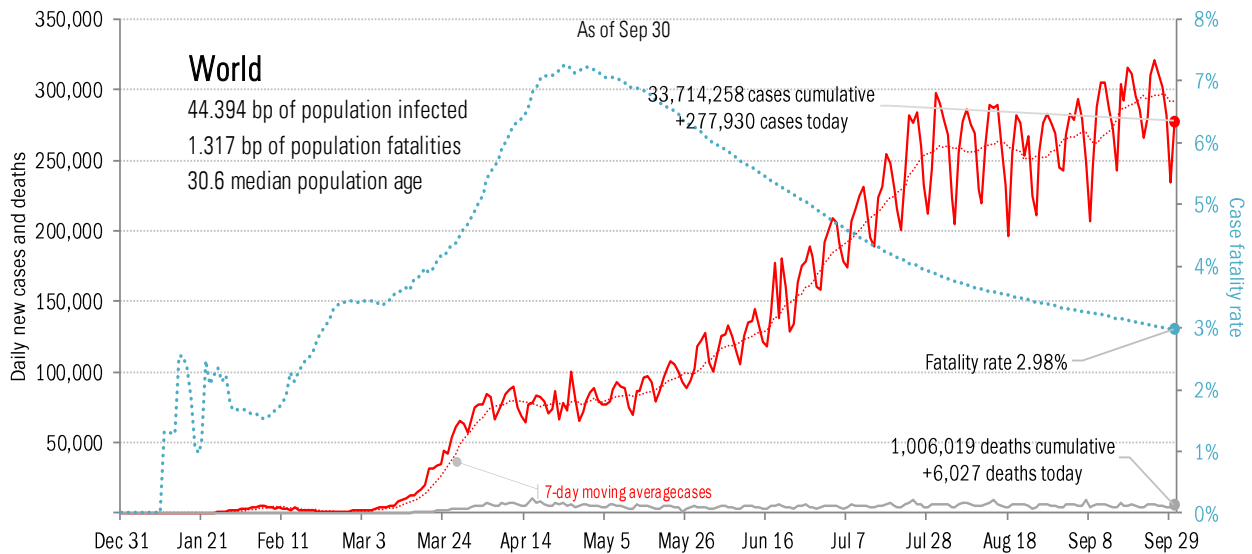
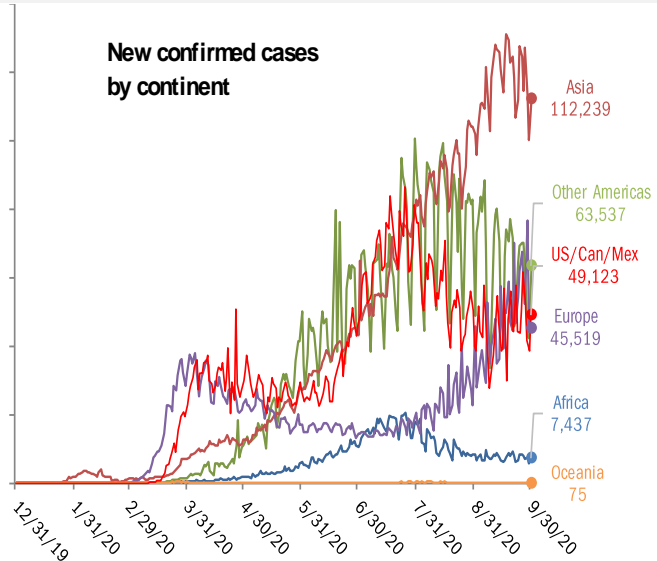


Data Insights: Covid-2019 Monitor

Wednesday, September 30, 2020

The global scorecard

The worst ten countries			
New cases		New Deaths	
India	+80,472	India	+1,179
US	+36,947	US	+928
Brazil	+32,058	Brazil	+863
Argentina	+13,477	Mexico	+560
Spain	+9,906	Argentina	+406
Russia	+8,232	Iran	+207
France	+8,051	Colombia	+187
UK	+7,143	Russia	+160
Colombia	+5,839	Indonesia	+128
Iraq	+4,724	France	+85
+206,849		+4,703	
World +277,930		World +6,027	
Top ten 74%		Top ten 78%	



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 scorecard

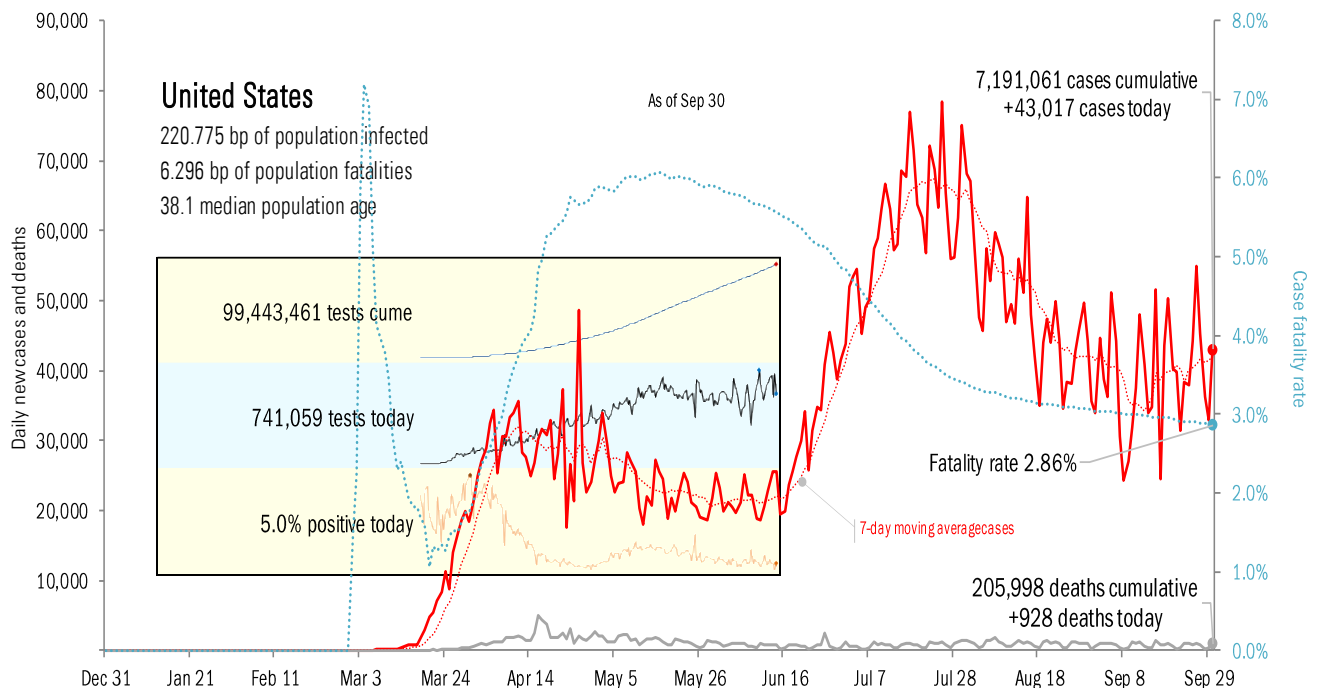
National and state-by-state data do not line up because of different sources

The ten worst US states

New cases		New Deaths		New in hospital		Cume cases		Cume deaths		Cume in hospital	
TX	+3,541	FL	+106	FL	+252	CA	807,425	NY	25,470	NY	89,995
FL	+3,266	TX	+71	VA	+161	TX	743,284	NJ	16,117	FL	44,355
WI	+2,447	NC	+49	GA	+142	FL	704,568	CA	15,640	GA	28,339
CA	+2,162	CH	+37	AR	+106	NY	457,649	TX	15,604	NJ	23,379
IL	+1,362	MS	+36	CH	+106	GA	316,306	FL	14,313	AZ	22,047
NY	+1,189	GA	+33	IN	+104	IL	293,490	MA	9,423	VA	18,534
SC	+1,179	CA	+32	OK	+93	AZ	218,184	IL	8,881	AL	17,182
MI	+1,118	TN	+31	AL	+91	NC	209,137	PA	8,123	MD	15,460
CH	+1,105	IL	+23	MN	+87	NJ	204,563	MI	7,072	CH	15,413
PR	+1,045	MO	+22	WI	+67	TN	194,611	GA	6,994	IN	12,758
+18,414		+440		+1,209		4,149,217		127,637		287,462	
All states	+36,947	All states	+739	All states	+1,733	All states	7,154,198	All states	197,868	All states	407,059
Top ten	50%	Top ten	60%	Top ten	70%	Top ten	58%	Top ten	65%	Top ten	71%

Five most improved US states

Fewer daily cases		Fewer new deaths		Fewer new hospitalizations		Most recoveries	
KS	-2,037	ND	-13	MS	-237	TX	+3,631
MO	-1,204	NY	-10	AL	-148	SC	+2,706
TX	-1,070	KS	-5	KS	-36	TN	+1,915
CA	-793	LA	-5	OR	-22	WI	+1,658
OK	-659	MA	-3	H	-11	IA	+1,150



Source: States and test data [Covid Tracking Project](#), US data [ECDC](#), TrendMacro calculations

Recommended reading

[Democrats' New \\$2.2 Trillion COVID Stimulus Includes The Word 'Cannabis' 68 Times — Mentioned More Than Jobs](#)

Henry Rodgers
Daily Caller
September 29, 2020

[Schools reopen, no surge](#)

Joanne Jacobs
Linking and Thinking on Education
September 29, 2020

[Educating Dr. Fauci On Herd Immunity And Covid-19: Completing What Rand Paul Began](#)

Andrew Bostom
Dr. Andrew Bostom
September 28, 2020

[Covid Doctors Find a Turning Point in Life-Threatening Cases](#)

Jason Gale
Bloomberg
September 24, 2020

[Governor DeSantis' roundtable experts advocate for "normal" life for young people](#)

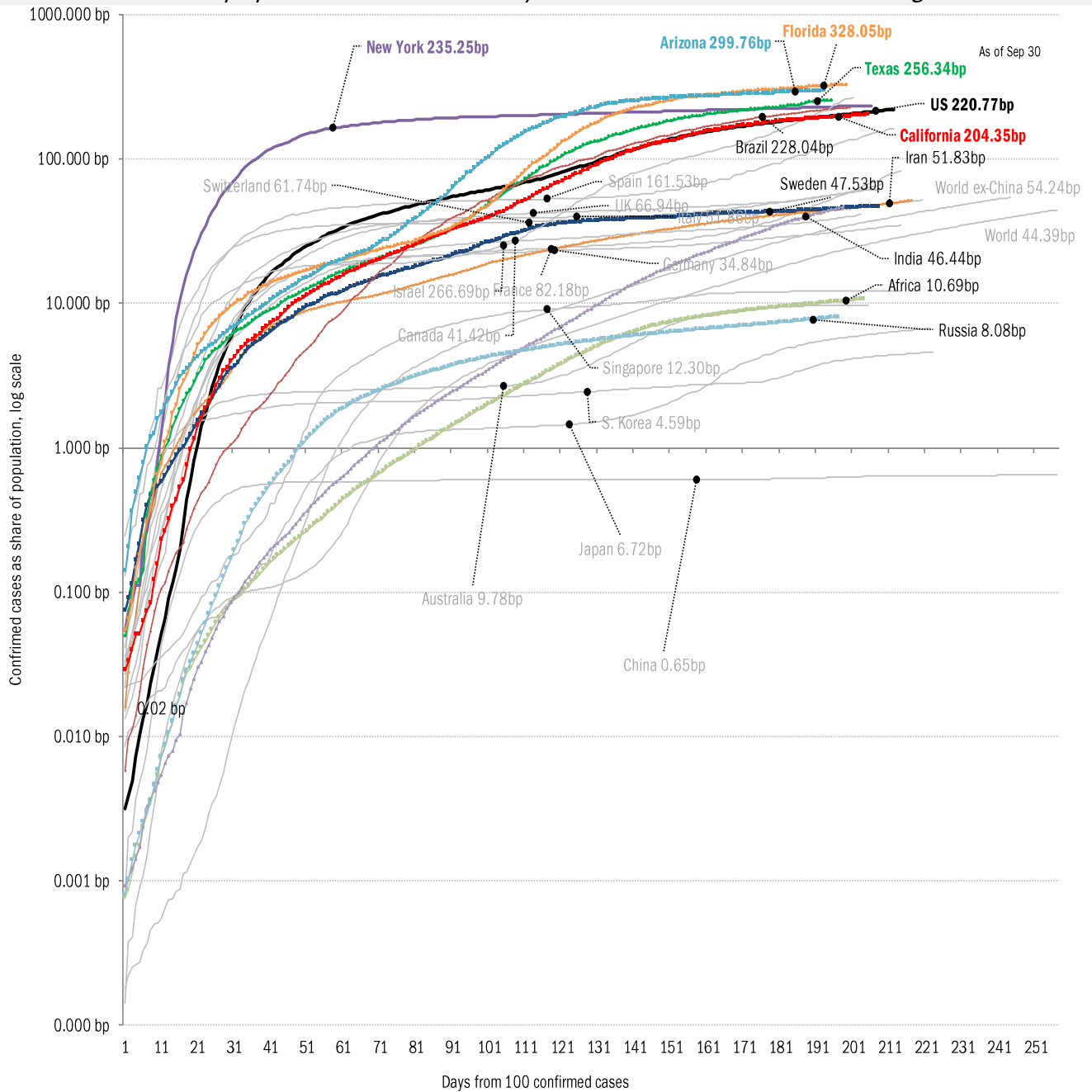
Rational Ground
September 28, 2020

Meme of day



Source: Our beloved clients, and [Power Line blog "The Week in Pictures"](#)

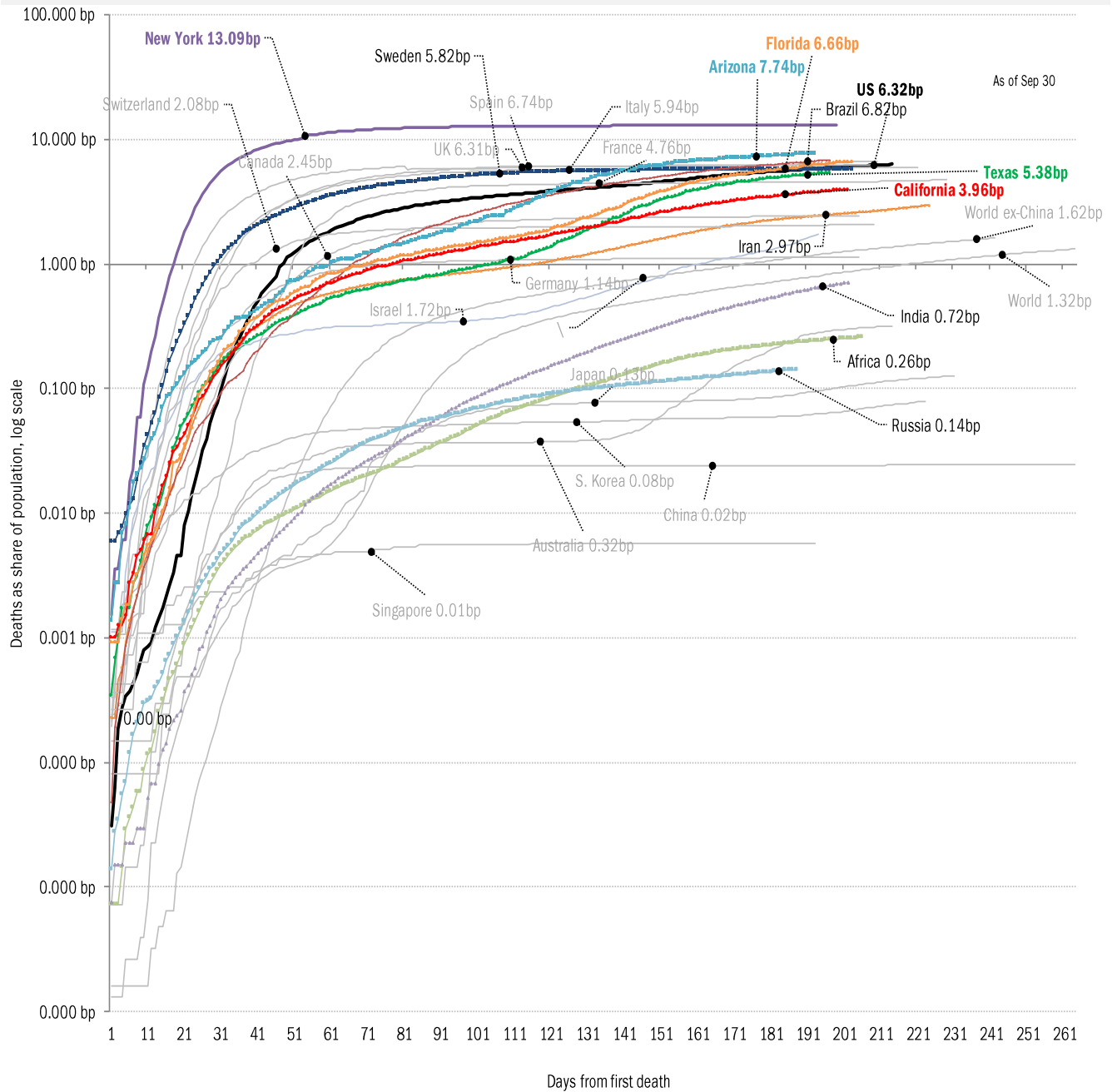
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



Source: [ECDC](#), TrendMacro calculations

The coronavirus mortality accelerometer ... tracking the world's fatality curves

Share of deceased population from day of first fatality

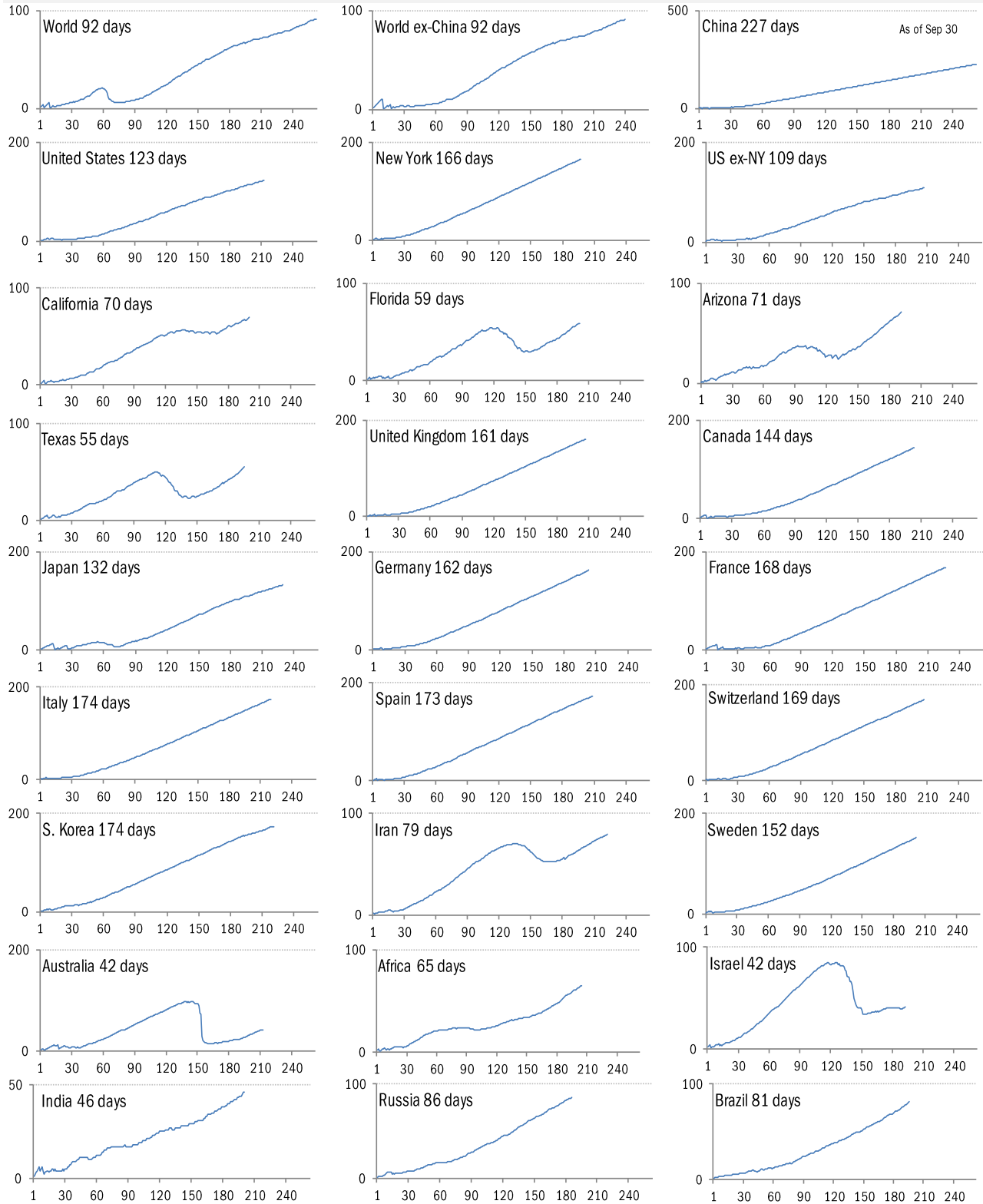


Source: [ECDC](#), TrendMacro calculations

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

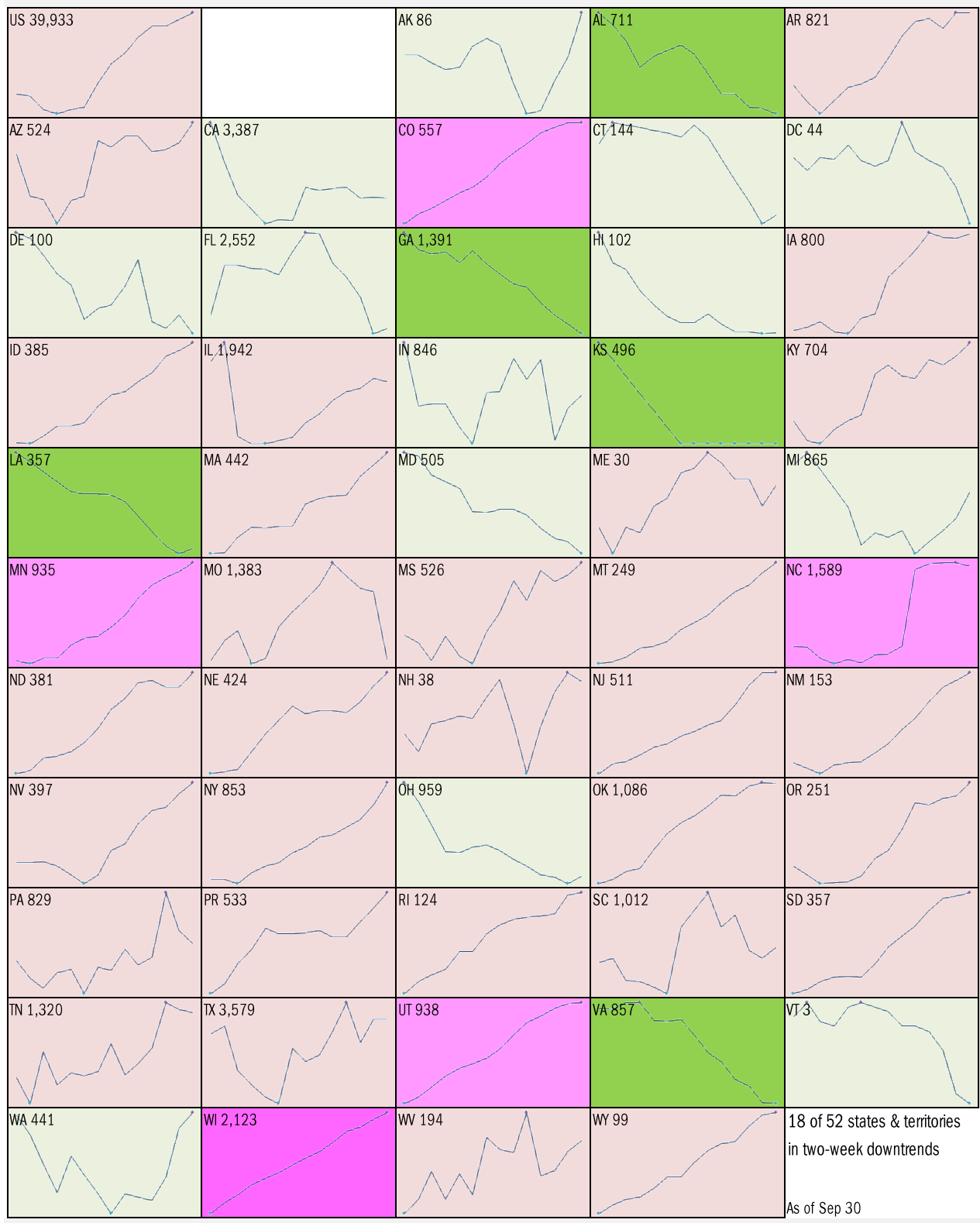
Vertical: days to double deaths Horizontal: days from first death

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



Source: [ECDC](https://ecdc.europa.eu/en), TrendMacro calculations

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

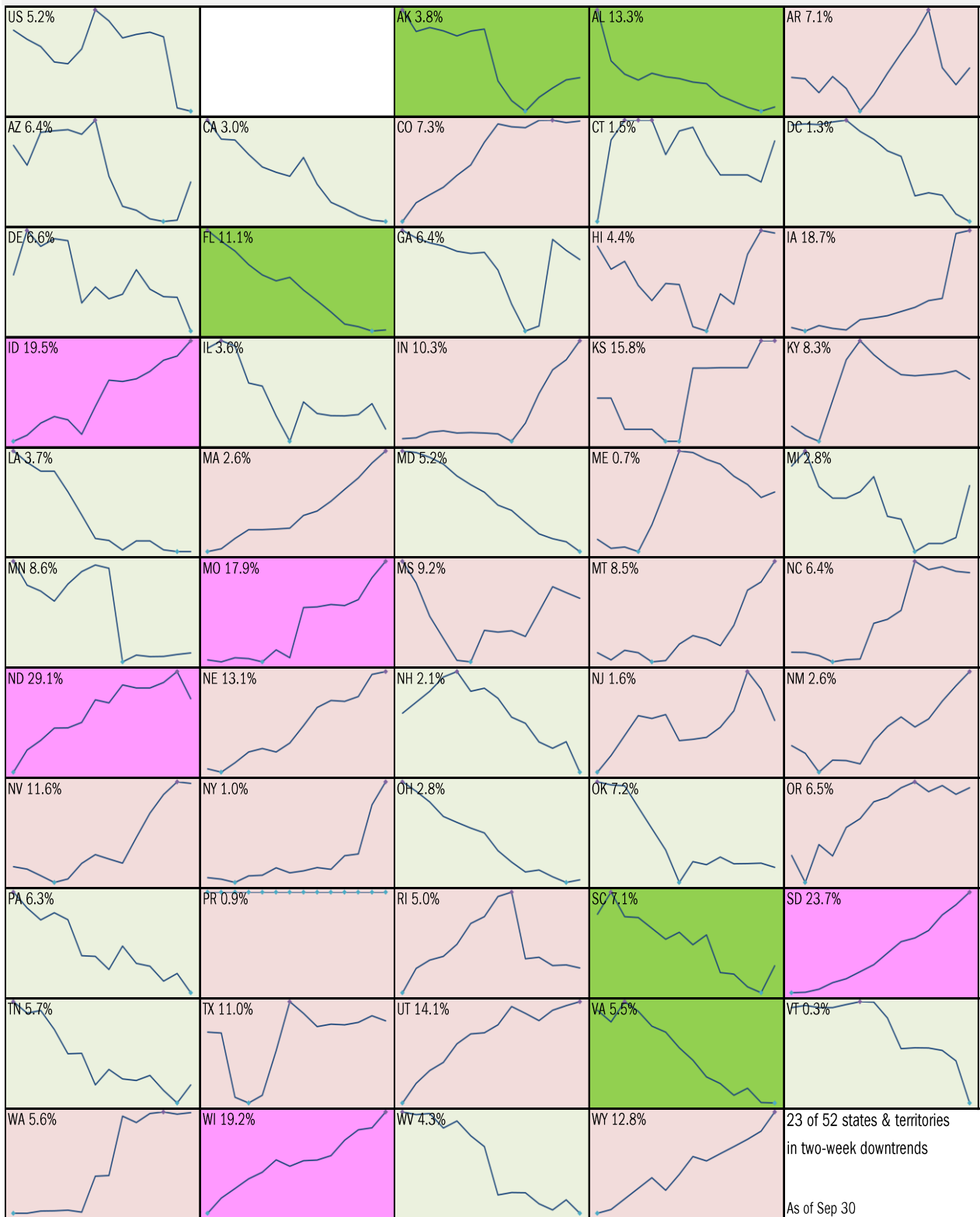


Source: [Covid Tracking Project](#), TrendMacro calculations

Alt requirement to [Open Up America Again](#): 14-day "downward trajectory" in pos tests

14-day moving average, last 14 days Most recent value displayed ● High ● Low

■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



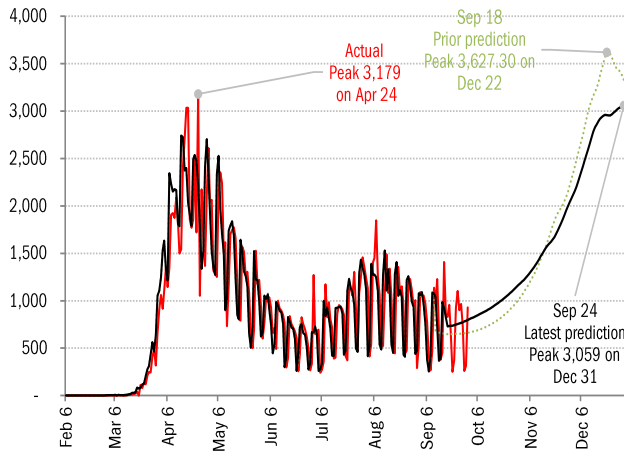
Source: [Covid Tracking Project](#), TrendMacro calculations

Reality-checking the models: actuals versus [IHME](#) predictions

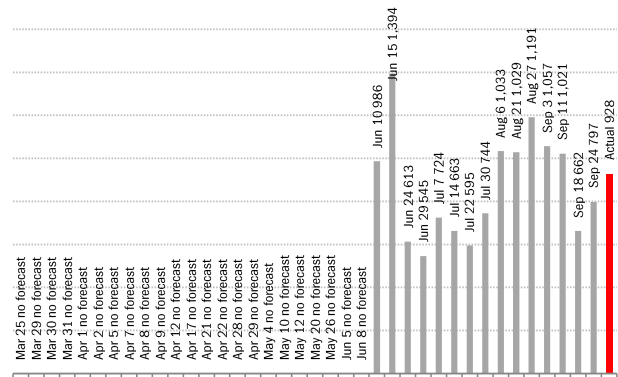
New daily fatalities

As of Sep 30

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

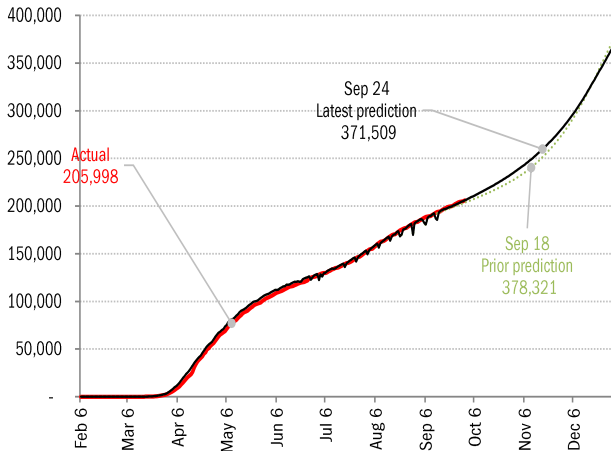


For this day, versus all model mean predictions

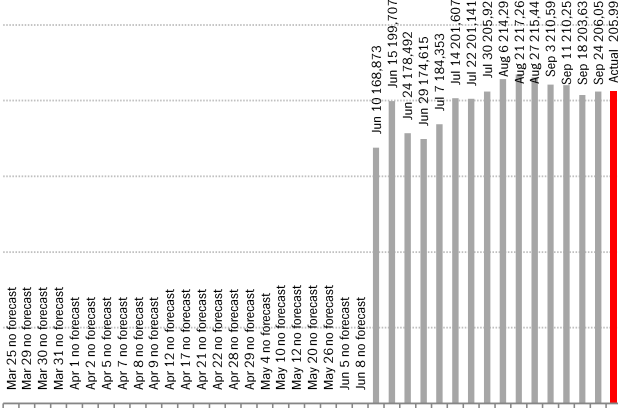


Cumulative fatalities

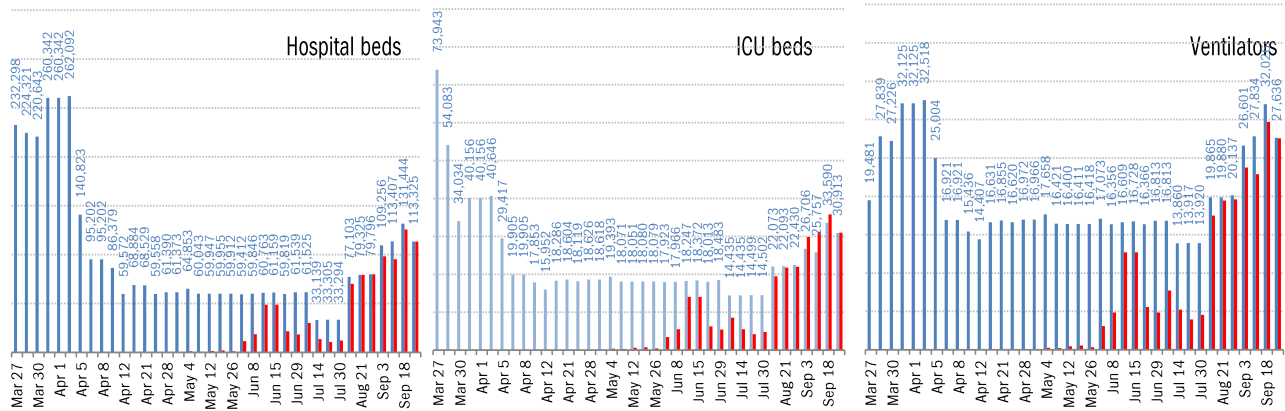
Actual versus first, highest, lowest and latest model mean predictions



For this day, versus all model mean predictions

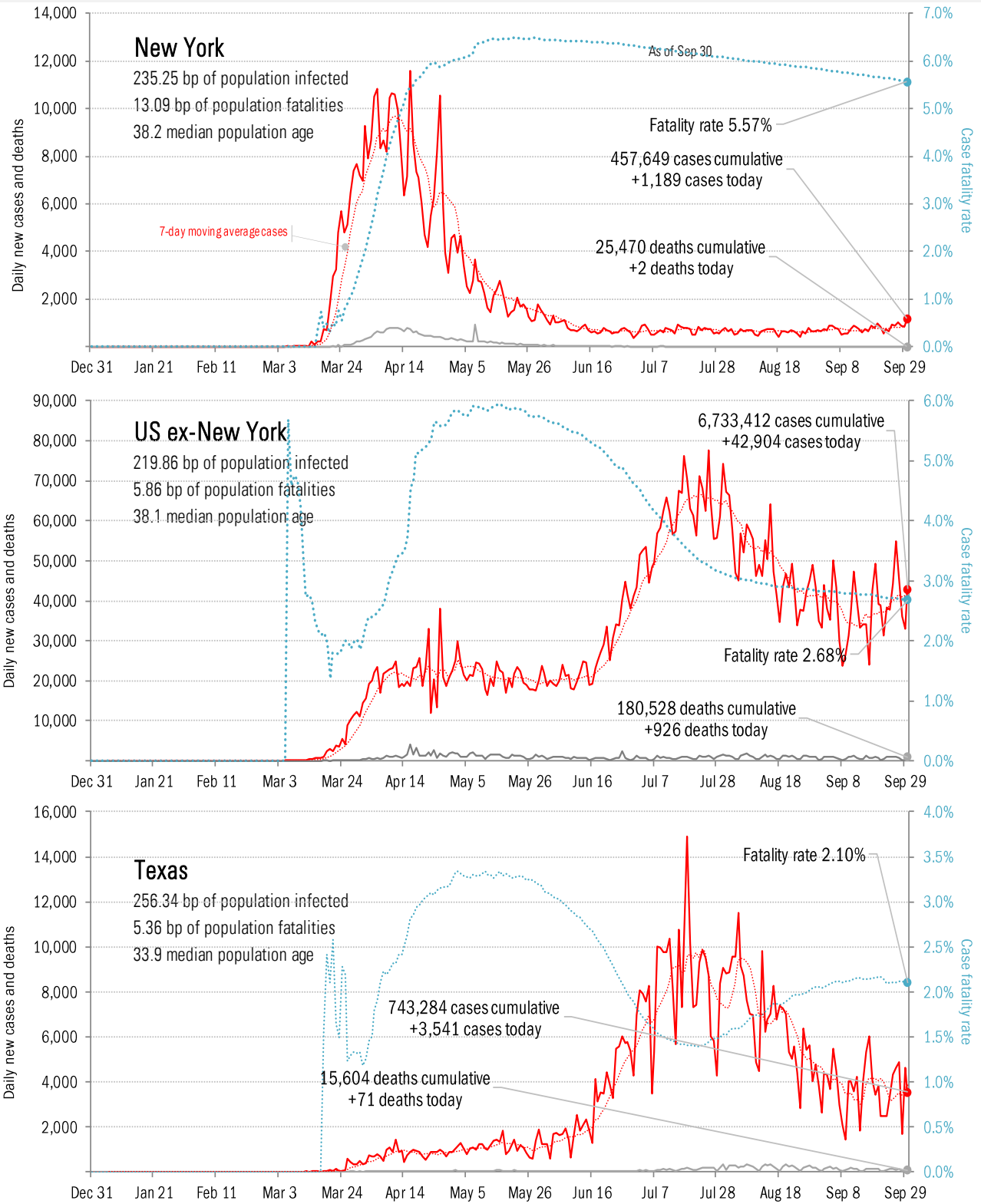


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



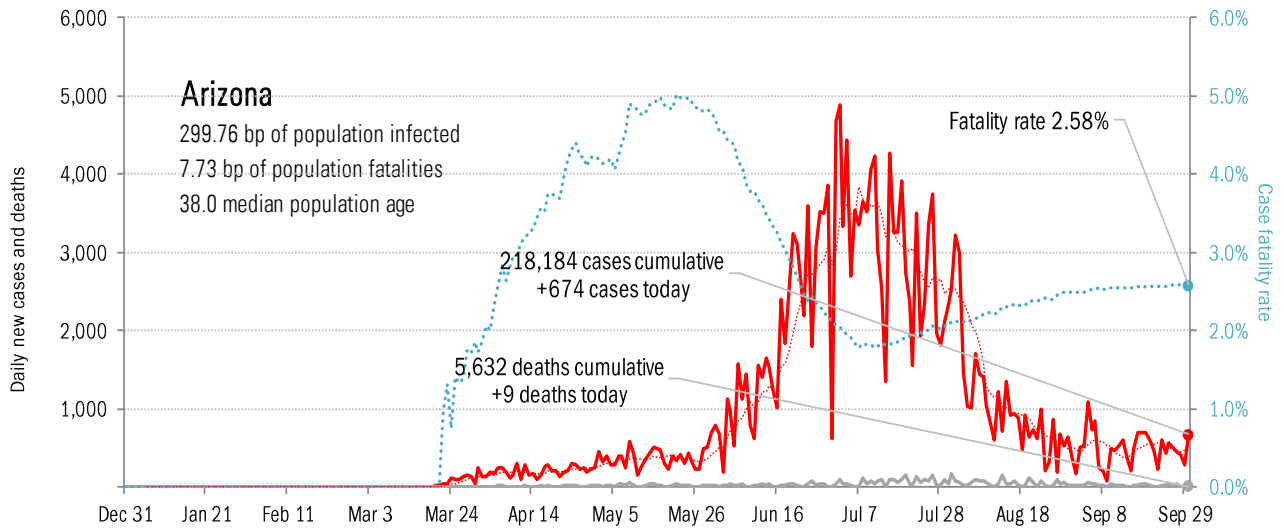
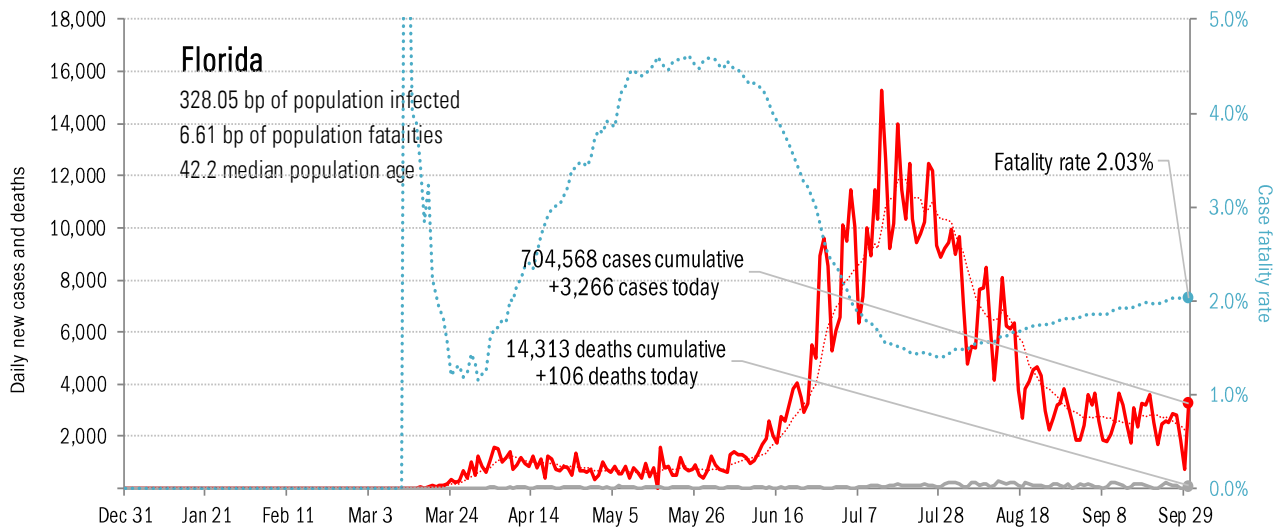
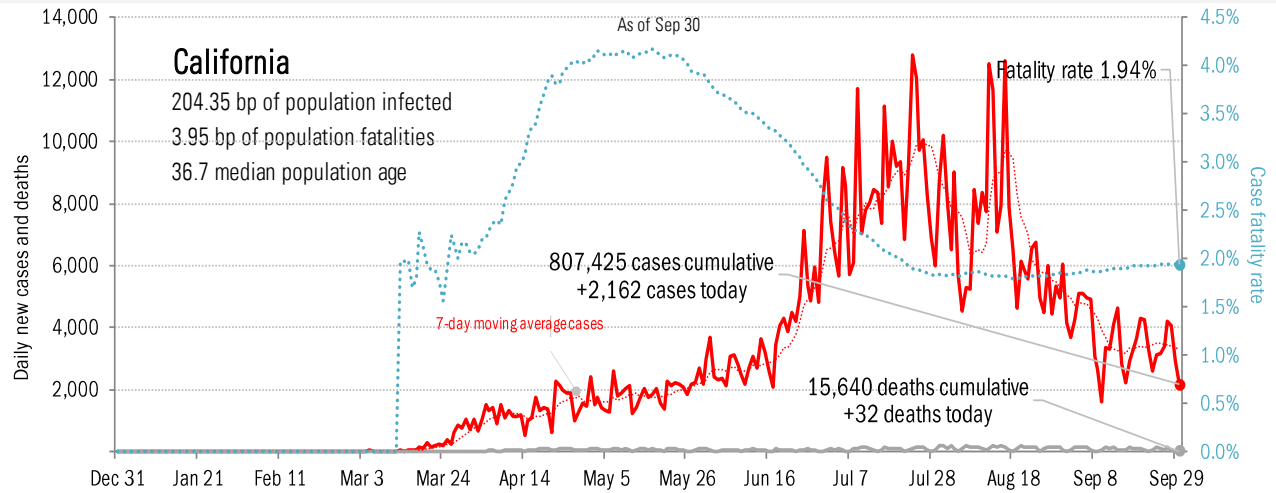
Source: [ECDC](#), [IHME](#), TrendMacro calculations

From Ground Zero to the Rio Grande



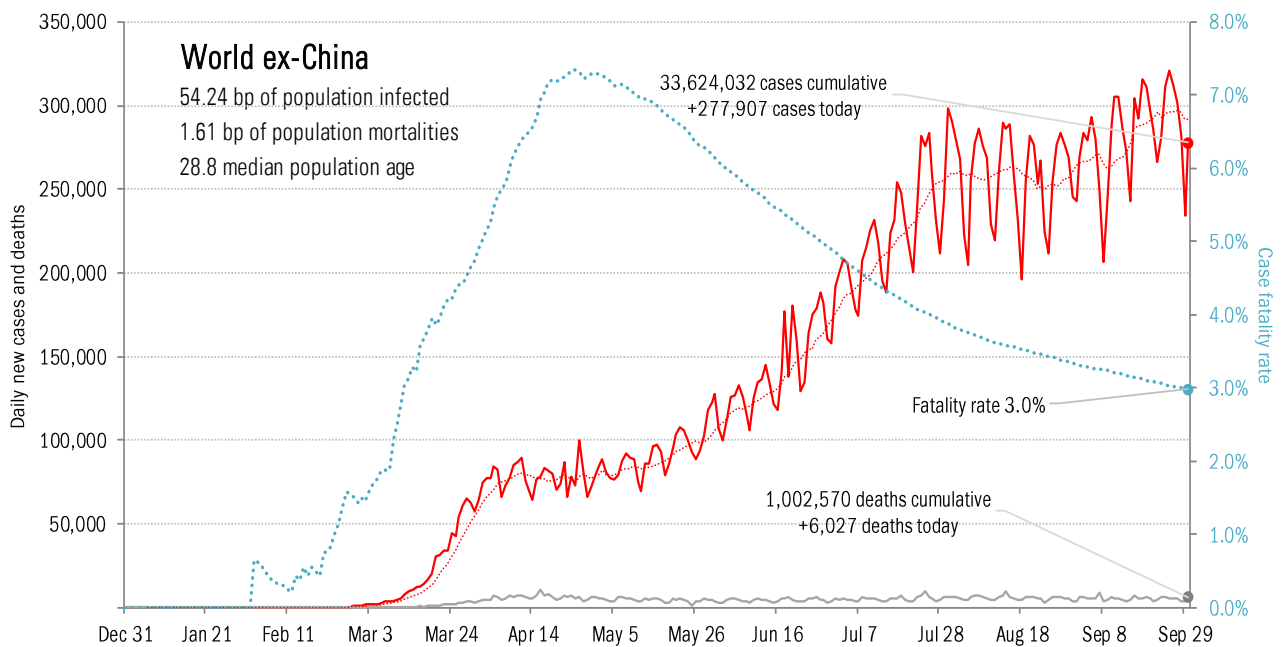
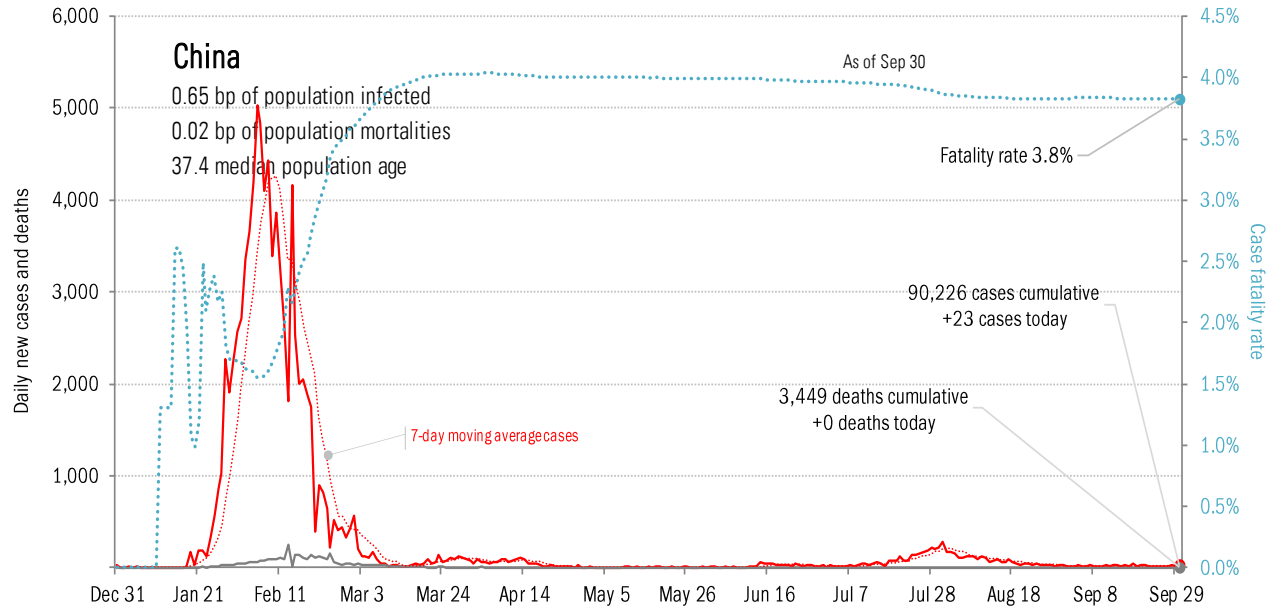
Source: [ECDC](#), TrendMacro calculations

The sun-belt hot-spot states (other than Texas)



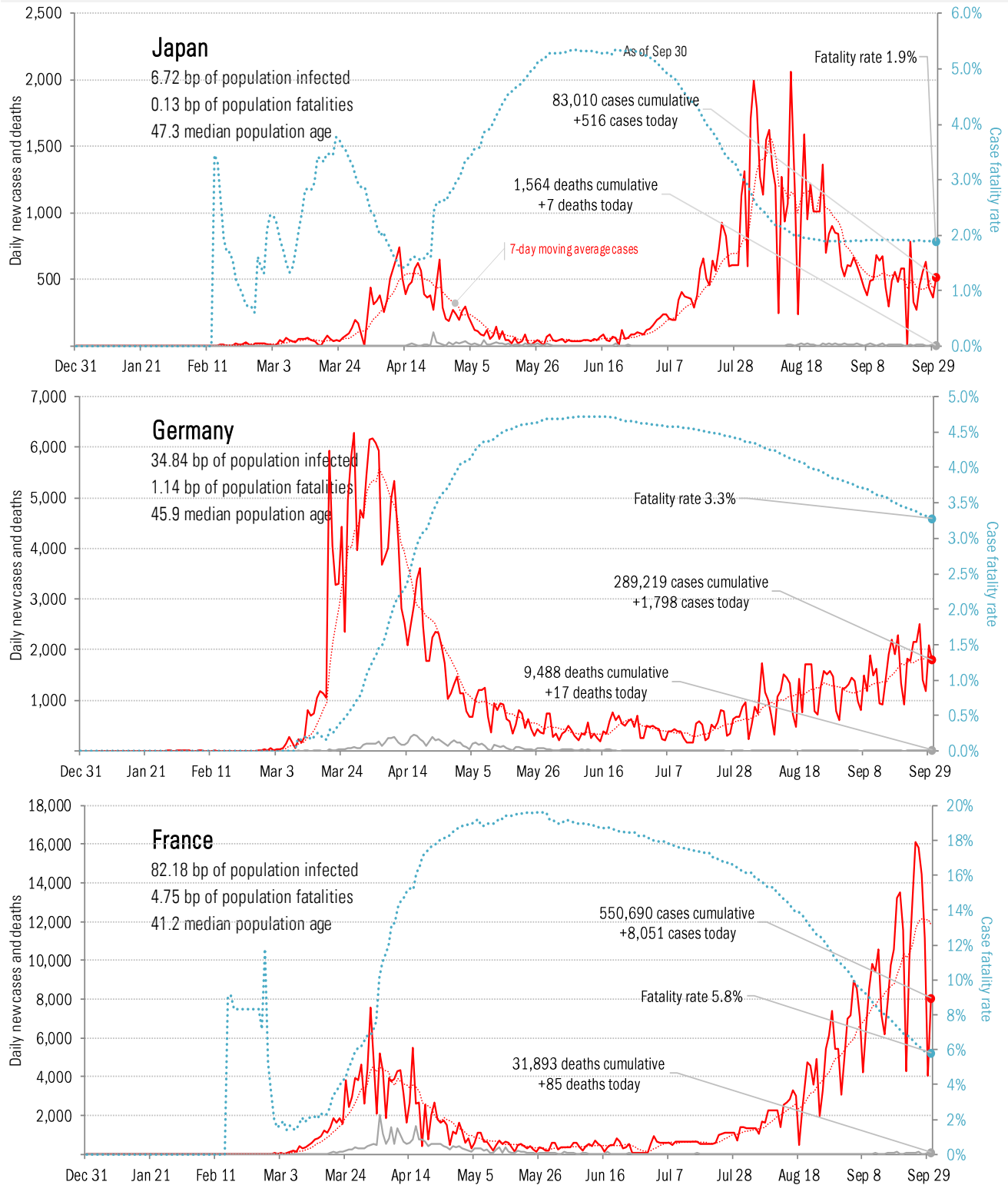
Source: [ECDC](#), TrendMacro calculations

Patient zero... and then everyone else



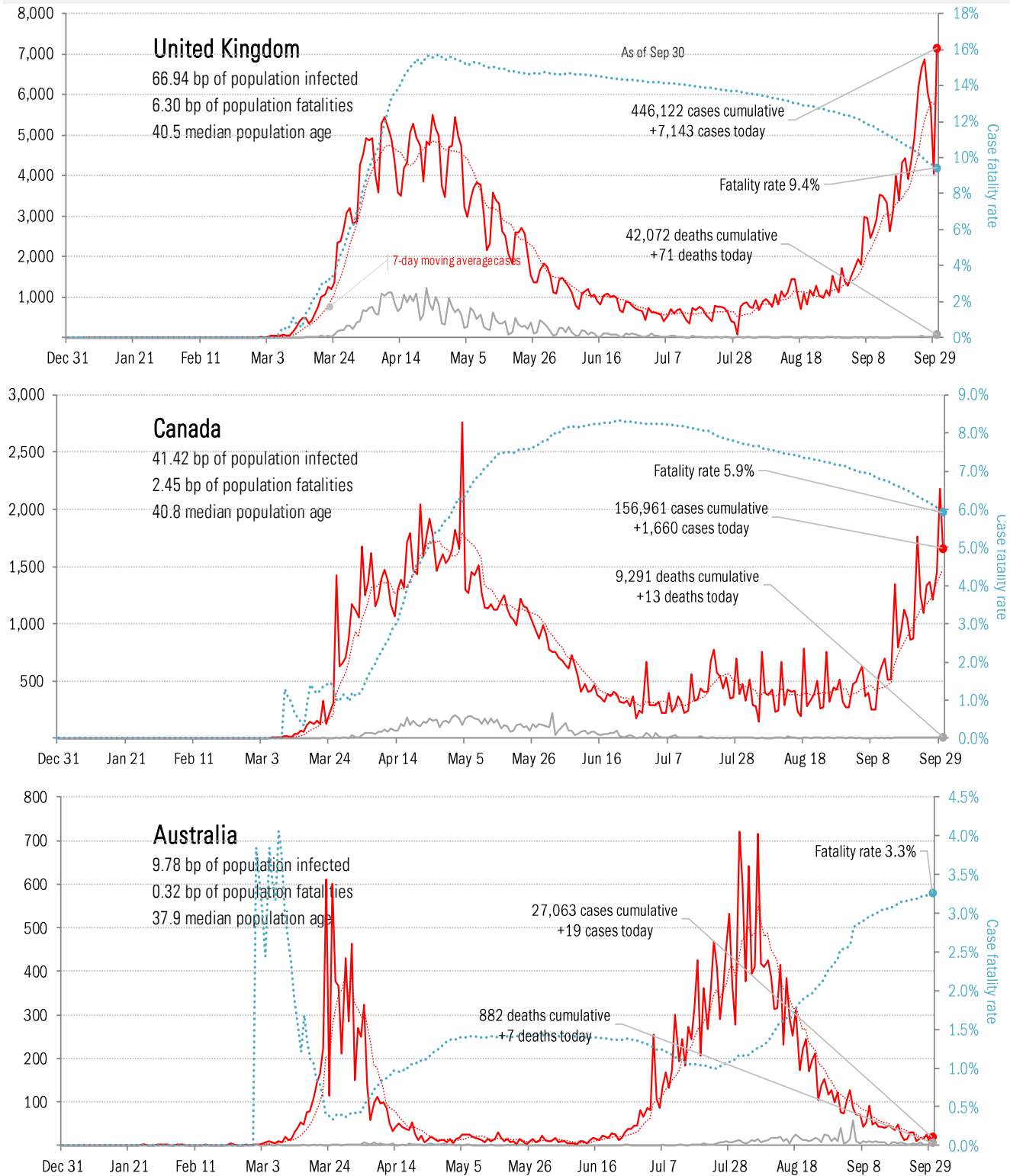
Source: [ECDC](#), TrendMacro calculations

Impact in the largest economies



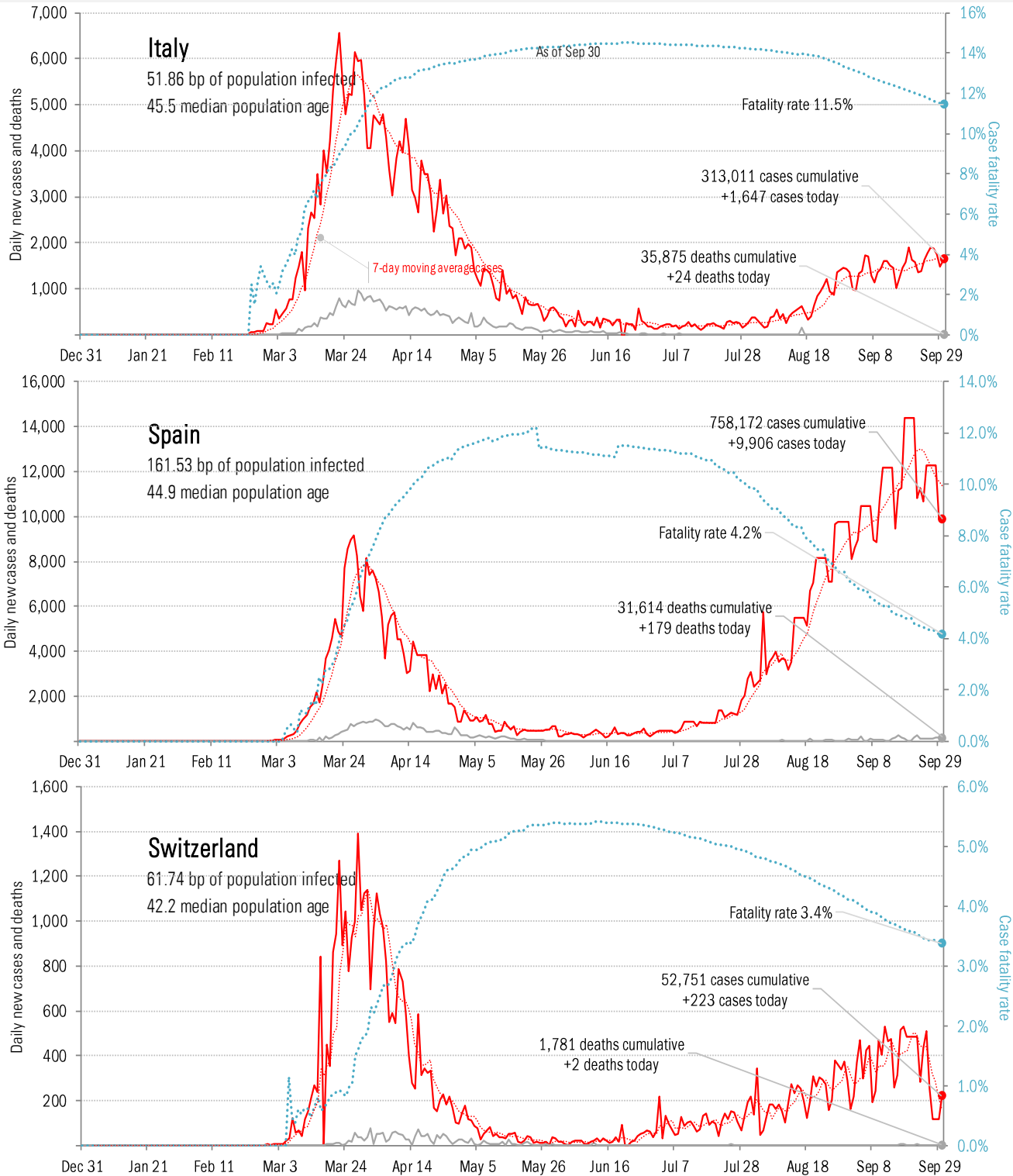
Source: [ECDC](#), TrendMacro calculations

Impact in The Anglosphere



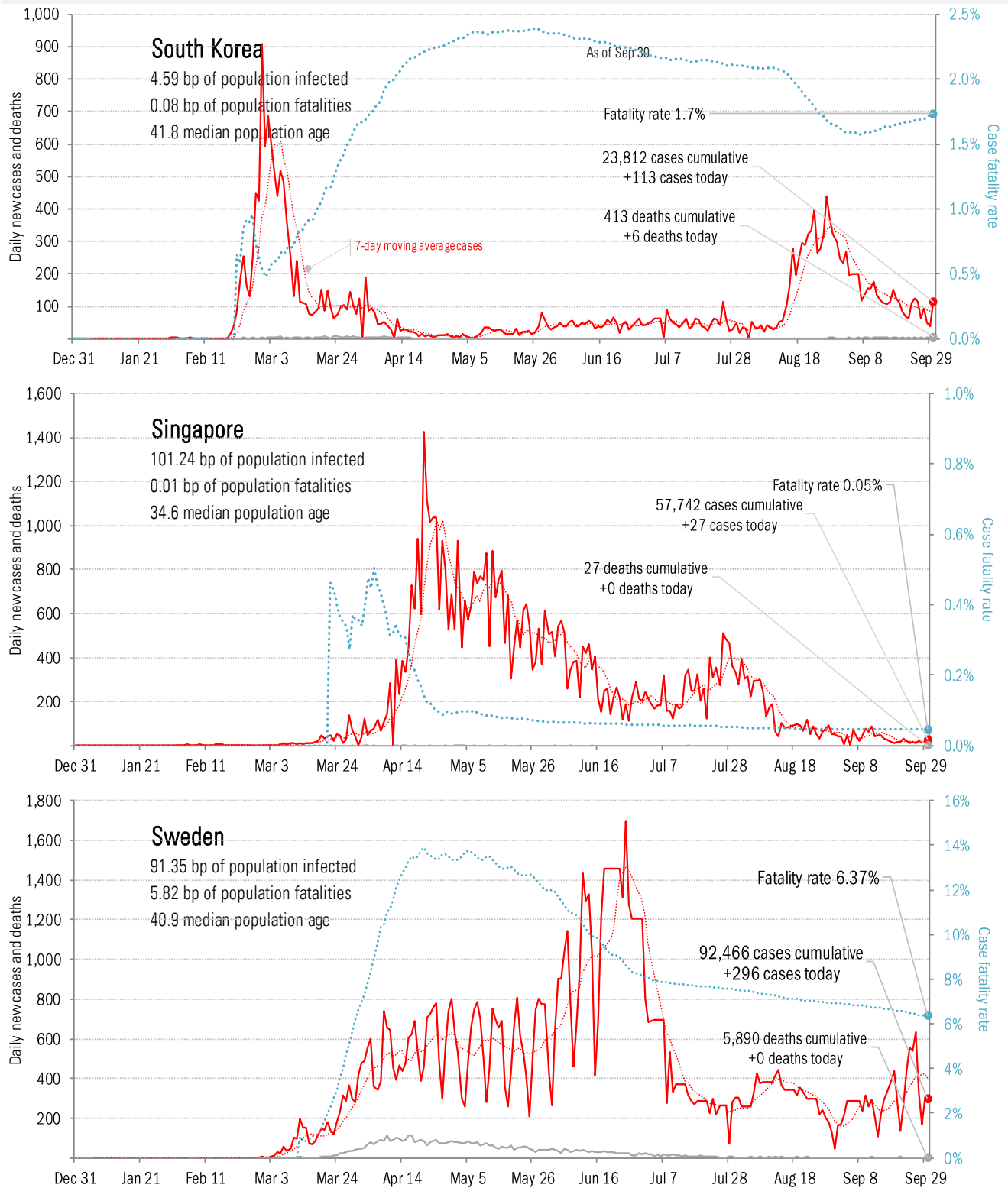
Source: [ECDC](#), TrendMacro calculations

Impact in continental Europe



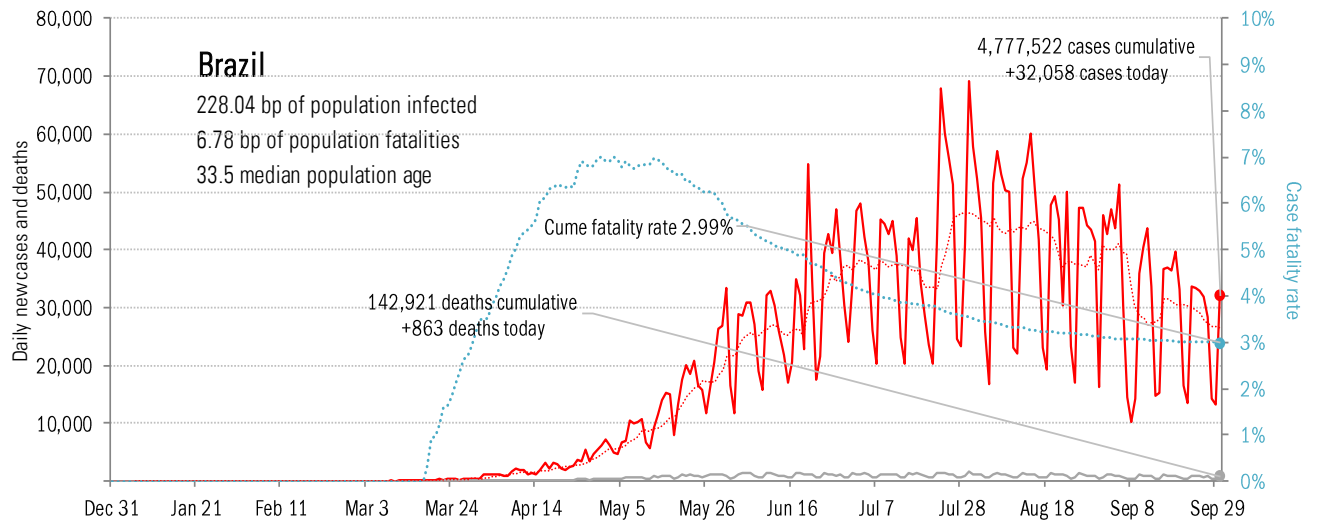
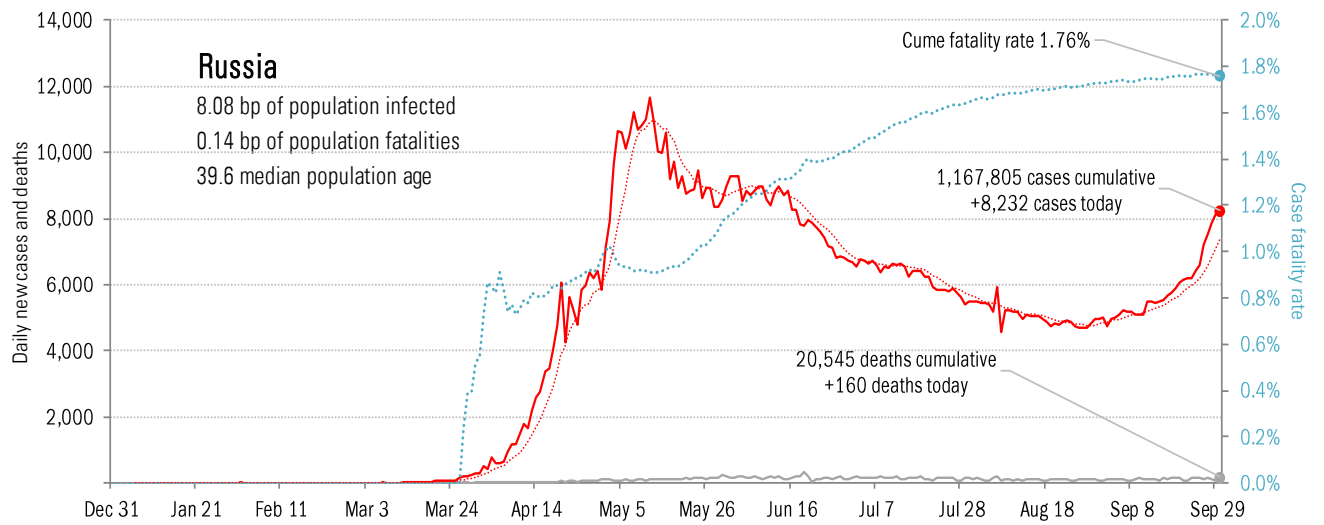
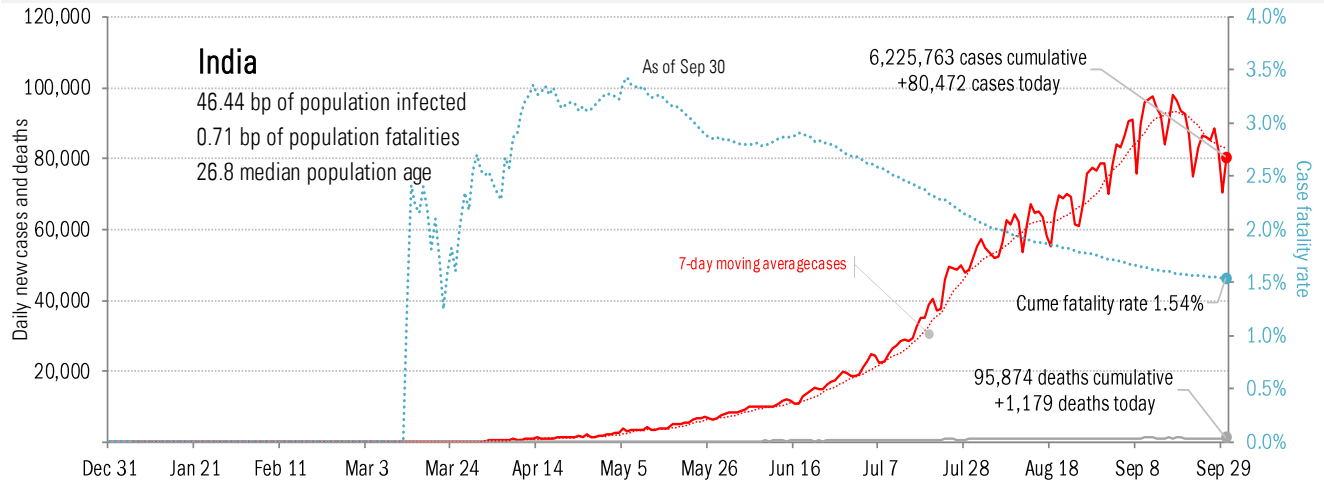
Source: [ECDC](#), TrendMacro calculations

Impact in other hot-spots



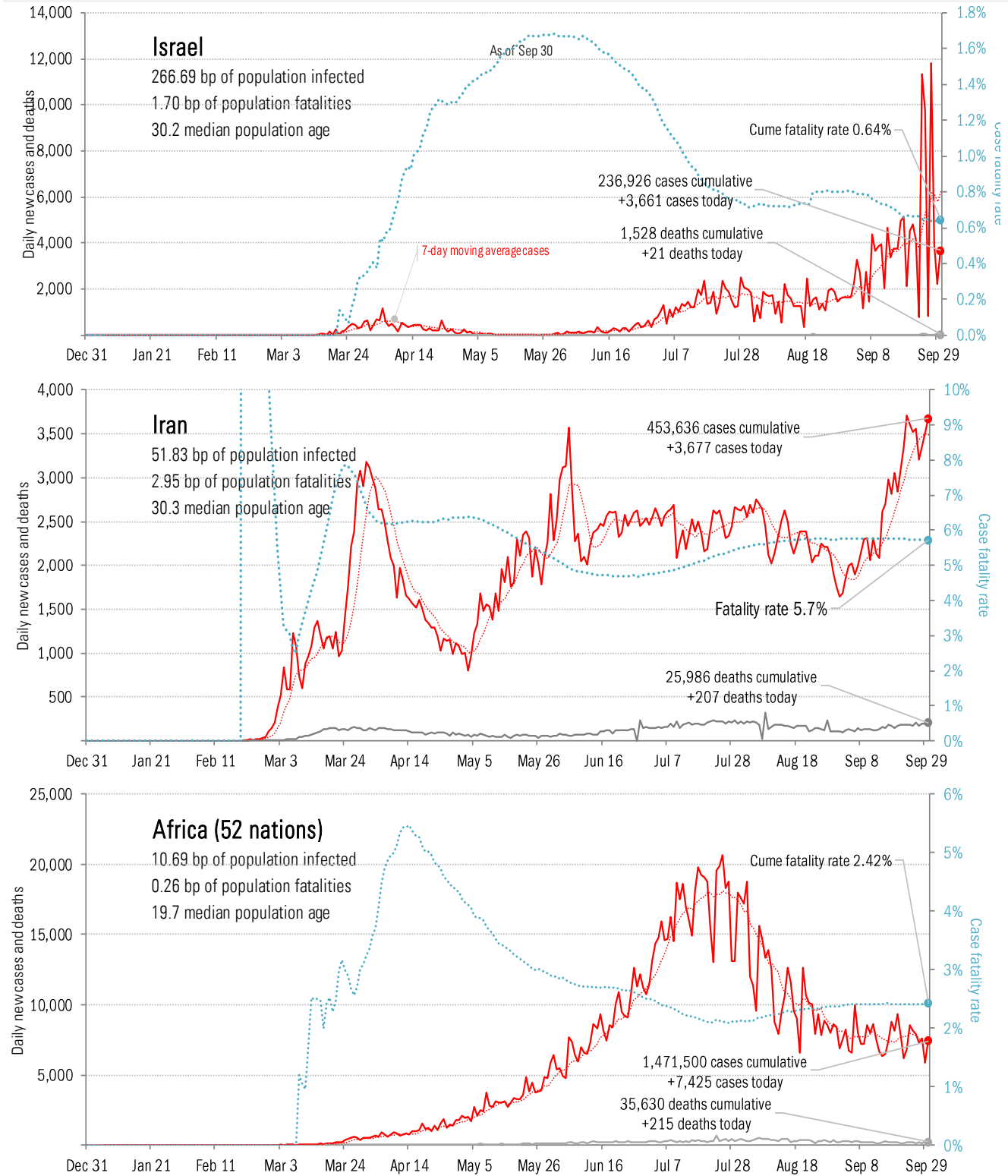
Source: [ECDC](#), TrendMacro calculations

Impact in the BRICs ex-China



Source: [ECDC](#), TrendMacro calculations

Impact in the Middle East and Africa



Source: [ECDC](#), TrendMacro calculations