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### Policy Error and Policy Rescue in COVID-19 Responses in the United States and United Kingdom

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# Policy Error and Policy Rescue in COVID-19 Responses in the United States and United Kingdom

## **Abstract**

The ongoing COVID-19 pandemic represents an existential threat to societies around the world. There has been considerable variation in both rhetoric and policy responses among the many national governments. This piece explains how democratic institutions, in particular federalism, can impact the speed and degree of policy responses protecting citizens, even when national leaders share similar public rhetoric that is non-conducive to speedy policy response. Comparing the policies of United States and United Kingdom with the backdrop of their national leaders' public stances, we argue that having multiple decision points due to the redundancy inherent in federalism increases the chances that a citizen will receive the "correct" policy, even when policy-makers at some levels of government put forth "wrong" policy responses. However, in unitary government, society must rely on the central leader to determine the "correct" policy as sub-national policy-makers are constrained by institutions in their ability to respond. That, due to inherent error probability, delays policy response.

# Policy Error and Policy Rescue in COVID-19 Responses in the United States and United Kingdom

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The ongoing COVID-19 pandemic represents an existential threat to societies around the world. There has been considerable variation in both rhetoric and policy responses among the many national governments. This piece explains how democratic institutions, in particular federalism, can impact the speed and degree of policy responses protecting citizens, even when national leaders share similar public rhetoric that is non-conducive to speedy policy response.

## **1. Authority redundancies in an emergency**

A multitude of government forms and institutional variations compete around the world in terms of best serving their countries and citizens. What it means to best serve the citizens is, however, a matter of broad interpretation and so the disagreements persist. COVID-19 pandemic created a new metrics for comparison of governments' performance – the metrics of human deaths, or, alternatively and as we pursue it here, the metrics of the speed of government response in preventing human deaths through policy adoption.

We argue in this essay that institutional and government systems with large authority redundancies are more likely to generate a quick policy response than systems with centralized policy authority. We explore the comparison of democracies and autocracies as higher- versus lower-redundancy policy mechanisms elsewhere. Here we argue that among democracies increasing redundancy in policy authority creates the mechanism of 'policy rescue' in the likely event of a policy error on the part of the national leadership. The cases that we compare are the United States and the United Kingdom in the crucial period of late January-March of 2020, when

governments still had the possibility of containing and reducing the spread of COVID-19 (See Appendix). Both nations' leaders adopted similarly dismissive stances during the initial phase of the pandemic, yet while Johnson's position closely corresponded with his country's policies, Trump's views coexisted with significant strong COVID policy response from sub-national authorities and public agencies.

The first COVID-19 cases were reported in France on 24 January 2020 (Spiteri 2020) making it apparent that the disease was not any longer contained to China, and necessitated responses from other national leaders. Over the next two months (until about the 17 March 2020), United States President Donald Trump and British Prime Minister Boris Johnson shared largely similar rhetoric, downplaying the need for any dramatic policy response to the COVID-19. However, these similar public stances of these heads of government did not hamper pandemic response to the same degree in these two nations. Specifically, strong epidemiological steps were implemented crucially earlier in the United States, contrary to the national government stance. Meanwhile, epidemiological data have shown that a delay of even one day in imposing the measures during the community spread stage increases the total number of infected with COVID-19 by forty percent (Pueyo 2020). We argue that the ability to quickly generate policy response was provided by multiple authority redundancies within the federal government structure in the United States compared to the unitary system in the United Kingdom. This explains in large part the different policy responses and timing enacted between the two nations.

Redundancy is inherent in federalism, with multiple decision-makers having policy-making authority in overlapping jurisdictions (Federalist Paper No. 45, Wheare 1964). In the United States, where President Trump and the national government do not act, state and local governments can create the tools and policies they feel are necessary, especially in health policy

(Holahan et al. 2003, Nathan 2015, Gardner 2018). If state or local officials do decide necessary policy is lacking from the national government, these state and local officials may create and enact policies they feel are necessary.<sup>1</sup> Multiple decision-makers mean if one policy-maker gets the response “wrong” other policy-makers have an opportunity to make it “right.”

## **2. Overlapping Jurisdictions Create Life-saving Redundancies in Policy Response to Emergencies**

Consider the following scenario: four honest hardworking politicians are in power at different levels of government. They are doing the best they can, all working tirelessly on our behalf, one each at the national, state, county/borough, and city levels. This world that we are imagining is federal, meaning that each politician has jurisdiction over the policy that will be implemented within her administrative territory: President’s – nationally, governor’s – statewide, county executive’s – countywide, and mayor’s – citywide.<sup>2</sup> Then the lowest level administrating division, suppose that is the county in our example, is subject to the policy decisions of all four governments.

Suppose that the ‘signal’ that infection spread is imminent has been sent and the information is now available that extreme epidemiological measures are necessary – information obtained from observation and research of an outbreak elsewhere in the world. But people, politicians included, are flawed with limited capacities, while information channels are noisy. Thus, even if the true signal is out there, the chances that the signal is successfully received by any single policy authority is not 100 percent. In our story, this means that each executive

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<sup>1</sup> Unless explicitly prohibited by law or constitution.

<sup>2</sup> This is the typical order of government levels in the United States. Figure 1 reverses the order of the two last government layers, taking inspiration from the narrative in the state and city of New York.

receives the signal with probability that is less than 1. Suppose for illustration purposes that such probability is in fact  $\frac{1}{4}$ .

Suppose further, that political incumbents would definitely respond with appropriate policy IF such signal actually reaches them. Figure 1 represents what would ensue in a multi-layer (federal) authority structure. If the president implements stay-at-home as the national policy, it will reach the city in question, as well as the rest of the nation. But if the governor, or the county executive, or the mayor implements the policy, the city has to respond in exactly the same way, and its residents will still receive the policy.

[Figure 1 here]

Figure 1 shows that residents in each location have an approximately 0.7 probability (seventy percent chance) of receiving the correct policy, IF the governance structure is federal as described, and so has four levels of overlapping policy authorities. If a single policy authority served the citizen, as in a centralized unitary democracy, the chances of a correct policy would have been, as assumed, just twenty-five percent.

### **3. Comparison of the US and UK ‘policy rescue’ timelines**

In the United Kingdom, if the central government does not act, local authorities do not have an option other than following the national government’s policies. Local authorities can advise the government but in terms of policy making they do not have much room. There are exceptions. Northern Ireland and Scotland differ from mainland Britain. They can act autonomously and make policies.

However, in general the unitary system of the UK ties the hands of local authorities in England and Wales. It limits the policy making space where local authorities can operate. If the main policy maker makes a wrong choice, there is no local authority that can correct that



choice. Even in the United Kingdom’s most powerful city, London mayor Sadiq Khan often does not have a choice but to wait for Prime Minister Boris Johnson to act for COVID-19 responses in most policy areas (Schofield 2020, McGuinness 2020).

In Table 1, we present a narrative of policy responses in the UK and US respectively, as it developed over time between January 24 and April 1, 2020. The comparison of policy responses in the two countries is juxtaposed with policy stances of the two national leaders as expressed in their public statements during that timeline.

[Table 1 is here]

At the national-level in the United States, President Trump downplayed the severity of the COVID-19 pandemic, especially when compared to other American policy-makers and bureaucrats attempting to respond to the crisis. President Trump does not offer a sobering assessment of the pandemic until March 17. On that day, he claimed he “felt it was a pandemic long before it was called a pandemic” (Johnson 2020). Prior to this, President Trump addressed the public numerous times sharing that the spread of COVID-19 in the United States was controlled and had a small footprint. He also argued that the health impact on an individual was less severe than other, more “typical” diseases like the seasonal flu.

In light of President Trump’s statements and actions, state and local policy-makers could respond where the national government didn’t or well in advance of the national government. In New York State, Governor Andrew Cuomo has been well ahead of President Trump in policy responses. Governor Cuomo declared a State of Emergency on March 7, 2020, well ahead of the national government (Anon. 2020). By the time President Trump declared a national State of Emergency on March 13, 2020<sup>3</sup>, Governor Cuomo had been mobilizing resources and money for

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<sup>3</sup> See Ordonez, F., Naylor, B., Keith, T. & Rascoe, A., 2020.

nearly a week, giving New York State a faster start to develop a comprehensive response to the pandemic.

Furthermore, New York State has acted in places where the national government has not yet (as of March 26, 2020) and will likely not. Governor Cuomo declared an Executive Order to close all non-essential New York business offices on March 20<sup>th</sup> (2020, March 20). Prior to this, Governor Cuomo closed all schools in the state (2020, March 16). Nothing similar has been proclaimed at national level at this point and, from President Trump's stated preferences, will likely not happen.

In the UK, the government refused to take any precautions to stop the spread of COVID-19 while the rest of Europe took actions. In spite of warnings from local authorities, until the 16th of March, the UK's strategy was letting the virus spread as much to build herd immunity in the society. On March 12th, Prime Minister Boris Johnson warned citizens "to be prepared to lose loved ones before their time." On March 13th, government's chief science adviser, Sir Patrick Vallance mentioned building herd immunity is the key thing to do. However, after critical responses from the public, the UK Secretary of State for Health and Social Care expressed building herd immunity is not a stated policy. The only response to the pandemic from the government was postponing the local elections in May with the advice from the Electoral Commission. The UK's strategy on fighting against the COVID-19 switched on March 16th with the scientific report that showed the UK's situation can turn to "catastrophic epidemic".

In contrast to Prime Minister Johnson, the Mayor of London, Sadiq Khan made earlier public appearances and warned the public to be cautious. On March 11th, the Mayor tweeted about his concerns on the economic impacts of COVID-19 on lower-income Londoners and

called the government to take urgent further action. However, the Government did not announce any economic plan until the 17th of March.

Other independent actors responded to the outbreak earlier than the government. However, the unitary system of government in the UK limits the power of other actors. For example, The Church of England restricted the number of guests in wedding and baptism ceremonies 5 days before the government took any actions on social events. Transport for London (TfL) closed some London underground stations while Boris Johnson denied the plans of shutting down the London underground.

The UK government started to announce their plans to fight against COVID-19 on March 17 with an economic package to help businesses. Policies to prevent COVID-19 shifted from there on. The UK went under lockdown on 23rd of March to fight the pandemic. The London governor could not take any policy decisions against the government. However, on the other hand, Scottish government as an autonomous actor was ahead of other parts of the UK. They started to fight against the pandemic by banning all social gatherings over 500 on March 12th while the UK was trying to ‘build immunity’ in the community. Scottish government announced economic package of support for businesses 3 days before the UK government’s package.

#### **4. Conclusion**

Our analysis focuses on the speed of policy reacting to crisis. In that, we conclude, systems with greater policy authority redundancies – greater jurisdictional overlap in policy-making – have a built in advantage. This advantage in the speed with which they can react may or may not extend to the quality of the policies that they put forth, or to their ability to successfully implement those policies. Those are important considerations in their own right, and will be addressed in future research.

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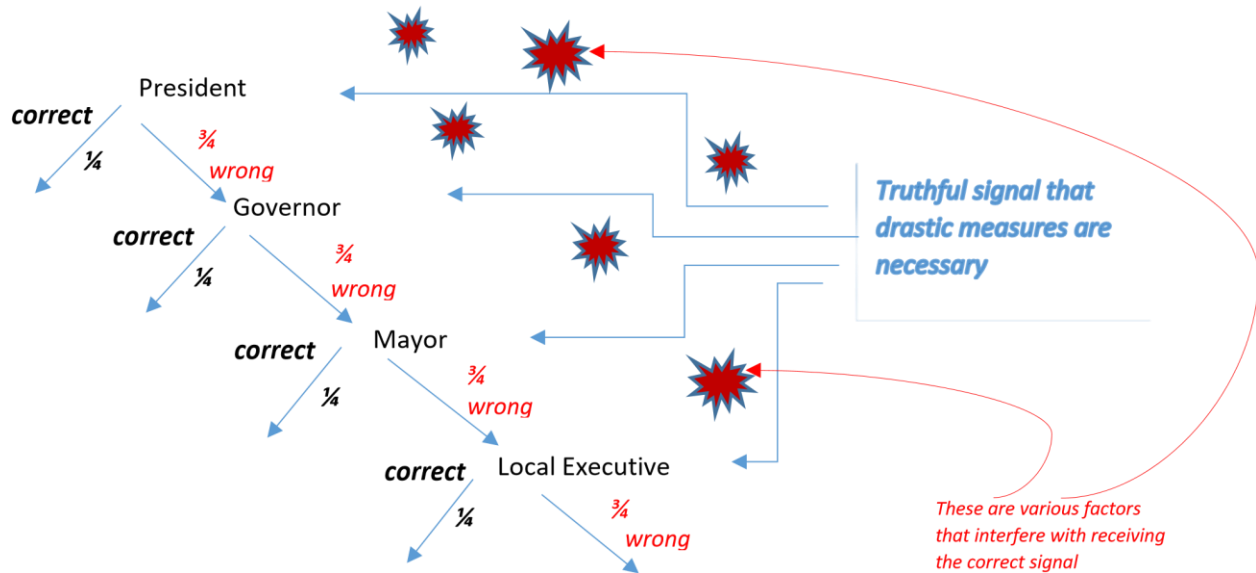
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Figure 1. Capacity for “Policy Rescue” in a multi-layer (federal) authority structure



The probability that the correct signal would reach at least one authority is:  $1 - [\text{probability that neither authority receives the correct signal}]$ , which is  $1 - \left(\frac{3}{4}\right)^4 = \frac{175}{256} \approx 0.7$

So the chance that any single resident will receive the necessary stay-at-home policy from *some* relevant authority is almost seventy percent, as opposed to what would have been twenty-five percent in a centralized authority system.

Table 1. Comparison of the US and UK Timing of Policy Response

Enacted policies, UK	Johnson Said	Time	Trump Said	Enacted policies, US
U01		19-25/1	1st U.S. case of the coronavirus; 1st Tweet: "It will all work out well"	A01
U02		26/1-1/2		A02
U03		2-8/2		A03
U04		9-16/2	"a lot of people think [the virus] goes away in April with the heat."	A04
U05		16-22/2		A05
U06	"... most valuable thing we can do to prevent the spread of coronavirus is to wash our hands..."	23-29/2	"...I think it's going to work out fine." "The Coronavirus is very much under control in the USA. ." First US COVID death	A06
U07	"Coronavirus will not stop me shaking hands"	1-3/3		A07
U08	"We're not at the point yet where we're asking large numbers of people to self-isolate. But that of course may come if large numbers of people have the symptoms of coronavirus"	4-6/3	calls the WHO's estimate of the global death rate "false," describes the coronavirus as "very mild," and suggests that those infected can get better by "sitting around" and "going to work."	A08
U09		7-9/3	urges the public to remain calm and touts the country's testing capabilities	A09
U10		10-12/3	T's common flu is worse and happens every year comment	A10
U11	Should prepare to lose loved ones before their time Not planning to ban sports events; Asked people with fever and cough to stay at home	13-15/3		A11
U12	Work from home if you can Avoid mass gatherings; Use NHS if really need to	16-18/3	claims he "felt it was a pandemic long before it was called a pandemic."	A12
U13		19-21/3		A13
U14		22-24/3		A14
U15		25-27/3		A15
U16		28-30/3		A16

## Appendix 1. Timeline of Policy Actions in the United Kingdom in Response to COVID-19

Time code	Dates	All during time	Policy	Link
u01	19-25/1			
U02	26/1-1/2	Tracing people who have been to Wuhan in the past 14 days	Tracing people who have been to Wuhan in the past 14 days	<a href="https://www.gov.uk/government/speeches/wuhan-coronavirus-health-secretarysstatement-to-parliament">https://www.gov.uk/government/speeches/wuhan-coronavirus-health-secretarysstatement-to-parliament</a>
U03	2-8/2	Coronavirus public information campaign launched	Coronavirus public information campaign launched	<a href="https://www.gov.uk/government/news/coronavirus-public-information-campaign-launchedacross-the-uk">https://www.gov.uk/government/news/coronavirus-public-information-campaign-launchedacross-the-uk</a>
U04	9-15/2	1 hospital 2 hotels are designated as an "isolation" facility Health Protection (Coronavirus) Regulations 2020 is published	1 hospital 2 hotels are designated as an "isolation" facility	<a href="https://www.gov.uk/government/news/secretary-of-state-makes-new-regulations-oncoronavirus">https://www.gov.uk/government/news/secretary-of-state-makes-new-regulations-oncoronavirus</a>
			Health Protection (Coronavirus) Regulations 2020 is published	<a href="http://www.legislation.gov.uk/ukxi/2020/129/contents/made">http://www.legislation.gov.uk/ukxi/2020/129/contents/made</a>
U05	16-22/2			
U06	23-29/2	New surveillance system for early detection of COVID19	New surveillance system for early detection of COVID-19	<a href="https://www.gov.uk/government/news/newsurveillance-system-for-early-detection-ofcovid-19">https://www.gov.uk/government/news/newsurveillance-system-for-early-detection-ofcovid-19</a>
U07	1-3/3			
U08	4-6/3	Coronavirus is listed as a notifiable disease in law £46 million funding for developing coronavirus vaccine and a rapid test	Coronavirus is listed as a notifiable disease in law	<a href="https://www.gov.uk/government/news/coronavirus-covid-19-listed-as-a-notifiable-disease">https://www.gov.uk/government/news/coronavirus-covid-19-listed-as-a-notifiable-disease</a>
			£46 million funding for developing coronavirus vaccine and a rapid test	<a href="https://www.gov.uk/government/news/pmannounces-new-funding-in-fight-againstspread-of-coronavirus">https://www.gov.uk/government/news/pmannounces-new-funding-in-fight-againstspread-of-coronavirus</a>
U09	7-9/3			
U10	10-12/3	Scotland bans gathering above 500 people	Scotland bans gathering above 500 people	<a href="https://www.gov.scot/news/first-ministerannounces-large-events-to-be-cancelled/">https://www.gov.scot/news/first-ministerannounces-large-events-to-be-cancelled/</a>
U11	13-15/3			
U12	16-18/3	Schools are closed Scotland closes Schools and nurseries	Schools are closed	<a href="https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-18-march-2020">https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-18-march-2020</a>
			Scotland closes Schools and nurseries	<a href="https://www.gov.scot/news/school-andnursery-closures/">https://www.gov.scot/news/school-andnursery-closures/</a>
U13	19-21/3	Some London underground stations are closed;	Some London underground stations are closed	<a href="https://www.theguardian.com/uknews/2020/mar/19/london-tube-to-closemany-stations-because-of-coronavirus">https://www.theguardian.com/uknews/2020/mar/19/london-tube-to-closemany-stations-because-of-coronavirus</a>



		Funerals and weddings limited to immediate family; Double the military force to help deal with the outbreak; Ramping up testing for the virus; powers to detain to police, public health and immigration officers Shut down All cafes, restaurants, gyms, leisure centers, nightclubs, theatres and cinemas	Funerals and weddings limited to immediate family Double the military force to help deal with the outbreak Ramping up testing for the virus powers to detain to police, public health and immigration officers Shut down All cafes, restaurants, gyms, leisure centers, nightclubs, theatres and cinemas	<a href="https://www.theguardian.com/world/2020/mar/19/church-of-england-restricts-weddingceremonies-to-five-people">https://www.theguardian.com/world/2020/mar/19/church-of-england-restricts-weddingceremonies-to-five-people</a> <a href="https://www.theguardian.com/world/live/2020/mar/18/coronavirus-live-news-updatesoutbreak-us-states-uk-australia-europe-euself-isolation-lockdown-latest-update">https://www.theguardian.com/world/live/2020/mar/18/coronavirus-live-news-updatesoutbreak-us-states-uk-australia-europe-euself-isolation-lockdown-latest-update</a> <a href="https://www.telegraph.co.uk/politics/2020/03/19/boris-johnson-news-latest-schoolscoronavirus-emergency-bill/">https://www.telegraph.co.uk/politics/2020/03/19/boris-johnson-news-latest-schoolscoronavirus-emergency-bill/</a> <a href="https://www.theguardian.com/politics/live/2020/mar/19/uk-coronavirus-live-boris-johnsonlondon-lockdown-williamson-refuses-to-ruleout-government-putting-london-in-lockdownby-weekend">https://www.theguardian.com/politics/live/2020/mar/19/uk-coronavirus-live-boris-johnsonlondon-lockdown-williamson-refuses-to-ruleout-government-putting-london-in-lockdownby-weekend</a> <a href="https://www.theguardian.com/politics/live/2020/mar/20/uk-coronavirus-live-confusionover-key-workers-list-as-schools-close">https://www.theguardian.com/politics/live/2020/mar/20/uk-coronavirus-live-confusionover-key-workers-list-as-schools-close</a>
U14	22-24/3	Gatherings of more than 2 people are banned; Non-essential stores closed; All social events including weddings, and but except funerals are banned Stay-at-home order Public sector prisons are put on lockdown in England and Wales	Gatherings of more than 2 people are banned; Non-essential stores closed; All social events including weddings, and but except funerals are banned Stay-at-home order Public sector prisons are put on lockdown in England and Wales	<a href="https://www.bbc.com/news/uk-52012432">https://www.bbc.com/news/uk-52012432</a> <a href="https://www.bbc.com/news/uk-52012432">https://www.bbc.com/news/uk-52012432</a> <a href="https://www.bbc.com/news/uk-52012432">https://www.bbc.com/news/uk-52012432</a> <a href="https://www.bbc.com/news/uk-52012432">https://www.bbc.com/news/uk-52012432</a> <a href="https://www.dailymail.co.uk/news/article8146703/Prisons-England-Wales-immediate-lockdown-no-visits-allowed-amid-coronavirus-pandemic.html">https://www.dailymail.co.uk/news/article8146703/Prisons-England-Wales-immediate-lockdown-no-visits-allowed-amid-coronavirus-pandemic.html</a>
U15	25-27/3	Emergency powers to the government by coronavirus act	Emergency powers to the government by coronavirus act	<a href="https://services.parliament.uk/bills/201921/coronavirus.htm">https://services.parliament.uk/bills/201921/coronavirus.htm</a>
U16	28-30/3			
U17	31/3-2/4			

## Appendix 2. Timeline of COVID-19 Policy Actions in the United States

Time code	dates	All during time	Policy	Link
A01	19-25/1	New York State Department of Health issues clinical guidance for Healthcare Providers across the state	New York State Department of Health issues clinical guidance for Healthcare Providers across the state	<a href="https://www.governor.ny.gov/news/governor-cuomooutlines-state-response-first-two-confirmed-casesnovel-coronavirus-united">https://www.governor.ny.gov/news/governor-cuomooutlines-state-response-first-two-confirmed-casesnovel-coronavirus-united</a>
A02	26/1-/2	President forms a coronavirus task force, headed by Health and Human Services (HHS) Secretary Alex Azar; Azar declares the coronavirus a public health emergency; Federal restriction on travel from China into the United States;	President forms a coronavirus task force, headed by Health and Human Services (HHS) Secretary Alex Azar	<a href="https://thehill.com/policy/healthcare/480627-whitehouse-announces-task-force-to-monitor-coronavirus">https://thehill.com/policy/healthcare/480627-whitehouse-announces-task-force-to-monitor-coronavirus</a>
			Azar declares the coronavirus a public health emergency	<a href="https://www.npr.org/sections/healthshots/2020/01/31/801686524/trump-declarescoronavirus-a-public-health-emergency-and-restrictstravel-from-c">https://www.npr.org/sections/healthshots/2020/01/31/801686524/trump-declarescoronavirus-a-public-health-emergency-and-restrictstravel-from-c</a>
			Federal restriction on travel from China into the United States	<a href="https://www.nytimes.com/2020/01/31/business/chinatrans-travel-coronavirus.html">https://www.nytimes.com/2020/01/31/business/chinatrans-travel-coronavirus.html</a>
A03	2-8/2			
A04	9-16/2			
A05	16-22/2			
A06	23-29/2	Federal travel ban from Iran and a "do not travel" warning for areas in Italy and South Korea Vice President Pence is tasked with leading the federal response to the coronavirus Washington State Governor Declares State of Emergency.	Federal travel ban from Iran and a "do not travel" warning for areas in Italy and South Korea	<a href="https://www.nytimes.com/2020/02/29/world/coronavirus-news.html#link-63f783d3">https://www.nytimes.com/2020/02/29/world/coronavirus-news.html#link-63f783d3</a>
			Vice President Pence is tasked with leading the federal response to the coronavirus	<a href="https://thehill.com/policy/healthcare/484858-trumpnames-pence-to-lead-coronavirus-response">https://thehill.com/policy/healthcare/484858-trumpnames-pence-to-lead-coronavirus-response</a>
			Washington State Governor Declares State of Emergency.	<a href="https://www.governor.wa.gov/news-media/insleeissues-covid-19-emergency-proclamation">https://www.governor.wa.gov/news-media/insleeissues-covid-19-emergency-proclamation</a>
A07	1-3/3	The Centers for Disease Control and Prevention lifted restrictions on testing for the coronavirus	The Centers for Disease Control and Prevention lifted restrictions on testing for the coronavirus	<a href="https://www.nytimes.com/2020/03/03/world/coronavirus-live-news-updates.html#link-79b1dbc8">https://www.nytimes.com/2020/03/03/world/coronavirus-live-news-updates.html#link-79b1dbc8</a>
A08	4-6/3	California declares State of Emergency;	California declares State of Emergency	<a href="https://www.gov.ca.gov/2020/03/04/governor-newsom-declares-state-of-emergency-to-help-stateprepare-for-broader-spread-of-covid-19/">https://www.gov.ca.gov/2020/03/04/governor-newsom-declares-state-of-emergency-to-help-stateprepare-for-broader-spread-of-covid-19/</a>

		Los Angeles County declares a public state of emergency; an \$8.3 billion coronavirus package is passed by Congress and signed by President	An \$8.3 billion coronavirus package is passed by Congress and signed by President	<a href="https://www.cnbc.com/2020/03/06/trump-signs8point3-billion-emergency-coronavirus-spendingpackage.html">https://www.cnbc.com/2020/03/06/trump-signs8point3-billion-emergency-coronavirus-spendingpackage.html</a>
		Los Angeles County declared a public state of emergency.	Los Angeles County declared a public state of emergency.	<a href="http://www.publichealth.lacounty.gov/phcom/mon/public/media/mediapubhpdetail.cfm?prid=2248">http://www.publichealth.lacounty.gov/phcom/mon/public/media/mediapubhpdetail.cfm?prid=2248</a>
A09	7-9/3	New York State - Declares State of Emergency in Order to Expedite Procurement of Cleaning Supplies and Testing Equipment	New York State - Declares State of Emergency in Order to Expedite Procurement of Cleaning Supplies and Testing Equipment	<a href="https://www.governor.ny.gov/news/governor-cuomoconfirms-13-additional-coronaviruses-cases-new-yorkstate-bringing-statewide">https://www.governor.ny.gov/news/governor-cuomoconfirms-13-additional-coronaviruses-cases-new-yorkstate-bringing-statewide</a>
A10	10-12/3	New York State closes schools, houses of worship and large gathering facilities in New Rochelle, NY; NY State deploys National Guard to State Health Department Command Post in New Rochelle, NY for community support efforts; NY State partners with Northwell health to set up Satellite Testing Facility in New Rochelle, NY	New York State closes schools, houses of worship and large gathering facilities in New Rochelle, NY; NY State deploys National Guard to State Health Department Command Post in New Rochelle, NY for community support efforts; NY State partners with Northwell health to set up Satellite Testing Facility in New Rochelle, NY	<a href="https://www.governor.ny.gov/news/governor-cuomoaccepts-recommendation-state-health-commissionernew-emergency-measures-contain">https://www.governor.ny.gov/news/governor-cuomoaccepts-recommendation-state-health-commissionernew-emergency-measures-contain</a>
		NY State moves State Universities to distance learning	New York City declares a state of emergency.	<a href="https://www1.nyc.gov/office-of-the-mayor/news/13820/mayor-de-blasio-issues-state-emergency">https://www1.nyc.gov/office-of-the-mayor/news/13820/mayor-de-blasio-issues-state-emergency</a>
		A federal travel ban from European Union countries;	Houston, TX declares a local health emergency	<a href="https://houstontx.gov/mayor/press/2020/public-health-emergency-declared-covid-19.html">https://houstontx.gov/mayor/press/2020/public-health-emergency-declared-covid-19.html</a>
		Houston, TX declares a local health emergency	NY State moves State Universities to distance learning	<a href="https://www.governor.ny.gov/news/during-novelcoronavirus-briefing-governor-cuomo-announces-newyork-state-will-contract-28">https://www.governor.ny.gov/news/during-novelcoronavirus-briefing-governor-cuomo-announces-newyork-state-will-contract-28</a>
		New York City declares a state of emergency;	A federal travel ban from European Union countries	<a href="https://www.cnn.com/2020/03/12/politics/donaldtrump-coronavirus-europe-travel/index.html">https://www.cnn.com/2020/03/12/politics/donaldtrump-coronavirus-europe-travel/index.html</a>
		Dallas County, TX declares a local disaster for public health emergency;	Dallas County, TX declares a local disaster for public health emergency	<a href="https://www.dallasnews.com/news/publichealth/2020/03/13/dallas-county-declares-state-of-emergency-after-confirming-5-more-cases-of-coronavirus/">https://www.dallasnews.com/news/publichealth/2020/03/13/dallas-county-declares-state-of-emergency-after-confirming-5-more-cases-of-coronavirus/</a>
A11	13-15/3	President declares a national emergency freeing up nearly \$50 billion in disaster funds to address the virus	President declares a national emergency freeing up nearly \$50 billion in disaster funds to address the virus	<a href="https://www.npr.org/2020/03/13/815420295/trumpto-discuss-coronavirus-amid-growing-crisis-scrutiny-ofhis-response">https://www.npr.org/2020/03/13/815420295/trumpto-discuss-coronavirus-amid-growing-crisis-scrutiny-ofhis-response</a>

		<p>Federal emergency order to waive applicable rules and regulations for healthcare providers</p> <p>NY State bans events with over 500 people</p> <p>A federal travel ban from the UK and Ireland;</p> <p>Washington State closes all schools, bans gatherings of over 250;</p> <p>CDC issues guidance recommending no events of 50 or more;</p> <p>NY City closes schools;</p> <p>Los Angeles closes dining and recreational venues</p>	<p>Los Angeles closes dining and recreational venues</p> <p>NY City closes schools</p> <p>CDC issues guidance recommending no events of 50 or more</p> <p>Washington State closes all schools, bans gatherings of over 250</p> <p>Federal emergency order to waive applicable rules and regulations for healthcare providers</p> <p>NY State bans events with over 500 people</p> <p>A federal travel ban from the UK and Ireland</p>	<p><a href="https://ktla.com/news/local-news/l-a-county-officialsprovide-update-on-coronavirus/">https://ktla.com/news/local-news/l-a-county-officialsprovide-update-on-coronavirus/</a></p> <p><a href="https://www.nytimes.com/2020/03/15/nyregion/nycschools-closed.html">https://www.nytimes.com/2020/03/15/nyregion/nycschools-closed.html</a></p> <p><a href="https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/mass-gatherings-readyfor-covid-19.html">https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/mass-gatherings-readyfor-covid-19.html</a></p> <p><a href="https://www.seattletimes.com/education-lab/insleeannounces-all-washington-k-12-schools-to-close-in-aneffort-to-slow-the-spread-of-coronavirus/">https://www.seattletimes.com/education-lab/insleeannounces-all-washington-k-12-schools-to-close-in-aneffort-to-slow-the-spread-of-coronavirus/</a></p> <p><a href="https://www.phe.gov/emergency/news/healthactions/section1135/Pages/covid19-13March20.aspx">https://www.phe.gov/emergency/news/healthactions/section1135/Pages/covid19-13March20.aspx</a></p> <p><a href="https://www.reuters.com/article/us-healthcoronavirus-usa-new-york/new-york-state-bansgatherings-exceeding-500-people-on-coronavirus-fearsidUSKBN20Z37G">https://www.reuters.com/article/us-healthcoronavirus-usa-new-york/new-york-state-bansgatherings-exceeding-500-people-on-coronavirus-fearsidUSKBN20Z37G</a></p> <p><a href="https://www.politico.com/news/2020/03/14/whitehouse-adds-uk-ireland-to-travel-ban-129470">https://www.politico.com/news/2020/03/14/whitehouse-adds-uk-ireland-to-travel-ban-129470</a></p>
A12	16-18/3	<p>National guidelines to avoid restaurants and bars, limit gatherings to 10 or fewer people, and work and engage in schooling from home when possible</p> <p>NY State closes schools</p> <p>NY, NJ, CT, AS close dining, drinking, and entertainment business for on-premises</p> <p>US and Canada close the border</p> <p>California enacts emergency legislation to fight COVID-19</p> <p>Congress passes President signs a coronavirus relief bill which includes free COVID-19 testing and paid medical and family leave</p>	<p>National guidelines to avoid restaurants and bars, limit gatherings to 10 or fewer people, and work and engage in schooling from home when possible</p> <p>NY State closes schools</p> <p>NY, NJ, CT, AS close dining, drinking, and entertainment business for on-premises</p> <p>US and Canada close the border</p> <p>California enacts emergency legislation to fight COVID-19</p>	<p><a href="https://www.counton2.com/health/coronavirus/president-trump-issues-new-recommendations-includinglimiting-gatherings-to-less-than-10-people/">https://www.counton2.com/health/coronavirus/president-trump-issues-new-recommendations-includinglimiting-gatherings-to-less-than-10-people/</a></p> <p><a href="https://www.governor.ny.gov/news/governor-cuomosigns-executive-order-closing-schools-statewide-twoweeks">https://www.governor.ny.gov/news/governor-cuomosigns-executive-order-closing-schools-statewide-twoweeks</a></p> <p><a href="https://www.governor.ny.gov/news/audio-rushtranscript-amid-lack-federal-direction-governor-cuomogovernor-murphy-and-governor">https://www.governor.ny.gov/news/audio-rushtranscript-amid-lack-federal-direction-governor-cuomogovernor-murphy-and-governor</a></p> <p><a href="https://www.washingtonpost.com/world/2020/03/18/coronavirus-latest-news/?utm_campaign=wp_the_daily_202&amp;utm_medium=email&amp;utm_source=newsletter&amp;wpsrc=nl_daily202#link-J6GAMON3JZFZNIJ3MQNIPUTY24">https://www.washingtonpost.com/world/2020/03/18/coronavirus-latest-news/?utm_campaign=wp_the_daily_202&amp;utm_medium=email&amp;utm_source=newsletter&amp;wpsrc=nl_daily202#link-J6GAMON3JZFZNIJ3MQNIPUTY24</a></p> <p><a href="https://www.gov.ca.gov/2020/03/17/governor-newsom-signs-emergency-legislation-to-fight-covid-19/">https://www.gov.ca.gov/2020/03/17/governor-newsom-signs-emergency-legislation-to-fight-covid-19/</a></p>

			Congress passes President signs a coronavirus relief bill which includes free COVID-19 testing and paid medical and family leave	<a href="https://www.congress.gov/bill/116th-congress/housebill/6201">https://www.congress.gov/bill/116th-congress/housebill/6201</a>
A13	19-21/3	NY State closes non-essential businesses except for work from-home	NY State closes non-essential businesses except for work from-home	<a href="https://www.governor.ny.gov/news/governor-cuomoissues-guidance-essential-services-under-new-yorkstate-pause-executive-order">https://www.governor.ny.gov/news/governor-cuomoissues-guidance-essential-services-under-new-yorkstate-pause-executive-order</a>
		US and Mexico close the border	US and Mexico close the border	<a href="https://www.politico.com/news/2020/03/20/us-mexico-ready-to-partially-close-border-138946">https://www.politico.com/news/2020/03/20/us-mexico-ready-to-partially-close-border-138946</a>
A14	22-24/3	FEMA authorized to fund the activation of U.S. National Guard units in California, New York, and Washington FEMA invokes the Defense Production Act to acquire coronavirus testing kits Federal major disaster declaration for California. Washington State issues self isolation requirement	FEMA authorized to fund the activation of U.S. National Guard units in California, New York, and Washington	<a href="https://www.cnn.com/2020/03/22/politics/trumpcoronavirus-task-force-briefing/index.html">https://www.cnn.com/2020/03/22/politics/trumpcoronavirus-task-force-briefing/index.html</a>
			FEMA invokes the Defense Production Act to acquire coronavirus testing kits	<a href="https://thehill.com/policy/healthcare/489200-femachief-says-defense-production-act-will-be-used-forcoronavirus-test-kits">https://thehill.com/policy/healthcare/489200-femachief-says-defense-production-act-will-be-used-forcoronavirus-test-kits</a>
			Federal major disaster declaration for California.	<a href="https://www.whitehouse.gov/briefingsstatements/president-donald-j-trump-approvescalifornia-disaster-declaration-7/">https://www.whitehouse.gov/briefingsstatements/president-donald-j-trump-approvescalifornia-disaster-declaration-7/</a>
			Washington State issues self isolation requirement	<a href="https://www.governor.wa.gov/news-media/stay-homestay-healthy-address-transcript">https://www.governor.wa.gov/news-media/stay-homestay-healthy-address-transcript</a>
A15	25-27/3	The Defense Production Act invoked to produce ventilators; Stay at home orders (or similar policies) in States: Minnesota, Washington State, Oregon, California, New Mexico, Wisconsin, Illinois, Louisiana, Indiana, Ohio, Michigan, New York, West Virginia, Delaware, New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont Federal major disaster	the Defense Production Act invoked to produce ventilators	<a href="https://thehill.com/homenews/administration/489909trump-uses-defense-production-act-to-require-gm-to-make-ventilators">https://thehill.com/homenews/administration/489909trump-uses-defense-production-act-to-require-gm-to-make-ventilators</a>
			Stay at home orders (or similar policies) in States: Minnesota, Washington State, Oregon, California, New Mexico, Wisconsin, Illinois, Louisiana, Indiana, Ohio, Michigan, New York, West Virginia, Delaware, New Jersey, Connecticut, Rhode Island	<a href="https://www.nbcnews.com/health/health-news/here-are-stay-home-orders-across-country-n1168736">https://www.nbcnews.com/health/health-news/here-are-stay-home-orders-across-country-n1168736</a>

		declarations for Florida, Iowa, Louisiana, New York, and Texas.	Federal major disaster declarations for Florida, Iowa, Louisiana, New York, and Texas.	<a href="https://www.nbcnews.com/health/healthnews/blog/2020-03-25-coronavirus-news1168156/ncrd1169071#blogHeader">https://www.nbcnews.com/health/healthnews/blog/2020-03-25-coronavirus-news1168156/ncrd1169071#blogHeader</a>
A16	28-30/3	Federal major disaster declaration for Colorado CDC Strong Travel Advisory, to be administered by the Governors, for NY, CT, and NJ	Federal major disaster declaration for Colorado CDC Strong Travel Advisory, to be administered by the Governors, for NY, CT, and NJ	<a href="https://www.denverpost.com/2020/03/28/coronavirus-colorado-trump-disaster-congress/">https://www.denverpost.com/2020/03/28/coronavirus-colorado-trump-disaster-congress/</a>
A17	31/3-2/4	30 Days to Slow the Spread - President issues guidelines for America		<a href="https://www.npr.org/2020/03/30/822448199/how-15days-became-45-trump-extends-guidelines-to-slowcoronavirus">https://www.npr.org/2020/03/30/822448199/how-15days-became-45-trump-extends-guidelines-to-slowcoronavirus</a>