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Reporting Summary

Nature Research wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Research policies, see <u>Authors & Referees</u> and the <u>Editorial Policy Checklist</u>.

Statistics

For	all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.
n/a	Confirmed
	The exact sample size (<i>n</i>) for each experimental group/condition, given as a discrete number and unit of measurement
	A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
	The statistical test(s) used AND whether they are one- or two-sided Only common tests should be described solely by name; describe more complex techniques in the Methods section.
	A description of all covariates tested
	A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
	A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
	For null hypothesis testing, the test statistic (e.g. <i>F</i> , <i>t</i> , <i>r</i>) with confidence intervals, effect sizes, degrees of freedom and <i>P</i> value noted <i>Give P values as exact values whenever suitable</i> .
\boxtimes	For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
	For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
	Estimates of effect sizes (e.g. Cohen's <i>d</i> , Pearson's <i>r</i>), indicating how they were calculated
	Our web collection on <u>statistics for biologists</u> contains articles on many of the points above.

Software and code

Policy information about <u>availability of computer code</u>					
Data collection	Computer code was not used to collect data.				
Data analysis	Python version 3.8, R version 3.5, Stata MP				

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors/reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research guidelines for submitting code & software for further information.

Data

Life sciences

Policy information about availability of data

All manuscripts must include a data availability statement. This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A list of figures that have associated raw data
- A description of any restrictions on data availability

All data used in this analysis is from free, publicly available sources, and can be accessed at https://github.com/bolliger32/gpl-covid

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

Behavioural & social sciences Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see <u>nature.com/documents/nr-reporting-summary-flat.pdf</u>

Behavioural & social sciences study design

Study description	The study analyzes six different countries with varying policy implementations to estimate the impact of these anti-contagion policies on the growth rate of infections.
Research sample	The research sample consists of COVID-19 case counts from China, Korea, Italy, France, Iran, and the United States.
Sampling strategy	We chose countries to analyze among those that accounted for the majority of the global confirmed caseload at the beginning of our analysis (3/14/2020). We chose a selection of countries based on global interest and the languages spoken by the authors (for ease of data collection). Within each country, we collected all available data on active infections (where available) and cumulative infections, in addition to all available policy data. No sampling was required.
Data collection	Data collection is detailed in the appendix.
Timing	Data collection began on March 14, 2020 and ended on April 12, 2020.
Data exclusions	Case data were excluded from dates with < 10 confirmed cases because of concerns about statistical reliability.
Non-participation	No participants dropped out or declined participation because this study did not directly involve them.
Randomization	Randomization was not possible for this study because the paper investigates the growth rate of COVID-19 cases with policy interventions or in the absence thereof.

All studies must disclose on these points even when the disclosure is negative.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
\boxtimes	Antibodies
\boxtimes	Eukaryotic cell lines
\boxtimes	Palaeontology
\boxtimes	Animals and other organisms
\boxtimes	Human research participants

Clinical data

Methods

n/a	Involved in the study
\boxtimes	ChIP-seq
\times	Flow cytometry

MRI-based neuroimaging