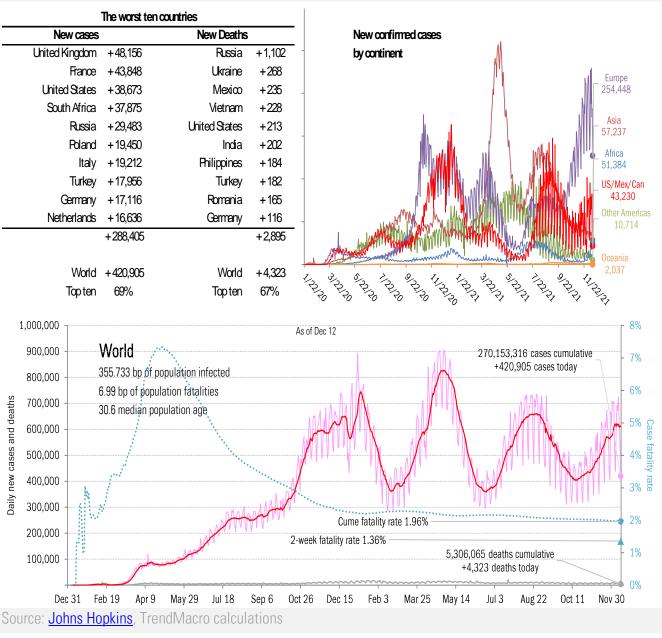


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Monday, December 13, 2021

The global scorecard

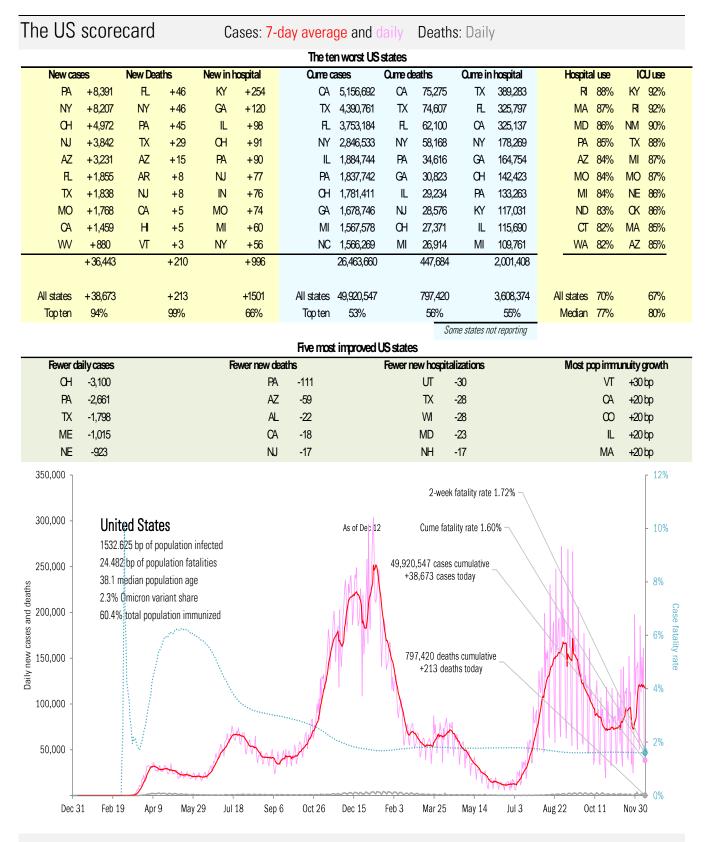


Cases: 7-day average and daily Deaths: Daily

For more information contact us:

Donald Luskin: 214 550 2121 <u>don@trendmacro.com</u> Thomas Demas: 704 552 3625 <u>tdemas@trendmacro.com</u>

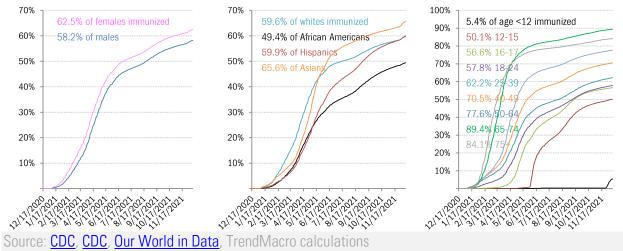
Copyright 2021 Trend Macrolytics LLC. All rights reserved. This document is not to be forwarded to individuals or organizations not authorized by Trend Macrolytics LLC to receive it. For information purposes only; not to be deemed to be recommendations for buying or selling specific securities or to constitute personalized investment advice. Derived from sources deemed to be reliable, but no warranty is made as to accuracy.

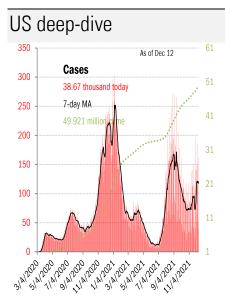


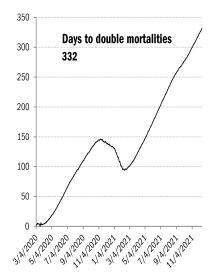
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

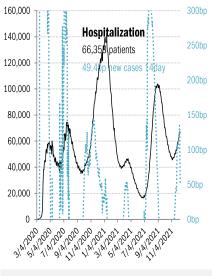
0					he worl	G	Τ.			E. 11	Deut
Administered	Cumulative							day million	Immunity	Full	Partial
Doses	497,122,885 54,687,308								US	60.4%	72.0%
				Immuno		0/	+0.895 million		UK	68.5%	75.2% 77.3%
Total population	One dose 244,931,976		% Pop 73%			% pop 62%	New immune today +0.289 million		France	70.8%	
Total population Age 12 to 17	244,931,976 14,886,781		73% 62%	207,088,694 12,498,260		62% 52%	+0.209 million		Spain	80.7%	82.3%
Age 18 to 64	165,857,520		81%	141,740,		52 % 70%	+0.010 million		Germany	69.0% 73.4%	72.0% 78.9%
Age 65 and over	57,751,808					90%	+0.018 million		ltaly Australia	73.4%	78.4%
•			100 /0	4	49,410,865 Every Ame			-		62.3%	69.0%
4%								eu m	Israel Canada	62.3% 76.7%	81.8%
170					77 days					77.8%	79.4%
Moderna	State		Best	:			U		Japan Africa	8.0%	12.3%
38%	At least partial immunity				by Feb 26, 2022 73.9% of population >18 immunized			India	36.9%	58.6%	
Pfizer	as % population		Middl	le	17.6% previously tested positive			Brazil	65.2%	77.2%	
58%	Full immunity				91.4% vs 60% adult herd immunity				China	80.5%	84.8%
		pulation	Wors	st	31.4% VS 80% adult herd initial			intunity	Global data differ		
64.0%	u3 /0 p0	pulation			WI		As of Dec 12		ſ	ME	
55.4%					67.0%					83.6%	
00.4%					60.9%					74.1%	
WA	ID	MT	ND	MN	L	MI	1	NY	VT	NH	
74.1%	51.5%	60.9%	61.0%	70.3%	70.7%	62.3%		81.0%	87.2%	91.8%	
66.5%	45.8%	52.9%	51.5%	64.2%	63.2%	55.8%		70.4%	75.2%	65.6%	
08.070 OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA	00.070	
72.7%	67.8%	54.7%	68.9%	63.6%	56.8%	59.4%	83.9%	81.1%	87.9%		
65.4%	55.5%	46.4%	55.9%	57.9%	51.4%	54.3%	60.1%	69.2%	73.1%		
CA	UT	CO	NE	M0	KY	WV	VA	MD	CT	RI	ŀ
80.6%	65.9%	72.9%	65.1%	61.1%	61.4%	89.0%	77.1%	78.4%	86.0%	85.7%	
64.8%	57.1%	65.0%	58.7%	52.1%	53.4%	71.0%	66.7%	69.2%	73.5%	74.8%	
01.070	AZ	NM	KS	AR	TN	NC	SC	DC	DE	7 1.0 /0	
	65.7%	78.6%	67.6%	61.7%	57.7%	73.0%	61.5%	84.6%	74.8%		
	55.9%	65.0%	55.9%	50.4%	50.3%	55.5%	52.3%	66.1%	62.8%		
1			OK	LA	MS	AL	GA				
			64.3%	56.4%	54.7%	57.5%	60.0%				
HI			52.5%	49.5%	47.5%	46.9%	49.9%				
83.5%			TX					FL	ľ	PR	
62.3%			65.2%					73.0%		86.5%	
								62.4%		75.2%	
			55.8%					bZ.4%		/ J. Z %	

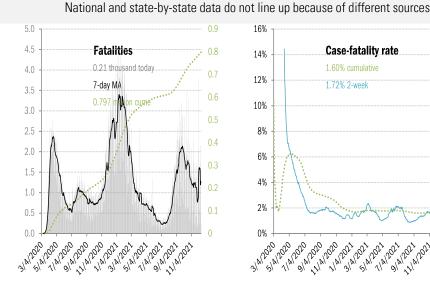
The demographics of US vaccination



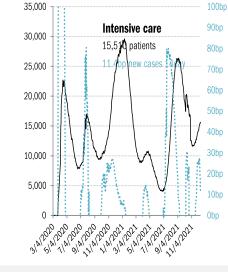


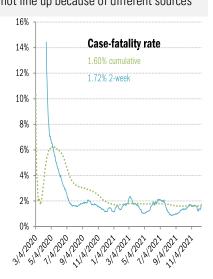


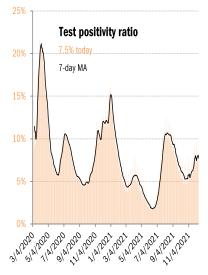


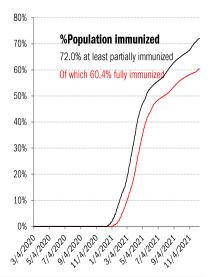




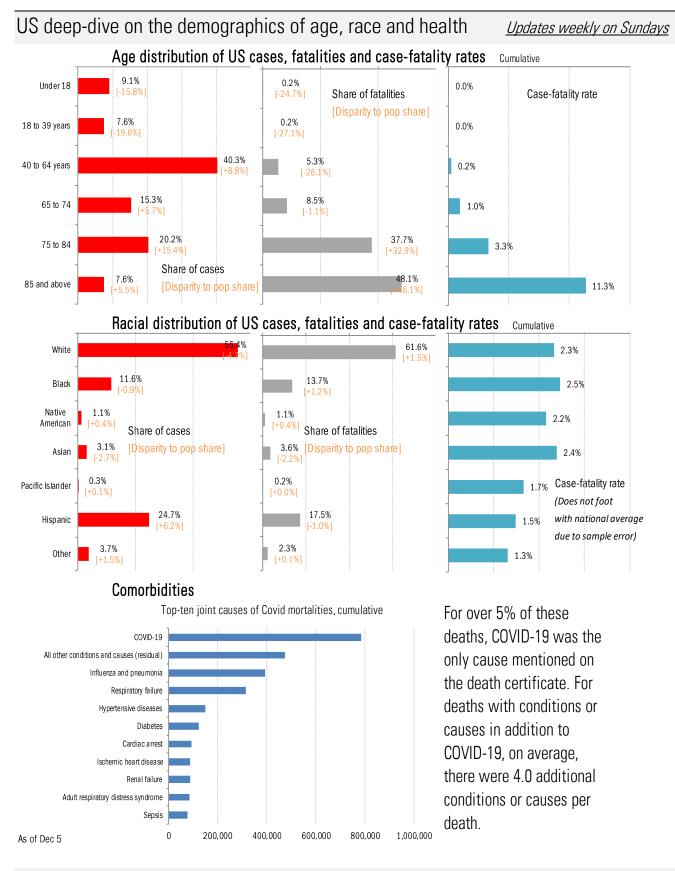








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



Source: Distributions <u>CDC</u>, Comorbidities <u>CDC</u>, TrendMacro calculations

Recommended reading

Will the Coronavirus Evolve to Be Milder?

Andrew Pekosz *New York Times* December 10, 2021

We Can Live Better Lives While Being Smart About Covid

New York Times December 11, 2021

Covid: The Path not Taken

Peter McCullough *DarkHorse Podcast* December 6, 2021

South Africa's president tests positive for the coronavirus. Lynsey Chutel

New York Times December 12, 2021

<u>That Big Office Building? It's an E-Commerce</u> Warehouse Now.

Chip Cutter and Konrad Putzier *Wall Street Journal* December 10, 2021

Emerging SARS-CoV-2 variants: shooting the

messenger

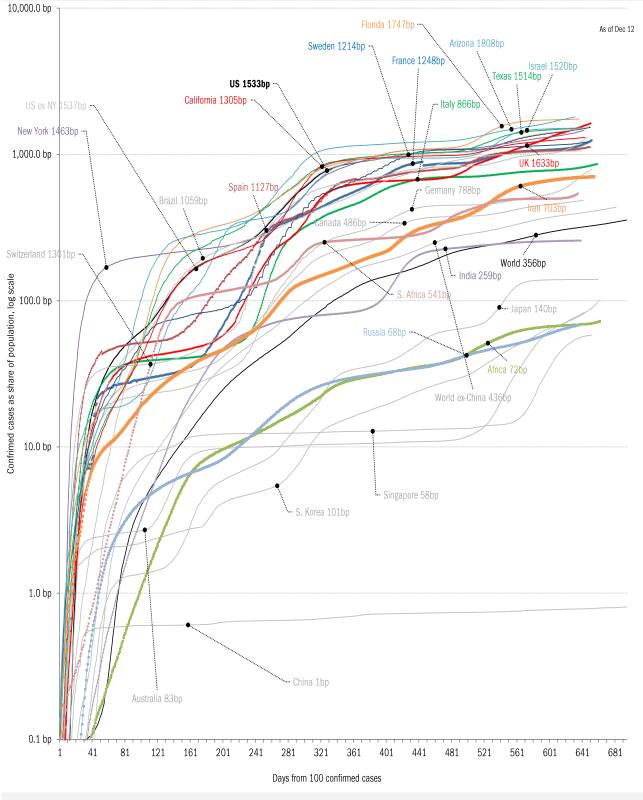
The Lancet Infectious Diseases December 9, 2021

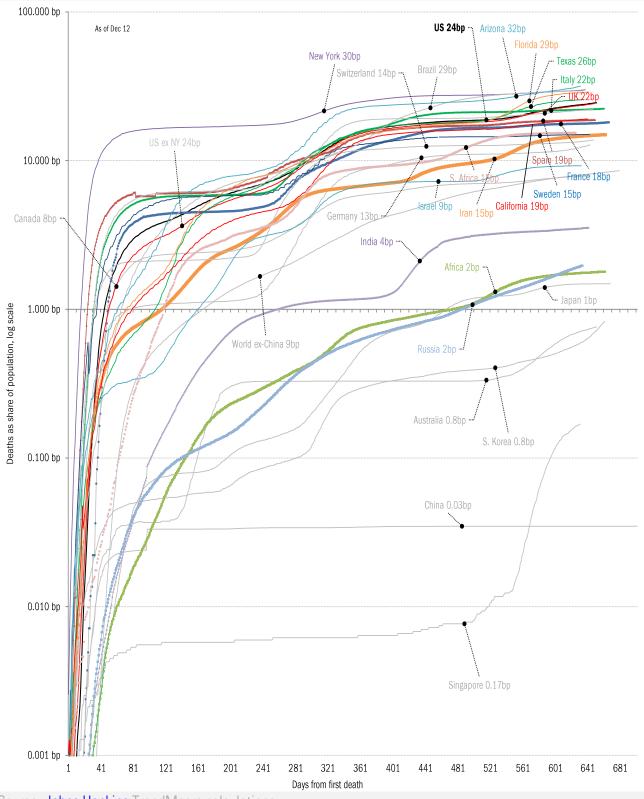
Meme of the day



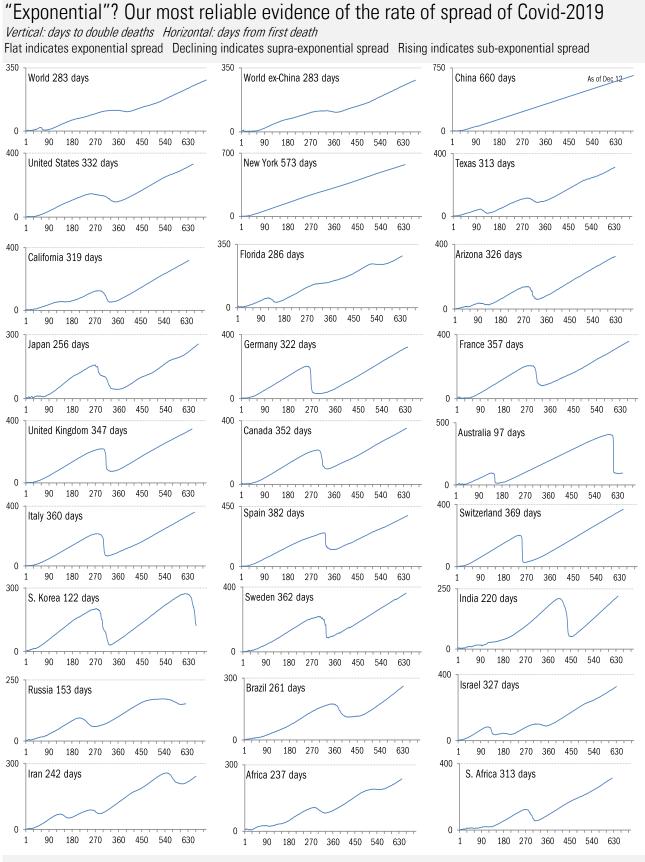
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

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*

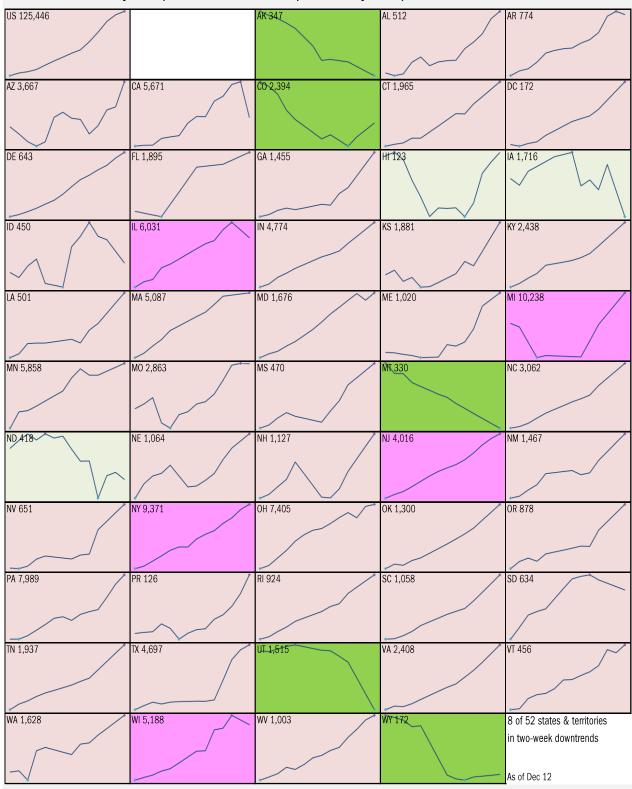




The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*

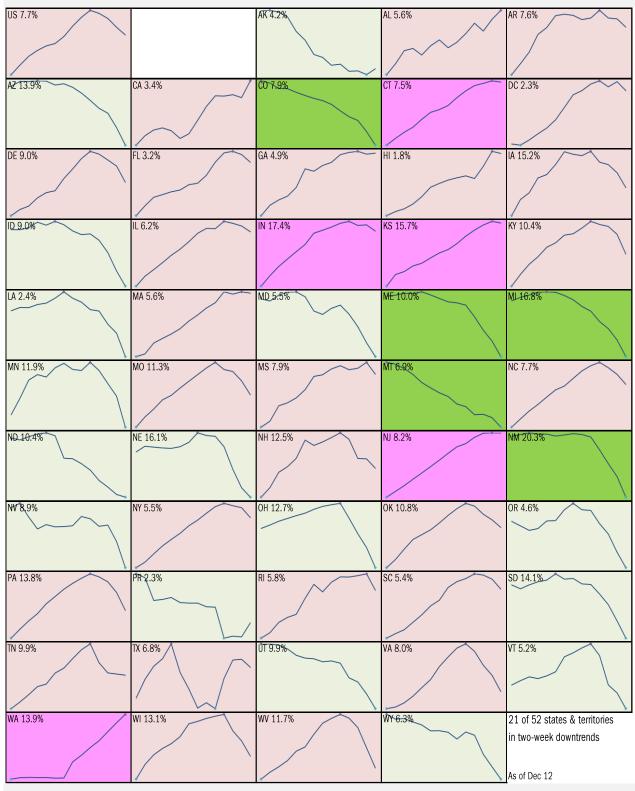


Requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in new cases *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



Source: Johns Hopkins, TrendMacro calculations

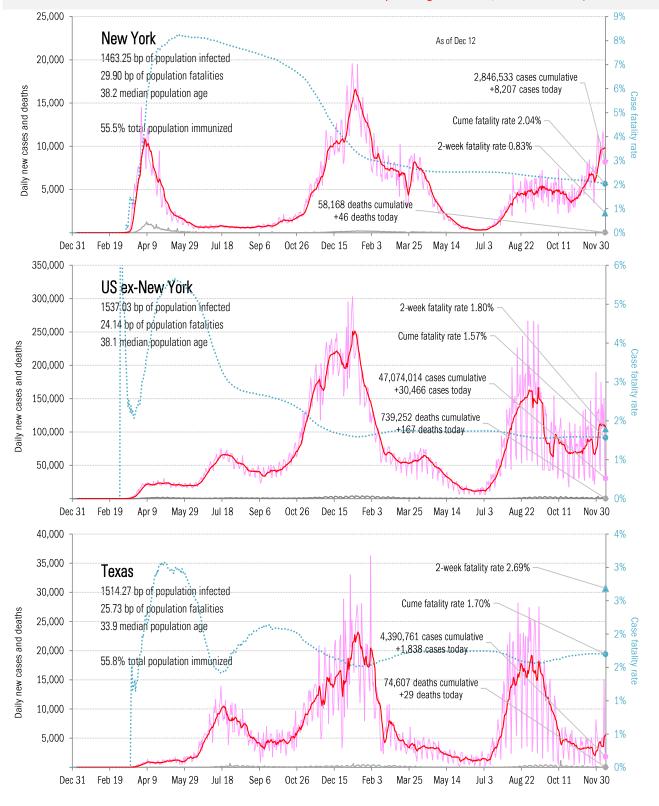
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



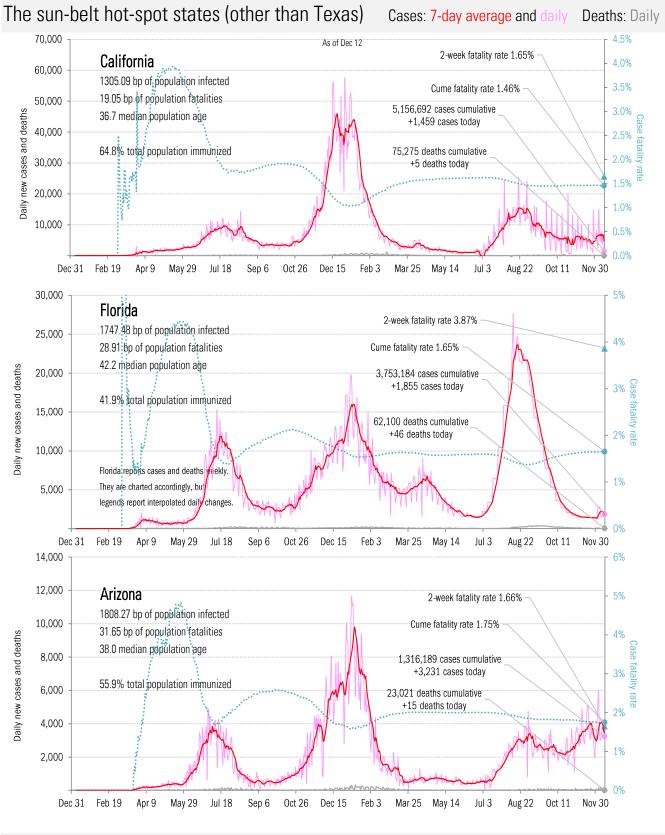
Source: Covid Act Now, TrendMacro calculations

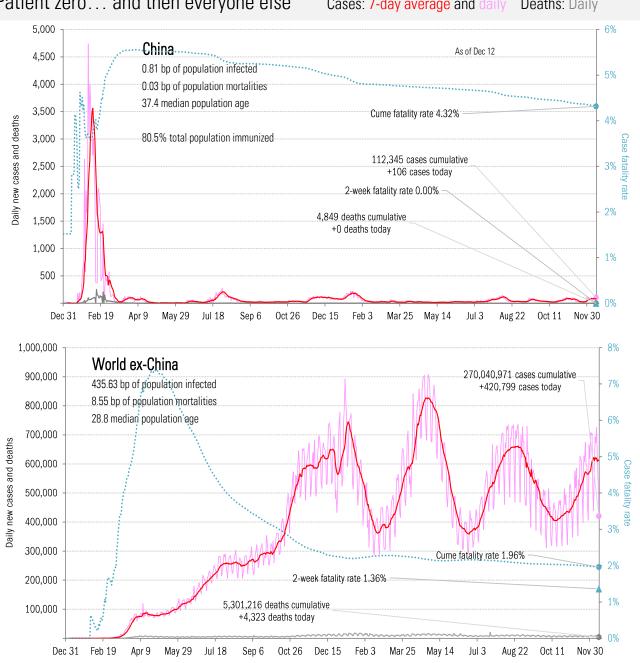
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations





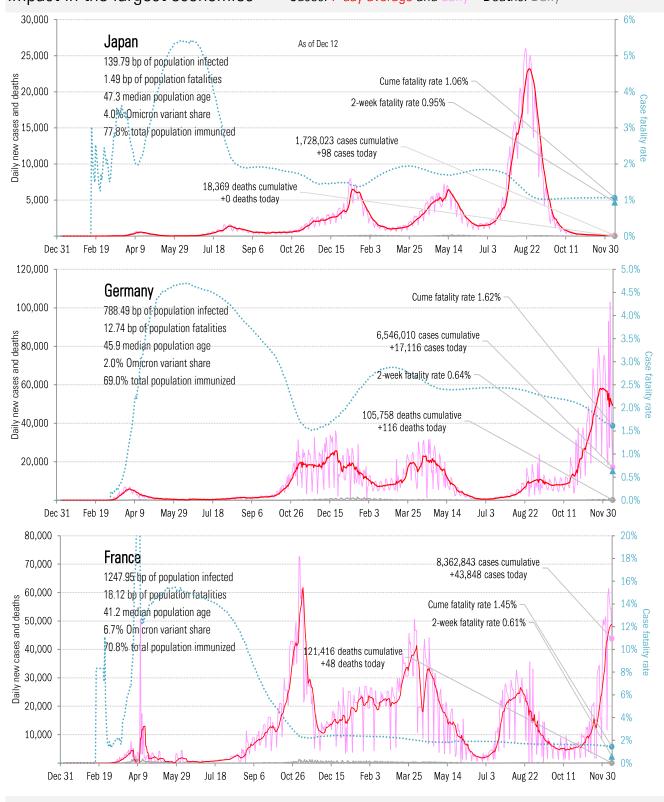
Patient zero... and then everyone else

Cases: 7-day average and daily Deaths: Daily

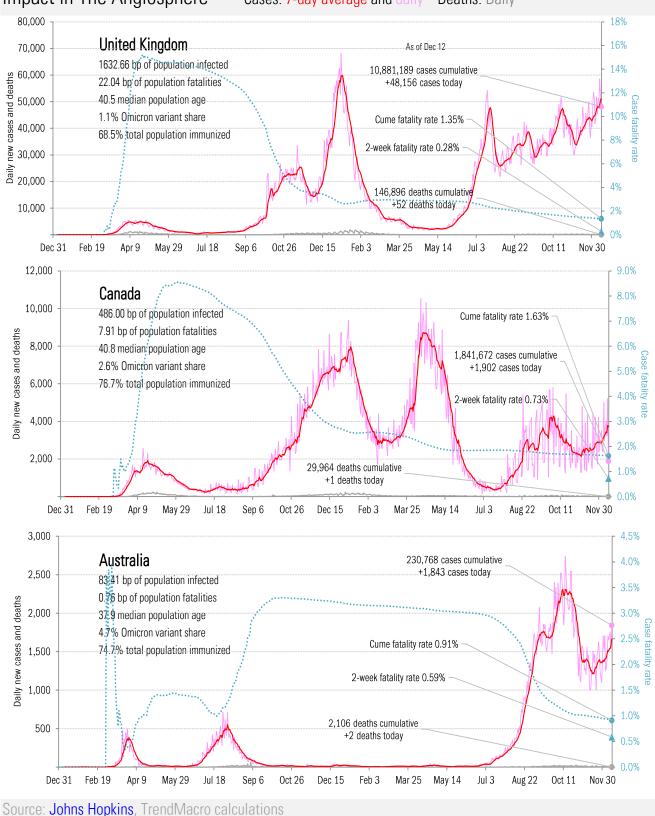
Source: Johns Hopkins, TrendMacro calculations

Impact in the largest economies Cases: 7-day average and daily

Deaths: Daily

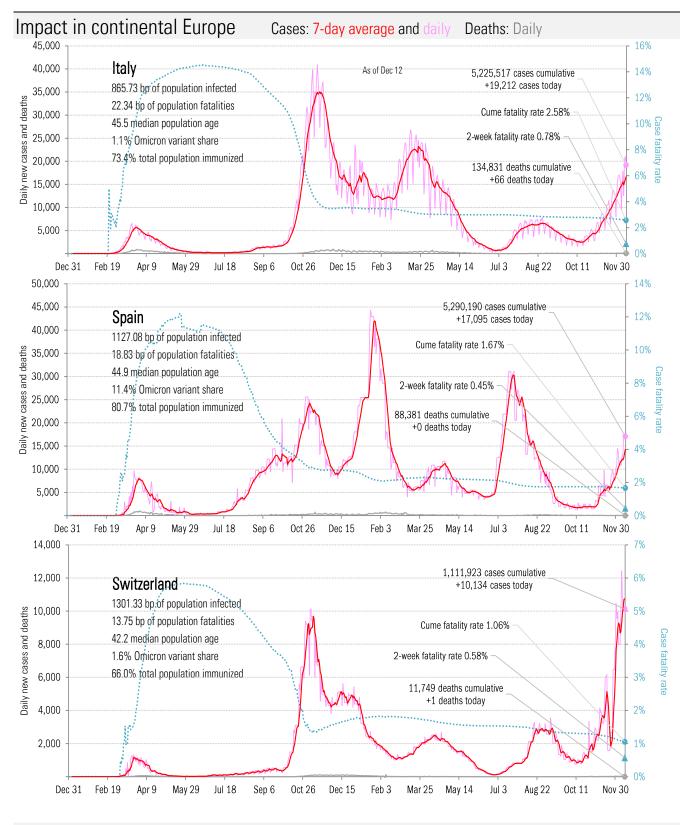




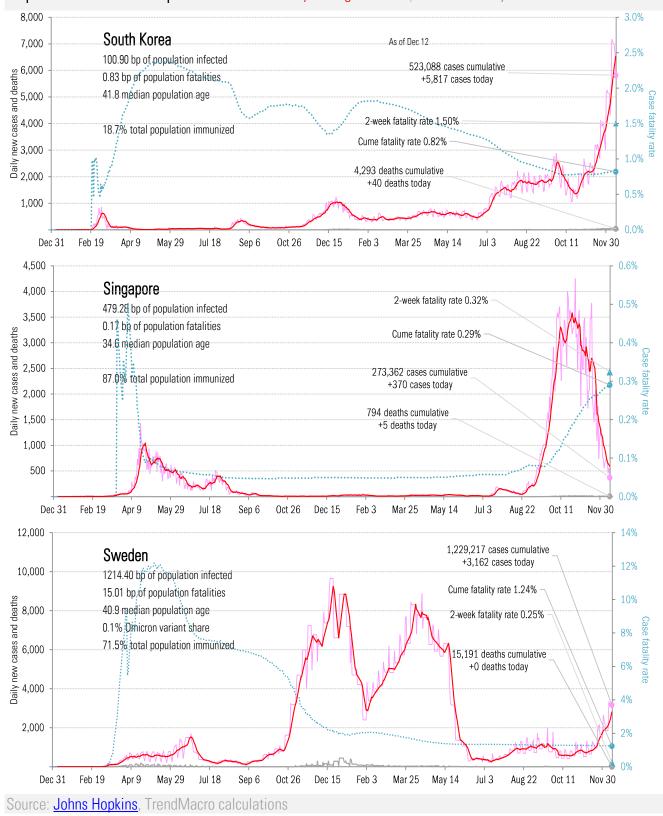


Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily

16

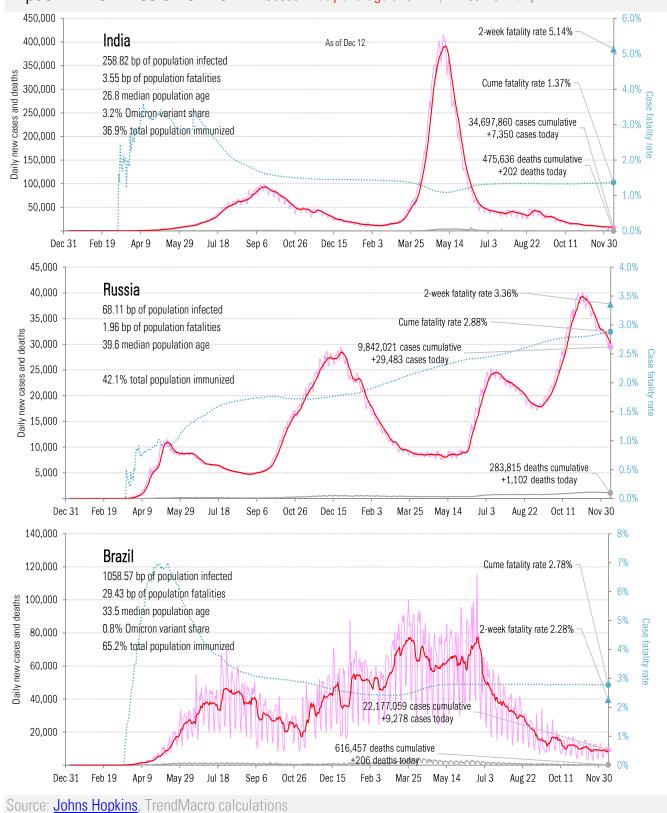


Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily



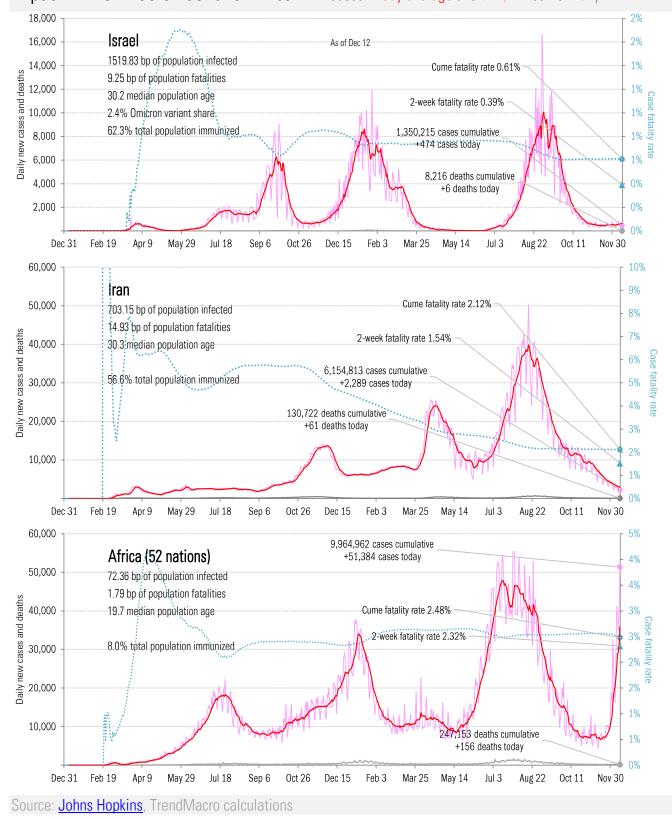
Impact in the BRICs ex-China Cas

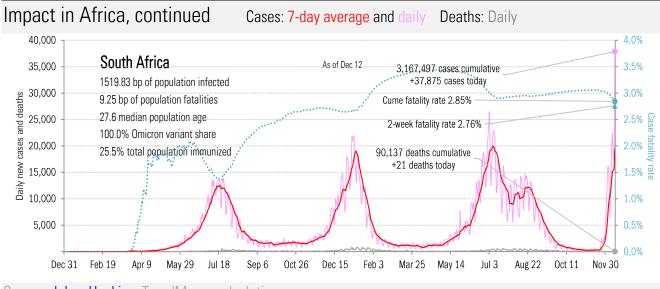
Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa

Cases: 7-day average and daily Deaths: Daily





Source: Johns Hopkins, TrendMacro calculations