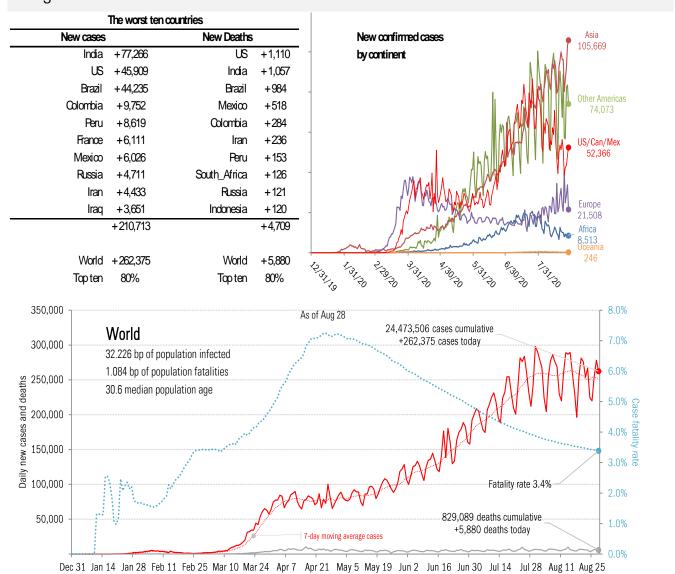


Data Insights: Covid-2019 Monitor

Friday, August 28, 2020

The global scorecard



Source: ECDC, TrendMacro calculations

For more information contact us:

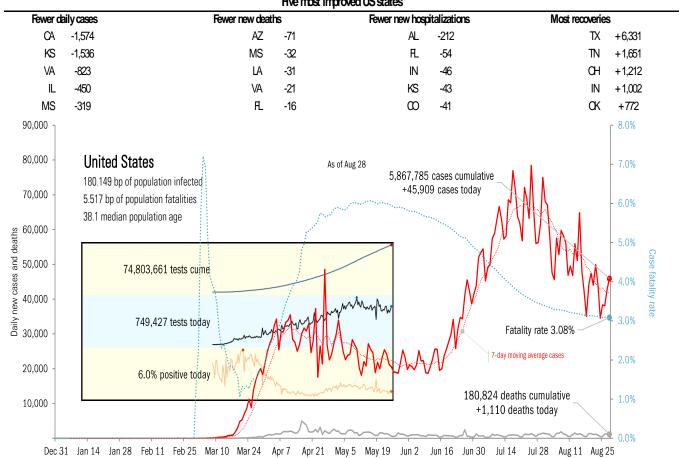
Donald Luskin: 312 273 6766 don@trendmacro.com
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Copyright 2020 Trend Macrolytics LLC. All rights reserved. This document is not to be forwarded to individuals or organizations not authorized by Trend Macrolytics LLC to receive it. For information purposes only; not to be deemed to be recommendations for buying or selling specific securities or to constitute personalized investment advice. Derived from sources deemed to be reliable, but no warranty is made as to accuracy.

The US score	ecard	National and	National and state-by-state data do not line up because of different sources						
The ten worst US states									
Now cases	Now Doaths	Now in hospital	വണം നടരാട	O mo doathe	O ma in hosnital				

	ine ten worst US states										
New cas	es	New Deaths	S	New in	hospital	Qume c	ases	Cume d	eaths	Qume in	hospital
TX	+5,600	TX	+265	FL.	+316	CA	683,529	NY	25,309	NY	89,995
CA	+4,430	CA	+143	GA	+188	FL.	611,991	NJ	15,921	R.	38,163
FL.	+3,269	FL.	+139	IN	+142	TX	597,737	CA	12,550	GA	24,127
GA	+2,484	GA	+82	СH	+107	NY	432,131	TX	12,070	NJ	22,560
NC	+2,091	SC	+55	CT	+93	GA	263,074	FL.	11,011	AZ	21,426
TN	+1,826	AZ	+33	VA	+86	IL	228,751	MA	9,007	VA	15,938
AL	+1,769	СH	+32	TN	+74	AZ	200,139	IL	8,186	MD	14,141
IL	+1,707	AL	+31	CK	+64	NJ	190,613	PA	7,635	AL	14,005
IA	+1,551	MS	+26	KY	+55	NC	161,076	MI	6,706	СH	13,150
MO	+1,512	TN	+25	MN	+52	TN	149,179	GA	5,393	MA	12,318
	+26,239		+831		+1,177		3,518,220		113,788		265,823
All states	+44,264	All states	+1,129	All states	+1,668	All states	5,837,507	All states	172,731	All states	365,993
Top ten	59%	Top ten	74%	Top ten	71%	Top ten	60%	Topten	66%	Top ten	73%

Five most improved US states



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

Recommended reading

Most Approve of National Response to COVID-19 in 14 Advanced Economies

Kat Devlin and Aidan Connaughton Pew Research Center August 27, 2020

<u>US and UK are bottom of the pile in rankings of governments' handling of coronavirus pandemic</u>

Richard Allen Greene *CNN*August 27, 2020

Department of Justice Requesting Data From
Governors of States that Issued COVID-19 Orders
that May Have Resulted in Deaths of Elderly Nursing
Home Residents

Department of Justice August 26, 2020

44% of Californians report clinical levels of anxiety, depression during COVID-19 pandemic

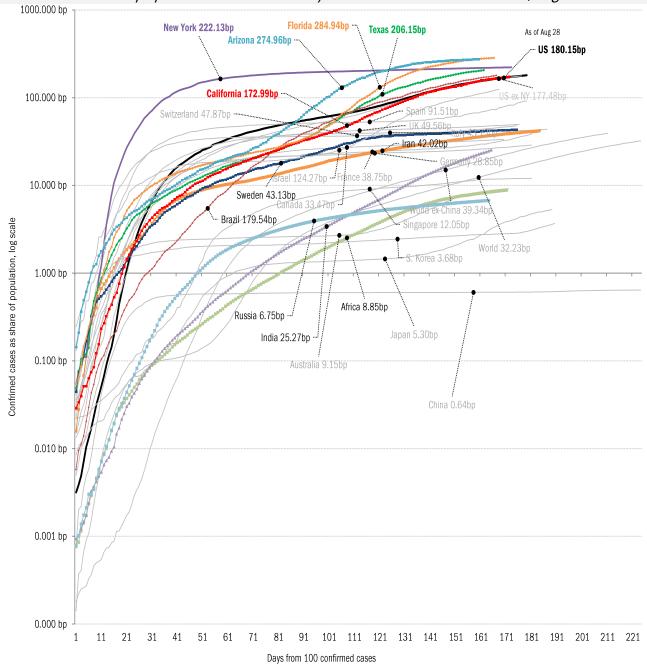
Los Angeles Times August 25, 2020

Meme of day

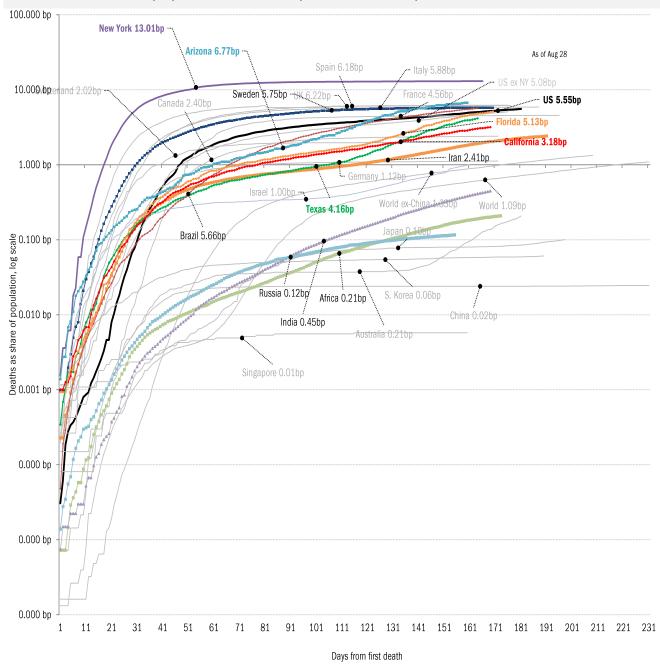


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

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



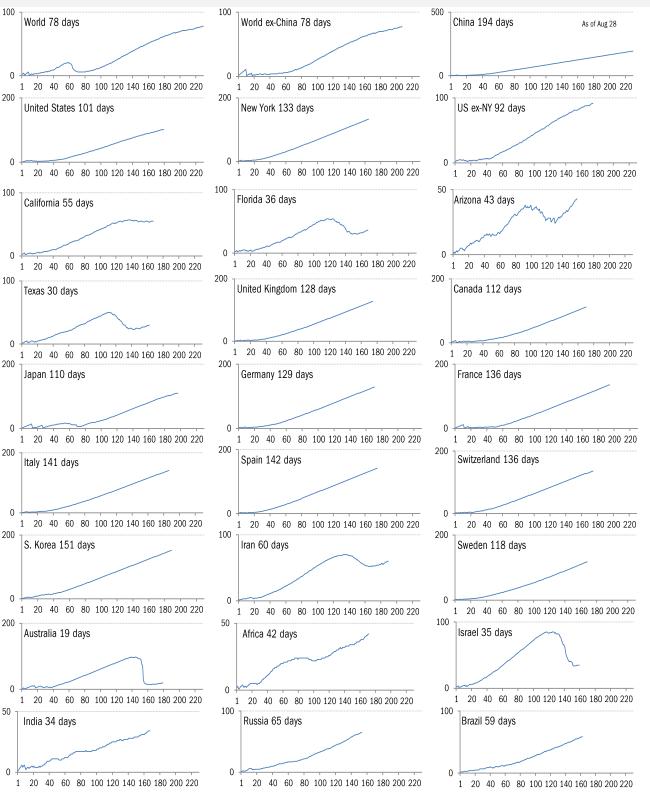
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*



Our most reliable evidence of slowing exponential growth of Covid-2019

Vertical: days to double deaths Horizontal: days from first death

Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread

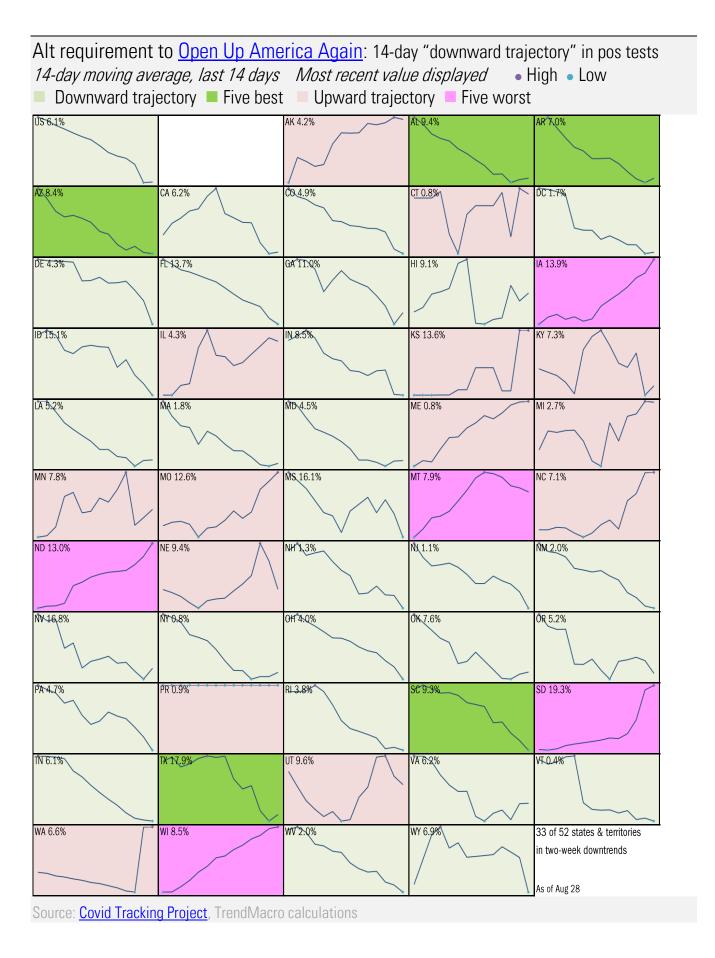


Requirement to Open Up America Again: 14-day "downward trajectory" in new cases 14-day moving average, last 14 days Most recent value displayed • High • Low Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst US 44,090 ÅR 572 AX 668 CQ 303 CT 103 **DC** 55 CA/6,456 FL 3,918 GA 2,458 HI 280 DE 50 IA 675 ID 332 IL 1,930 IN 924 KS 757 KY 593 LA 862 MA 403 MD 565 ME 23 MI/723 MN 671 NC 1,447 MO 1,127 MS 765 MT 109 ND 188 NH 20 NJ 287 NM 137 NE 249 NV 612 OH 957 OR 247 NY 621 **OK** 675 PA 645 PR 496 RI 102 SC 764 SD 164 TN 1,476 IX 6,012 Ů**₹**367 VA 904 VT 7 WA 325 ŴL 742 WV 106 WY 43 38 of 52 states & territories

Source: Covid Tracking Project, TrendMacro calculations

in two-week downtrends

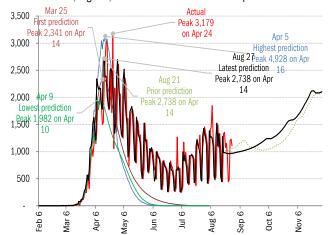
As of Aug 28



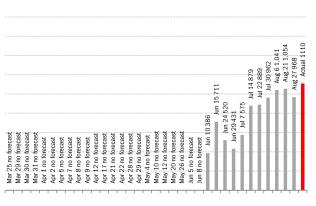
Reality-checking the models: actuals versus **IHME** predictions

New daily fatalities

Actual versus first, highest, lowest and latest model mean predictions



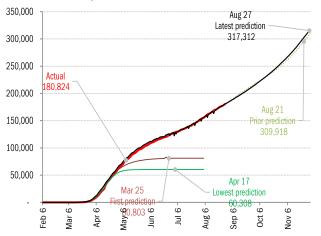
For this day, versus all model mean predictions



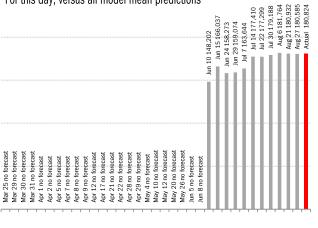
As of Aug 28

Cumulative fatalities

Actual versus first, highest, lowest and latest model mean predictions



For this day, versus all model mean predictions



Healthcare system stress, peak and ultimate estimated at each model revision

