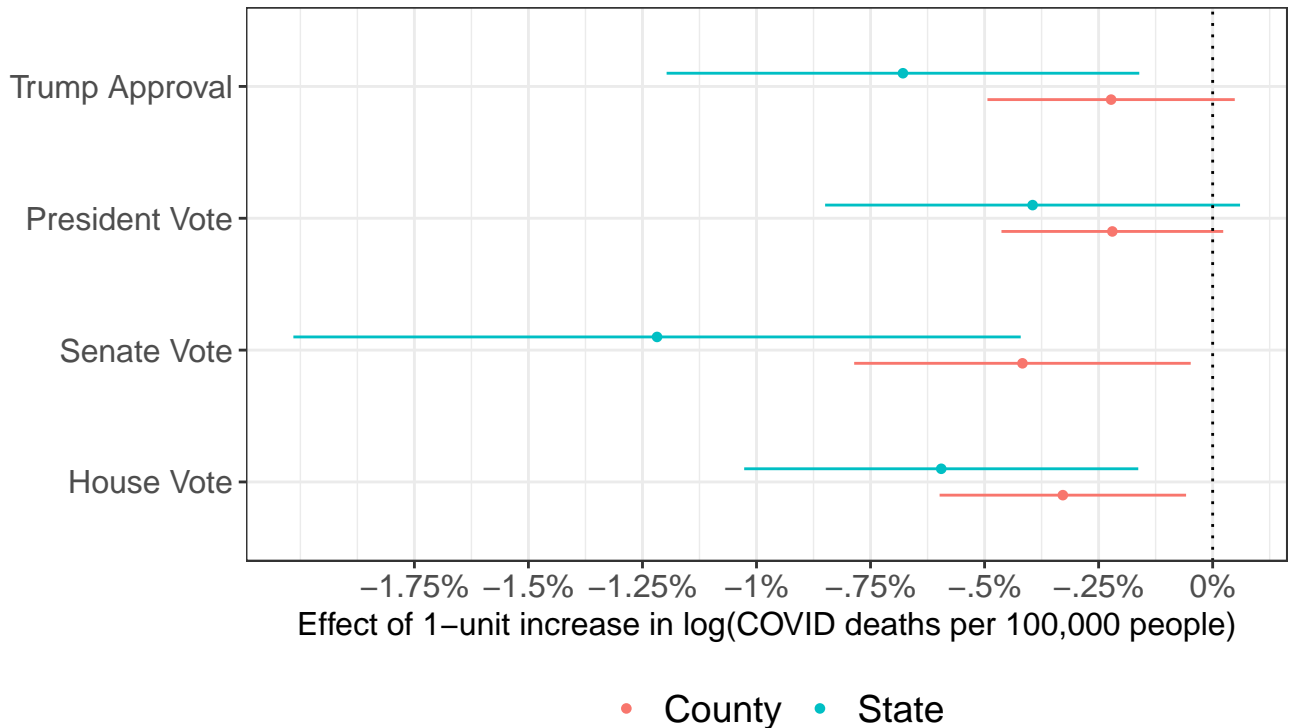
Figure 1: Association between COVID-19 deaths and changes in political preferences.



the week-of-interview to account for area- and time-specific confounders. We also control for a host of pre-COVID-19 individual-level attributes of the survey respondents, including 2016 vote choice, making our results net of factors such as race, education, gender, and partisan preference in 2016.

We find consistent results at every level of geography and for every office (Figure 2): the effect of fatalities is a drain on Republican vote share. Overall, areas with higher COVID-19 fatalities are significantly less likely to support President Trump and other Republican candidates. A doubling of COVID-19 fatalities (.7 units on the log scale) at the county level leads to roughly a .15% reduction in President Trump’s approval rating and a doubling in fatalities at the state level leads to a .5% reduction in the President’s approval. In the presidential election, a doubling of COVID-19 fatalities at the county level makes Americans about .15% less likely to support President Trump against Joseph R. Biden and a doubling in fatalities at the state level leads to a .3% reduction in support for Trump. In Senate

Figure 2: Effect of COVID-19 deaths on political preferences for various offices. This graph shows the results of regression models of the effect of a 1-unit increase on the log scale in COVID-19 deaths per 100,000 people in the past 60 days in each state and county on Trump approval and whether respondents plan to vote for Republican candidates for president, Senate, and House. The dots show the point estimates and the bars show 95% confidence intervals.

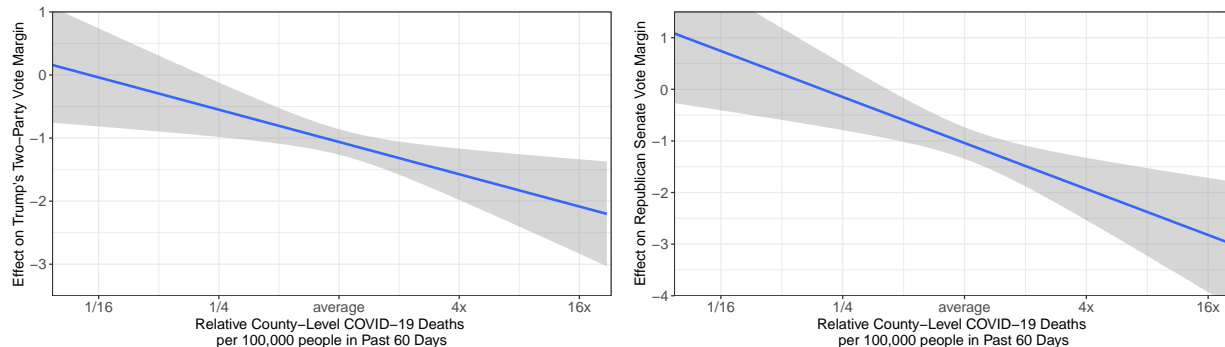


aces, a doubling of COVID-19 fatalities at the county level makes Americans about .3% less likely to support Republican candidates and a doubling in fatalities at the state level leads to a .9% reduction in support for Republicans. Finally, in House races, a doubling in fatalities at the county level makes Americans about .25% less likely to support Republican candidates and a doubling in fatalities at the state level leads to a .4% reduction in support for Republicans.

Figure 3 shows the implied results from our county-level regressions in terms of the vote margin for presidential and senate voting across the range of observed COVID-19 deaths at the county level. They show that both President Trump and Senate Republicans are performing several percentage points worse in counties with the most COVID-19 fatalities

than in counties that have barely been touched by the epidemic.

Figure 3: Effect of COVID-19 deaths on political preferences for various offices. This graph shows the implied results from our regressions across the range of observed COVID-19 deaths at the county-level.



Discussion

Our results show that the COVID-19 pandemic has already significantly damaged the political standing of President Trump. Just as the public penalizes the president for casualties during wars, the public is penalizing the President and other members of his party for local fatalities during the pandemic. The number of local fatalities due to COVID-19 appears to be at least as important as the local economy in Americans' evaluations of their leaders (Healy and Lenz 2017; Benedictis-Kessner and Warshaw 2020). COVID-19 deaths could cost Trump and other Republicans several percentage points in the 2020 election. This could swing the presidential election toward Democrats, with particularly high effects in swing states such as Michigan, Wisconsin, Pennsylvania, New Hampshire, Arizona, and Florida. All of these states had tight margins in the 2016 presidential election. Michigan's margin was particularly narrow (.2%) as was New Hampshire's (.4%), suggesting that COVID-related fatalities may be consequential not only at the individual level in 2020, but also in terms of Electoral College results. In addition, a number of swing Senate elections are in states currently suffering from an explosion of COVID-19 cases, including Georgia, Arizona, North Carolina, and Texas. The growing pandemic increases Republicans' vulnerability in these crucial states.

These narrow margins in recent elections, coupled with the realization that fatalities from COVID-19 are not unlike casualties of war in voters' minds, suggest that a winning strategy for President Trump and other Republican candidates on the ballot in 2020 should be to adopt mitigation strategies to limit the spread and consequences of COVID-19 in the American population. Increasing fatalities from the disease lead to losses for Republicans.

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Supporting Information

This appendix shows a tabular version of the regression results we present in Figure 2 of our main paper.

Table 1: Effect of COVID-19 deaths on political preferences for various offices. This table shows the results of regression models of the effect of a 1 unit increase on the log scale in COVID-19 deaths per 100,000 people in the past 60 days in each state and county on Trump approval and whether respondents plan to vote for Republican candidates for president, Senate, and House.

	<i>Dependent variable:</i>							
	Presidential Approval		R Vote for President		R Vote for Senate		R Vote for House	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
log(Fatalities per capita in county)	-0.223 (0.138)		-0.220* (0.124)		-0.417** (0.188)		-0.328** (0.138)	
log(Fatalities per capita in state)		-0.679** (0.264)		-0.395* (0.232)		-1.218*** (0.407)		-0.595*** (0.220)
Observations	314,904	317,172	286,440	288,473	120,174	121,048	249,569	251,363
R ²	0.431	0.410	0.510	0.491	0.553	0.524	0.543	0.523
Adjusted R ²	0.425	0.410	0.505	0.491	0.544	0.524	0.537	0.523

Note: *p<0.1; **p<0.05; ***p<0.01