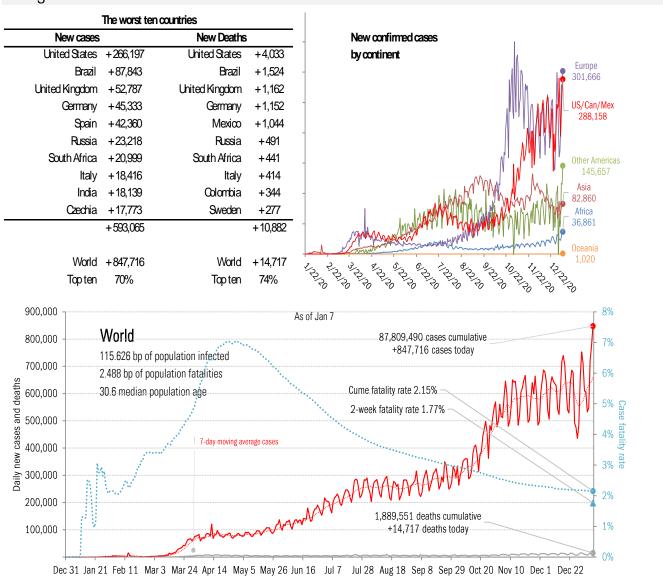


Data Insights: Covid-2019 Monitor

Friday, January 8, 2021

The global scorecard



Source: Johns Hopkins, Covid Tracking Project, TrendMacro calculations

For more information contact us:

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

Copyright 2021 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 scorecard

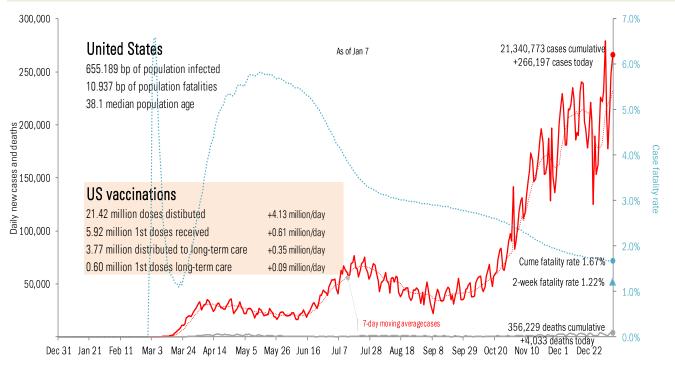
Tho	ton	word	110	etates

New cases	New Deaths	New in hospital	Cume cases	Cume deaths	Cume in hospital	Hospital use ICU use
CA +36,385	CA +583	TX +156	CA 2,518,611	NY 31,164	NY 89,995	RI 90% AL 96%
TX +24,578	TX +393	ID +112	TX 1,891,741	TX 28,938	FL 65,622	GA 89% GA 94%
FL +19,334	AZ +297	VA +75	FL 1,404,374	CA 28,045	NJ 49,515	SC 88% RI 91%
NY +17,636	PA + 265	NC +67	NY 1,075,312	FL 22,817	GA 43,796	MD 86% OK 91%
NC +10,398	IL +206	AL +48	IL 1,008,045	NJ 19,646	AZ 42,112	DC 84% CA 89%
OH +10,251	MI +206	MO +46	OH 753,068	IL 18,941	OH 40,469	FL 83% NM 89%
AZ +9,913	NY +199	AZ +43	PA 693,087	PA 17,179	IN 36,517	CA 81% TN 89%
PA +9,698	FL +170	LA +40	TN 634,237	MI 13,873	AL 36,411	PA 81% TX 88%
TN +9,000	NC +137	CA +31	GA 609,868	MA 12,909	MD 27,900	AZ 81% MS 87%
IL +8,757	NJ +123	IN +30	NC 592,746	GA 11,230	MN 22,541	MA 81% SC 87%
+ 155,950	+2,579	+648	11,181,089	204,742	454,878	
All states + 266,197	+4,033	-94	All states 21,340,773	356,229	716,151	All states 76% 80%
Top ten 59%	64%	-689%	Topten 52%	57%	64%	Median 73% 78%

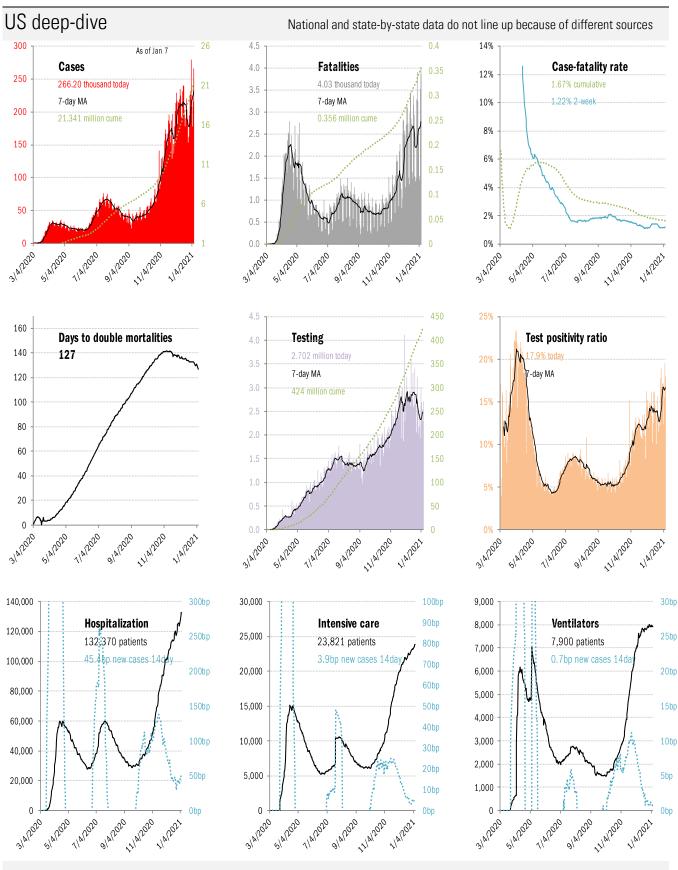
Some states not reporting

Five most improved US states

Fewer daily cases	Fewer new deaths	Fewer new hosp	italizations Most recoveries
KS -5,501	KS -13	CA -3	MA +31,850
MS -2,791	PA -10	3 NY -1	92 TX +17,462
LA -2,346	IA -56	KS -1	76 PA +13,816
KY -816	AR -40	GA -1	71 OH +7,944
IA -716	MS -38	TX -1	64 TN +6,796

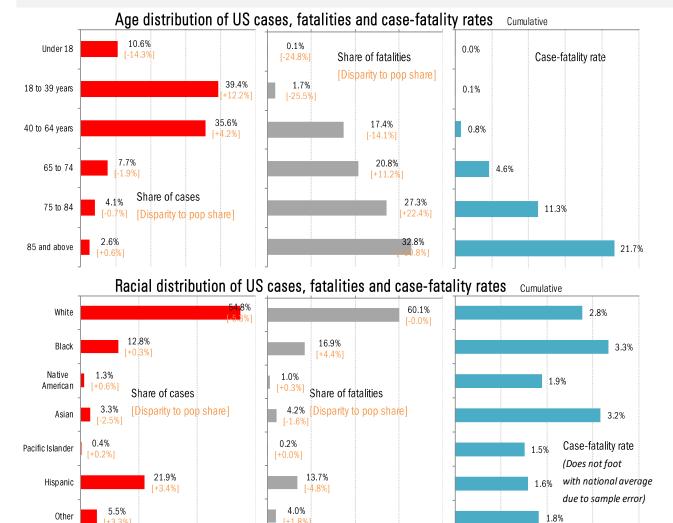


Source: Covid Tracking Project, Dept. of Health and Human Services, CDC, TrendMacro calculations

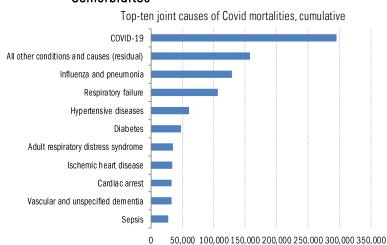


Source: Covid Tracking Project, TrendMacro calculations

US deep-dive on the demographics of age, race and health



Comorbidites



For 6% of the deaths, COVID-19 was the only cause mentioned. For deaths with conditions or causes in addition to COVID-19, on average, there were 2.9 additional conditions or causes per death.

Source: Distributions CDC, Comorbidities CDC, TrendMacro calculations

Recommended reading

A deep learning framework for drug repurposing via emulating clinical trials on real-world patient data

Ruoqi Liu et al.

Nature Machine Intelligence January 4, 2021

<u>Vaccine scepticism among medics sparks alarm in Europe and US</u>

Erika Solomon, Kiran Stacey, Leila Abboud, Davide Ghiglione *Financial Times* January 6, 2021 <u>Scientists are monitoring a coronavirus mutation that</u> <u>could affect the strength of vaccines</u>

Andrew Joseph Stat News January 7, 2021

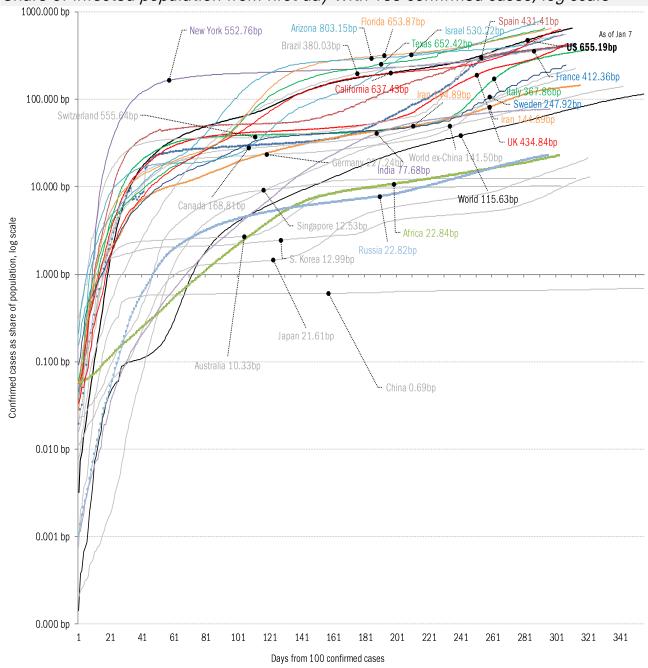
Meme of day



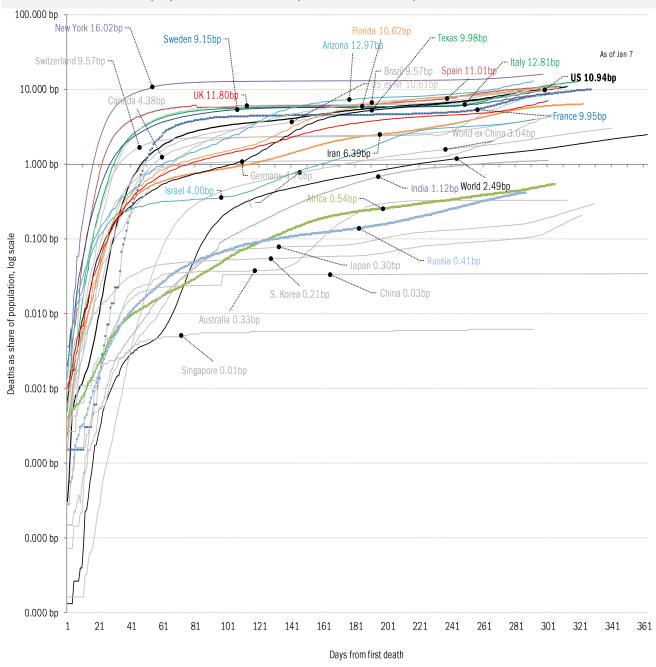
Study Finds Vaccine Only Works If You Post A Vaccination Selfie On Facebook

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

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



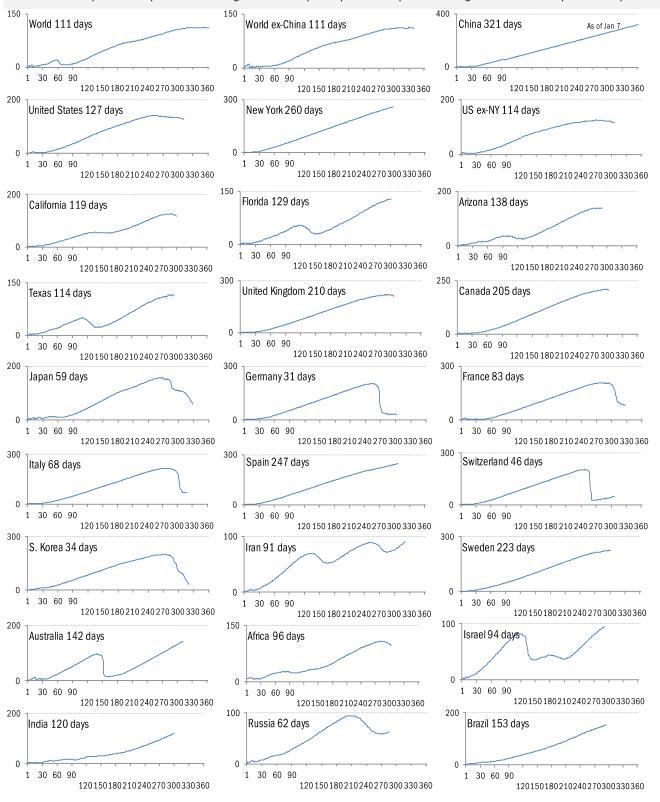
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*



"Exponential"? Our most reliable evidence of the rate of spread 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





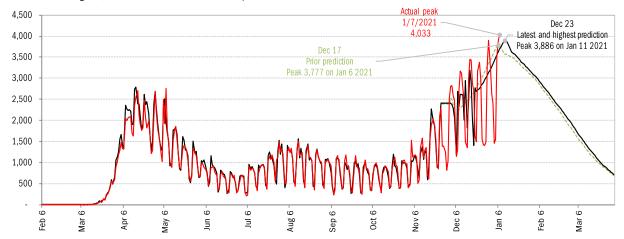


Reality-checking the models: actuals versus **IHME** predictions

New daily fatalities

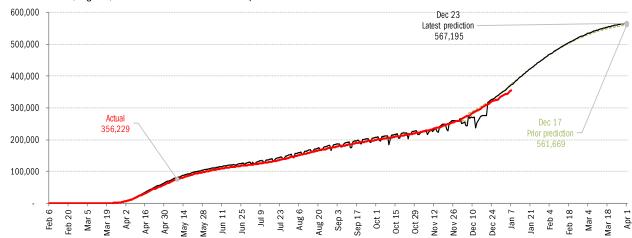
As of Jan 7

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

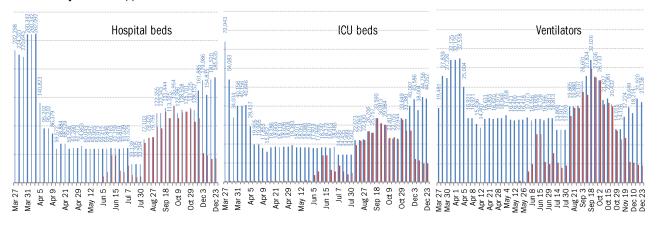


Cumulative fatalities

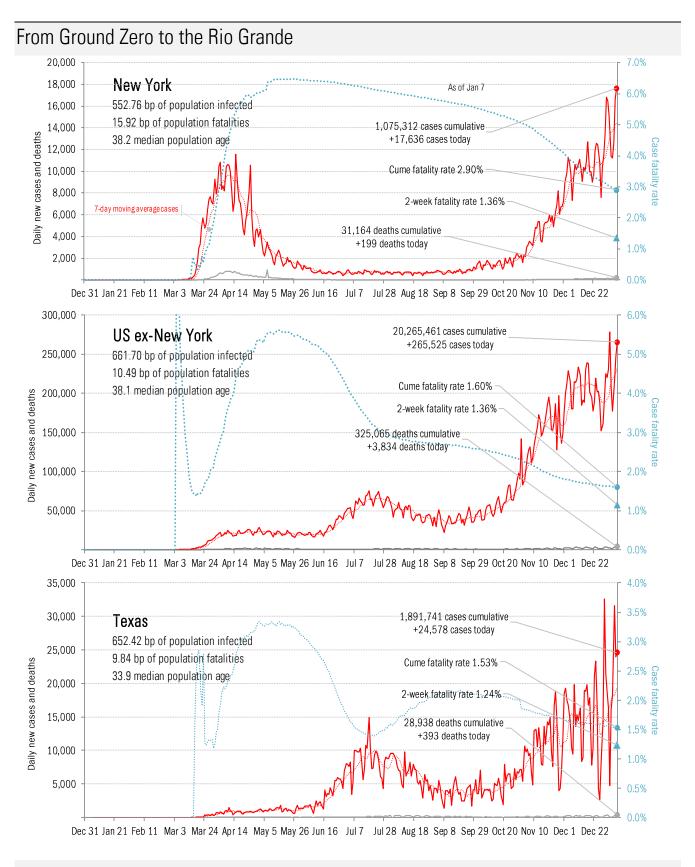
Actual versus first, highest, lowest and latest model mean predictions



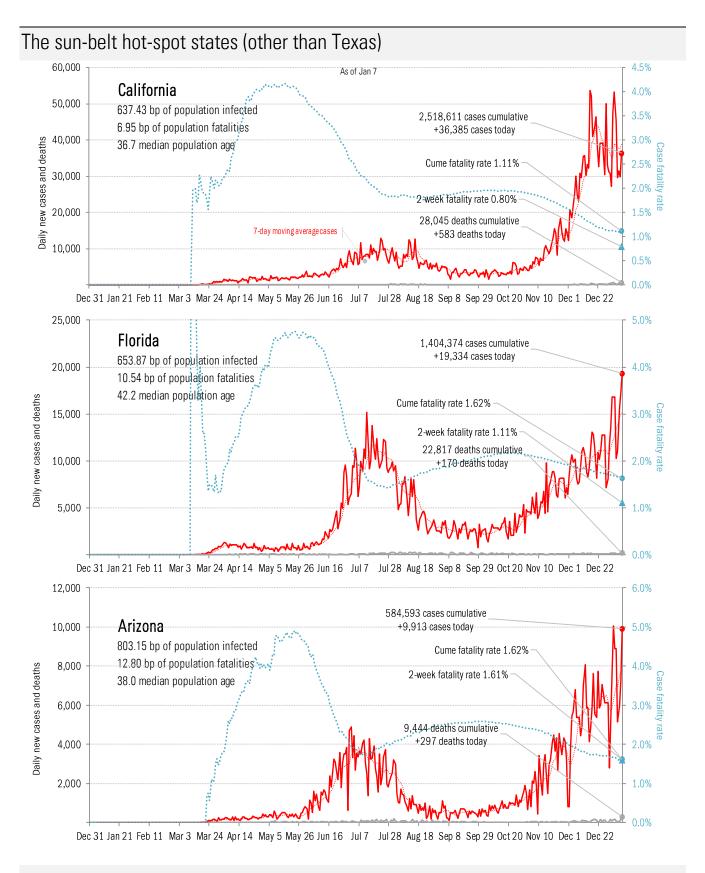
Healthcare system stress, peak and ultimate estimated at each model revision



Source: IHME, Covid Tracking Project, TrendMacro calculations



Source: Covid Tracking Project,, TrendMacro calculations



Source: Covid Tracking Project,, TrendMacro calculations

