

Data Insights: Covid-2019 Monitor

Friday, April 24, 2020

The global scorecard

The worst ten countries New cases New Deaths New confirmed cases +26.543 +3,179 by continent US Americas Russia +4,774 UK +638 36,865 Spain +4,635 France +516 UK +4,583 +464 Italy Europe Brazil +3,735 Spain +440 28,234 Turkey +3,116 Brazil +407 +2,646 Belgium Italy +228 Germany +2,337 Germany +227Canada +1,920 Canada +172 India +1,684 Netherlands +123+55,973 +6,394 World +80.071 World +7.428 Top ten 70% 86% Top ten 1/31/2020 2/29/2020 3/31/2020 12/31/2019 100,000 8.0% As of Apr 24 Fatality rate 7.1% 90,000 World 7.0% 3.513 bp of population infected 80,000 6.0% 30.6 median population age 70,000 Daily new cases and deaths 5.0% 60,000 2,668,734 cases cumulative +80,071 cases today 50,000 4.0% 40,000 3.0% 30,000 190,301 deaths cumulative 2.0% +7,428 deaths today 20,000 1.0% 10,000 0.0% Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21

For more information contact us:

Source: ECDC, TrendMacro calculations

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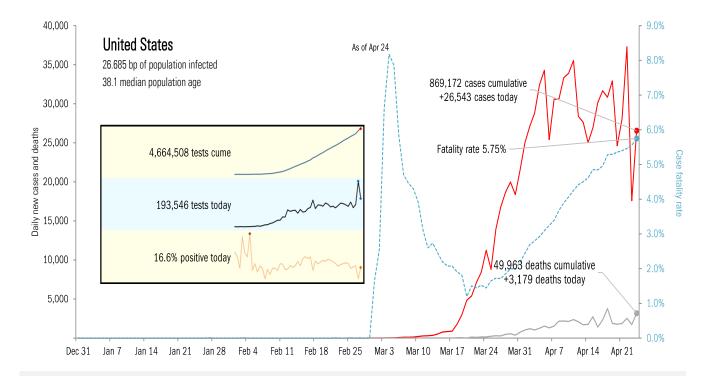
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National and state-by-state data do not line up because of different sources

The ten worst US states											
New cas	es	New Deaths	3	New in	hospital	Qume ca	ases	Cume de	eaths	Cume in	hospital
NY	+6,244	NY	+438	MA	+4,493	NY	263,460	NY	15,740	NY	57,103
NJ	+4,124	NJ	+305	FL	+224	NJ	99,989	NJ	5,368	FL	4,693
MA	+3,079	MA	+178	VA	+172	MA	46,023	MI	2,977	MA	4,493
CA	+1,973	MI	+164	MD	+152	CA	37,369	MA	2,360	GA	4,069
IL	+1,826	IL	+123	CO	+120	IL	36,934	IL	1,688	MD	3,477
PA	+1,602	MD	+117	GA	+110	PA	36,647	CT	1,639	OH	2,960
MI	+1,325	CA	+115	OH	+78	MI	35,291	LA	1,540	CO	2,123
VA	+1,176	CT	+95	MN	+52	FL.	28,832	CA	1,469	VA	1,753
MD	+962	FL.	+69	AL	+38	LA	25,739	PA	1,421	WI	1,318
TX	+875	LA	+67	MS	+36	CT	23,100	FL.	979	KY	1,105
	+23,186		+1,671		+5,475		633,384		35,181		83,094
VII states	+32,170	All states	+1,911	All states	+5,643	All states	859,318	All states	44,014	All states	91,108
Top ten	72%	Top ten	87%	Top ten	97%	Topten	74%	Top ten	80%	Top ten	91%

Five most improved US states

Fewer dai	ly cases	Fewer new deat	hs	Fewer new hos	pitalization	s Most recoveries	
CT	-1,478	PA	-259	GA	-70	TX	+684
FL.	-291	MA	-43	SC	-61	MN	+219
IL	-223	NY	-36	AK	-36	TN	+181
SC	-166	CT	-26	W	-34	SD	+127
CA	-162	WA	-20	ОН	-25	OK	+112
	CT FL IL SC	FL -291 IL -223 SC -166	CT -1,478 PA FL -291 MA IL -223 NY SC -166 CT	CT -1,478 PA -259 FL -291 MA -43 IL -223 NY -36 SC -166 CT -26	CT -1,478 PA -259 GA FL -291 MA -43 SC IL -223 NY -36 AK SC -166 CT -26 WI	CT -1,478 PA -259 GA -70 FL -291 MA -43 SC -61 IL -223 NY -36 AK -36 SC -166 CT -26 WI -34	CT -1,478 PA -259 GA -70 TX FL -291 MA -43 SC -61 MN IL -223 NY -36 AK -36 TN SC -166 CT -26 WI -34 SD



Source: States and test data Covid Tracking Project, US data ECDC, TrendMacro calculations

Recommended reading

Stopping a Lawsuit Epidemic

Wall Street Journal
April 23, 2020

New York Finds Virus Marker in 13.9%, Suggesting Wide Spread

Angelica LaVito, Kristen V Brown, and Keshia Clukey *Bloomberg*April 23, 2020

US business groups seek protection from coronavirus lawsuits

Andrew Edgecliffe-Johnson and Lauren Fedor *Financial Times* April 23, 2020

Switch to Bachelier Options Pricing Model

CME Group April 21, 2020

Policy Implications Of Models Of The SpreaPolicy
Implications Of Models Of The Spread Of
Coronavirus: Perspectives And Opportunities For
Economistsonavirus: Perspectives And Opportunities
For Economists

Christopher Avery et al.

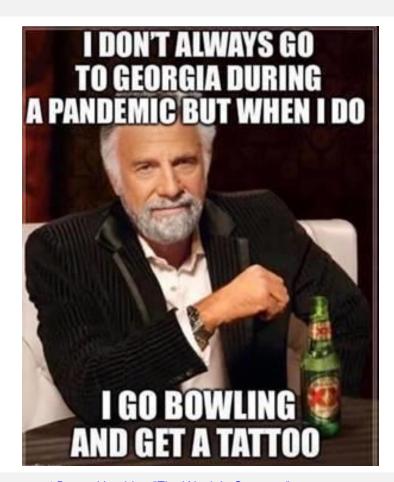
National Bureau Of Economic Research

April 2020

The culture of corona

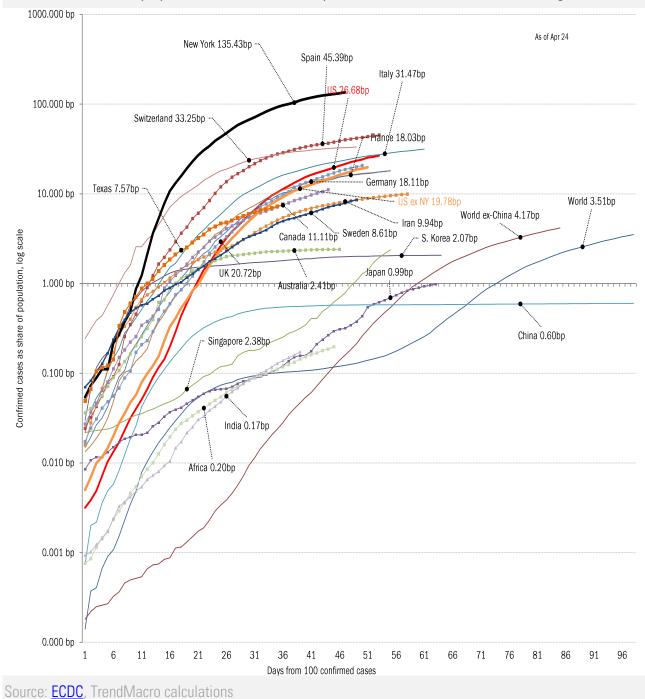
Roger Kimball New Criterion May 2020

Meme of the day

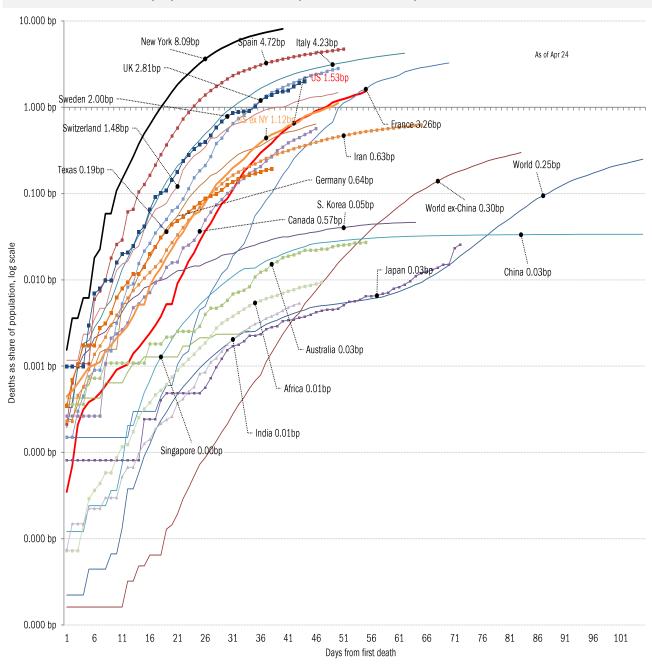


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

The coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

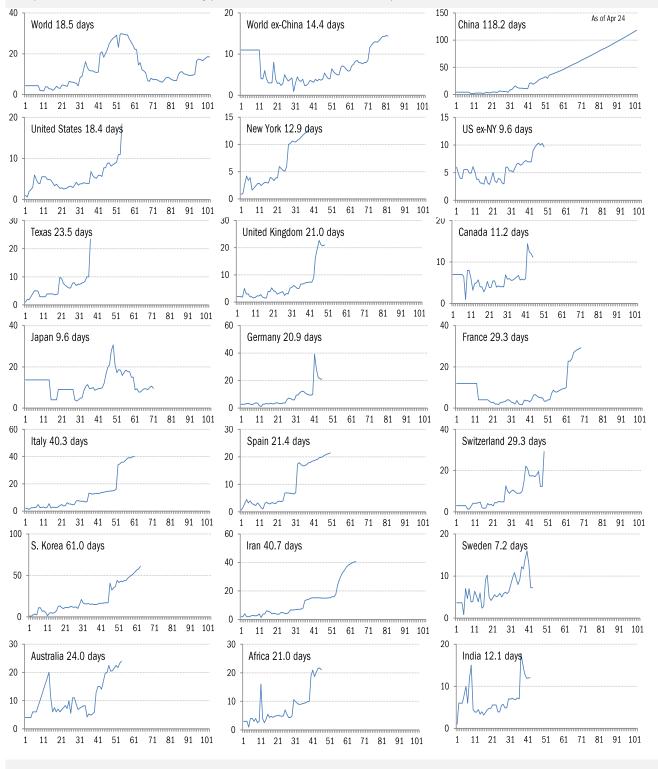


The coronavirus <u>mortality</u> accelerometer . . . tracking the world's fatality curves *Share of deceased population from day of first fatality*

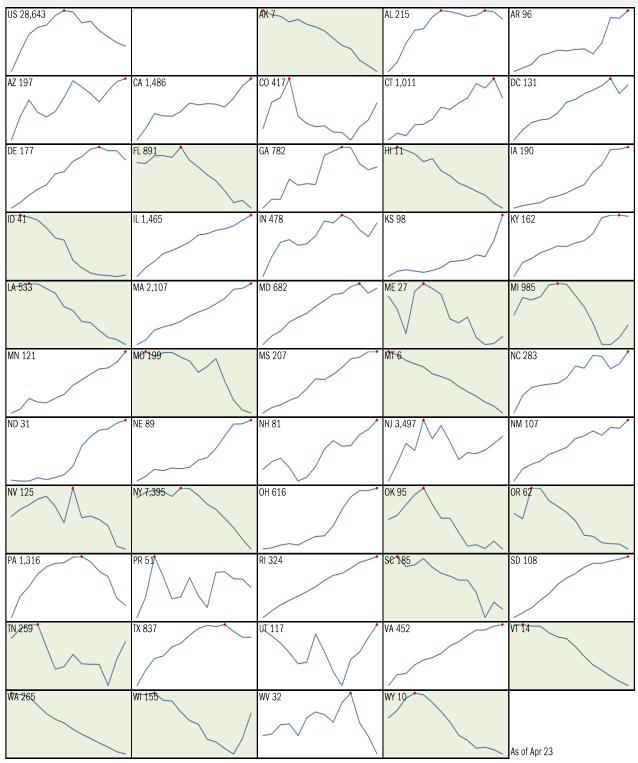


Our most reliable evidence of slowing the Moore's law of Covid-2019 Vertical: number of days it takes to double deaths Horizontal: days from first death Progress means seeing the line move up and to the right...

Extrapolated between actual doubling points. The most anomalous extrapolations are smoothed.

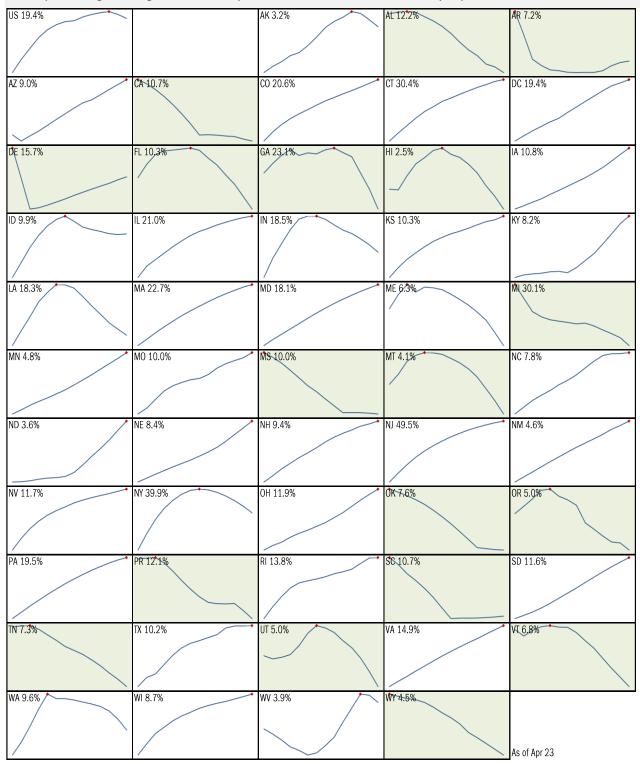


Requirement to <u>Open Up America Again</u>: ■ 14-day "downward trajectory" in new cases *14-day moving average, last 14 days Most recent value displayed*



Source: Covid Tracking Project, TrendMacro calculations

Alt requirement to <u>Open Up America Again</u>: ■ 14-day "downward trajectory" in pos tests 14-day moving average, last 14 days Most recent value displayed

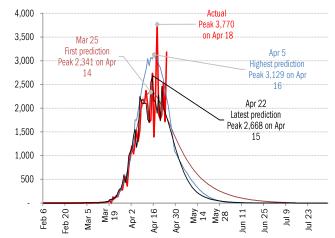


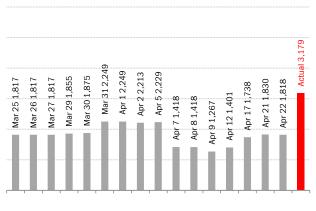
Source: Covid Tracking Project, TrendMacro calculations

Reality-checking the models: actuals versus **IHME** predictions

New daily fatalities

Actual versus first, highest and latest model mean predictions



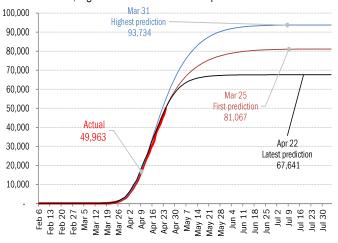


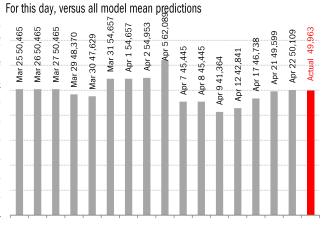
For this day, versus all model mean predictions

As of Apr 24

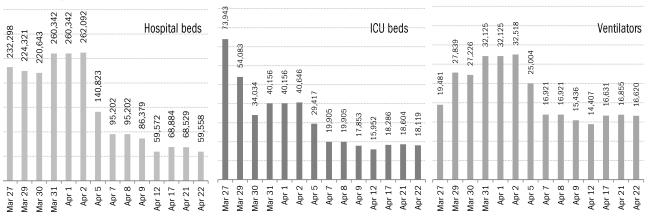
Cumulative fatalities

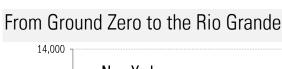
Actual versus first, highest and latest model mean predictions

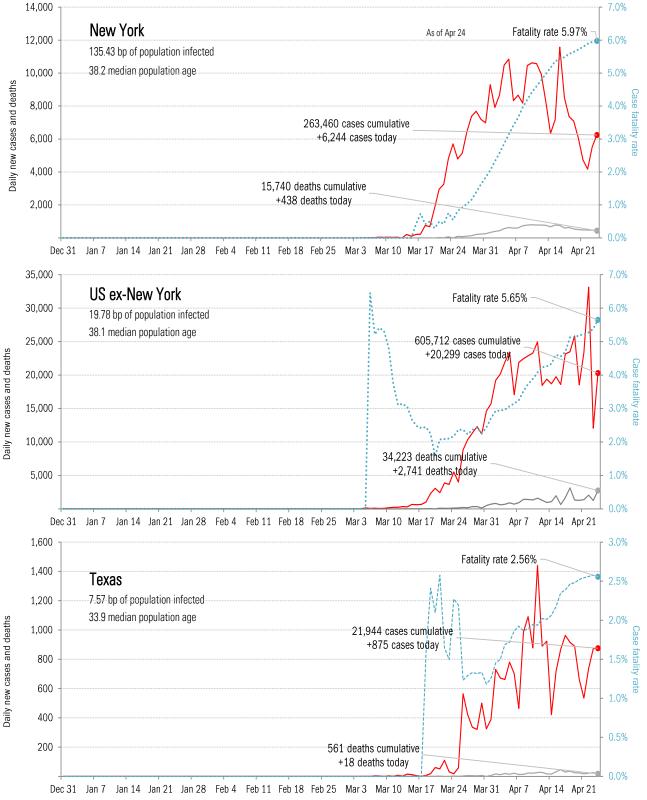




Healthcare system stress, peak estimated at each model revision







Patient zero... and then everyone else

