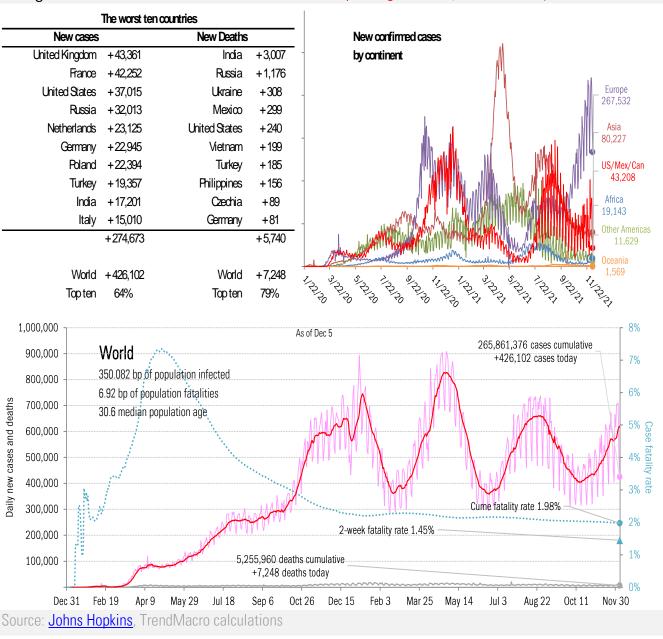


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Monday, December 6, 2021

The global scorecard

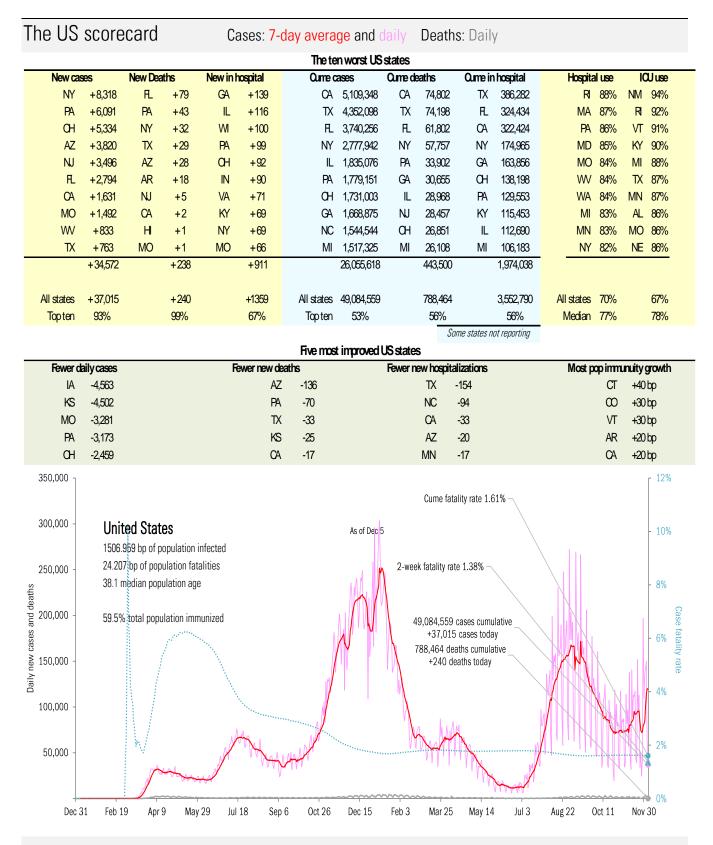


Cases: 7-day average and daily Deaths: Daily

For more information contact us:

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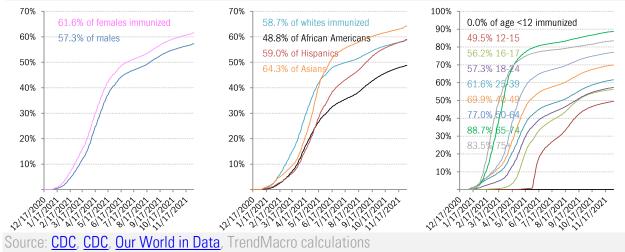


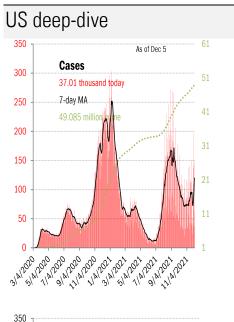
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

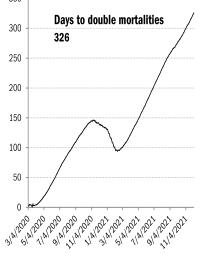
Rolling out the vaccines in the US and the world												
Administered		Cumulative							day	Immunity	Full	Partial
Doses		483,041,646						+1.819	million	US	59.5%	71.0%
Boosters		47,088,018						+1.030	million	UK	68.2%	74.9%
		One dose						New immune today		France	70.0%	77.0%
Total population		241,581,599				04,058,032	61%		million	Spain	80.6%	82.2%
Age 12 to 17		14,764,753				12,369,558	52%		million	Germany	68.4%	71.3%
Age 18 to 64		163,827,212				40,582,720	69%		million	ltaly	73.1%	78.5%
Age 65 and over		57,229,639				49,043,235			million	Australia	73.7%	78.0%
J&J 4%							erican >18		ed in	Israel	62.2%	68.6%
			ī	65 da			dav	ave		Canada	76.4%	81.0%
		St	ate	Bast			3		Japan	77.5%	79.3%	
Moderna 38% Pfizer 58%				by Feb 8, 2022					Africa	7.5%	11.3%	
		At least partial immunity		Middle 73.3% of population					India	34.3%	57.5%	
		as % population		17.3% previously test					Brazil	64.0%	76.9%	
		Full immunity		90.5% vs 60% ad			lult herd immunity		China	76.9%	84.8%	
AK		as % population								Global data diffe		s, timing
63.4%				WI				As of Dec 5			ME	
54.7%				66.4%					82.7%			
F	14/4		MT	ND		60.1%	N AI	i 1	NIX/)/T	72.9%	
	WA	ID	MT	ND	MN		MI		NY	VT	NH	
	73.4%	51.1%	60.3%	58.5%	69.6%	69.7%	61.8%		79.3%	86.3%	89.3%	
_	65.5%	45.5%	52.2%	49.2%	63.3%	62.2%	55.2%	DA	69.1%	73.8%	65.1%	
	OR	NV	WY	SD	IA 02.00/	IN	OH	PA	NJ	MA		
	72.0%	67.0%	54.2%	67.9%	63.0%	56.2%	58.9%	82.5%	80.0%	86.7%		
- F	64.6% CA	54.9% UT	46.0% CO	55.2% NE	57.2% M0	50.9% KY	53.6% WV	59.0% VA	68.5% MD	71.9% CT	RI	•
	79.6%	65.1%	72.1%	64.5%	60.4%	60.8%	69.3%	76.3%	77.6%	85.0%	84.1%	
	63.9%	55.9% AZ	63.9% NM	57.9% KS	51.5% AR	52.7% TN	49.1% NC	65.7% SC	68.4% DC	72.8% DE	73.5%	
		65.0%	77.5%	66.8%	61.0%	57.2%	71.4%	60.8%	82.7%	73.5%		
		55.2%	64.1%	55.2%	49.8%	49.8%	54.7%	51.8%	65.2%	73.5% 61.9%		
		JJ.Z /0	04.170	05.2 %	49.0% LA	49.6 % MS	54.7%	GA	00.2 /0	01.370		
				63.5%	56.0%	54.1%	57.1%	59.4%				
HI				52.0%	49.2%	47.1%	46.5%	49.4%				
82.8%				52.0% TX	4J.2 /0	47.170	40.0 /0	43.4 /0	FL	1 I	PR	
61.6%				64.6%					72.4%		85.6%	
01.0 /0				55.2%					61.9%		74.5%	
				JJ.Z /0					01.3 /0	1 I	74.370	
			-									

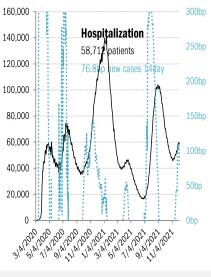
The demographics of US vaccination

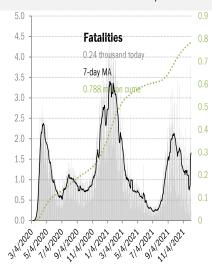
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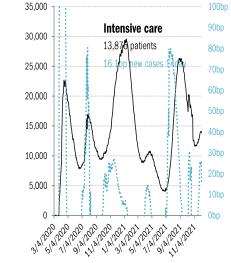


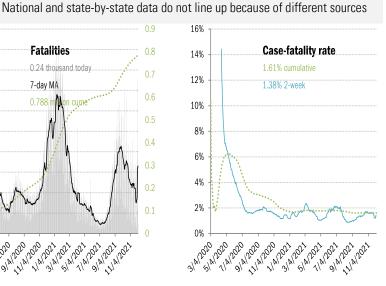


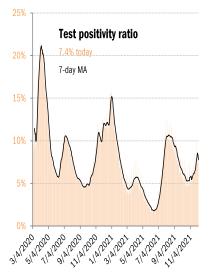


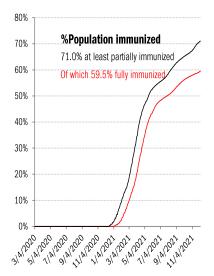




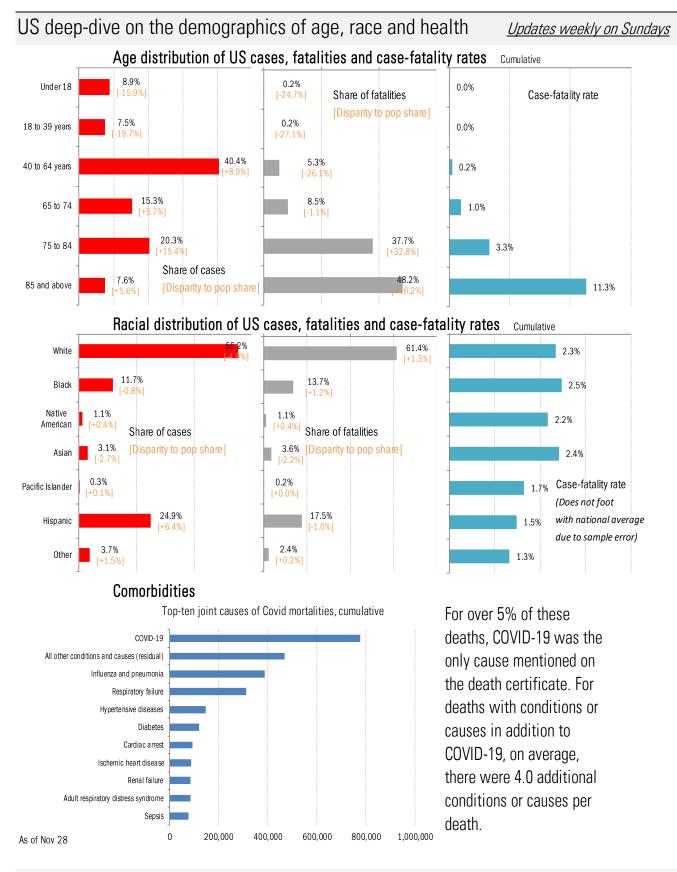








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Omicron variant of SARS-CoV-2 harbors a unique insertion mutation of putative viral or human genomic origin

A.J. Venkatakrishnan *OSF Preprints* December 2, 2021

<u>Omicron variant may have picked up a piece of</u> common-cold virus: experts

Jackie Salo *New York Post* December 5, 2021

Before Even Receiving a Name, Omicron Could Have Spread in New York and the Country

Joseph Goldstein, Julie Bosman, Kimiko de Freytas-Tamura and Roni Caryn Rabin *New York Times* December 5, 2021

What Spreads Faster Than Covid? Vaccination.

Holman W. Jenkins, Jr. *Wall Street Journal* December 3, 2021

Murder and Mandates in Chicago

Wall Street Journal December 5, 2021

Mrna COVID Vaccines Dramatically Increase Endothelial Inflammatory Markers and ACS Risk as Measured by the PULS Cardiac Test: a Warning Steven R Gundry *Circulation* November 8, 2021

Twitter Censors Links to American Heart Association over Vaccine ResearchTwitter Censors Links to American Heart Association over Vaccine Research Allum Bokhari *Breitbart* December 2, 2021

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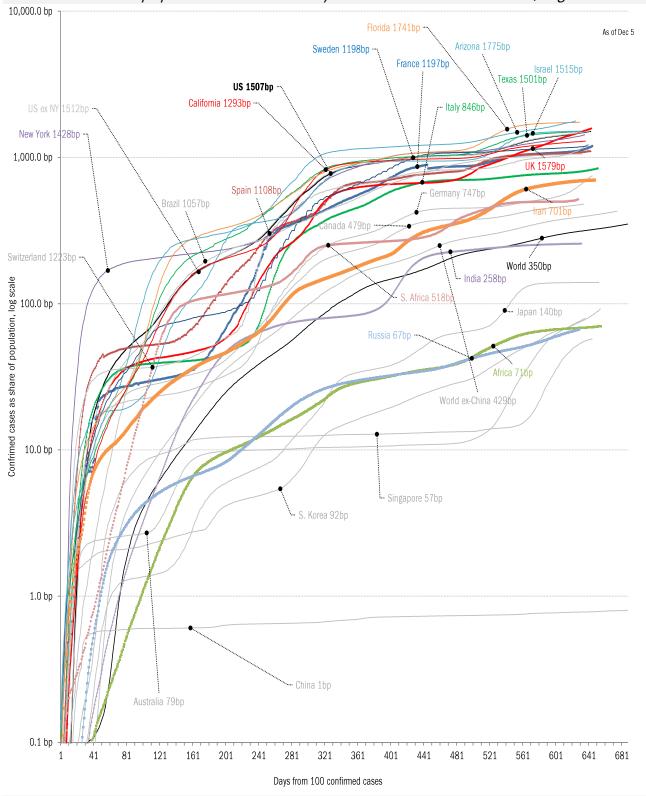
Meme of the day



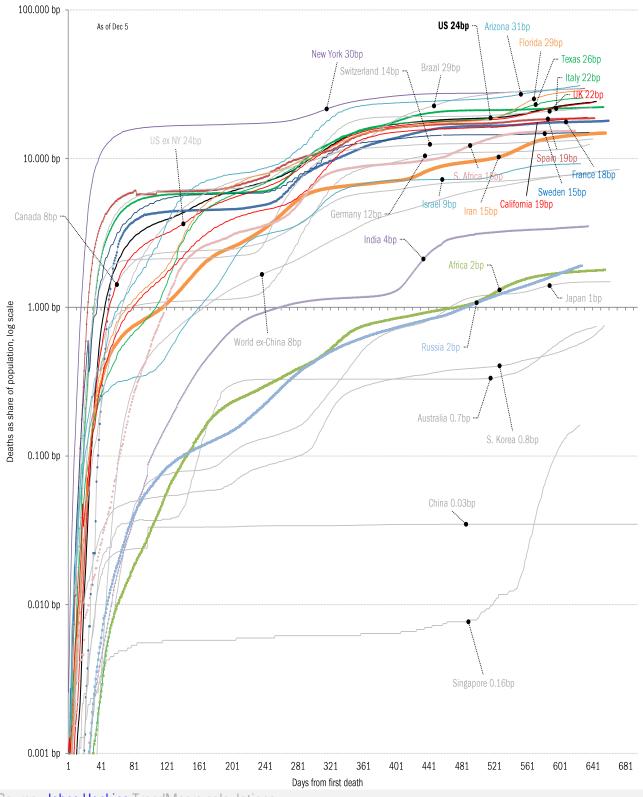
thebradfordfile @thebradfordfile

From what I can tell the "I'm over it" variant is spreading across America.

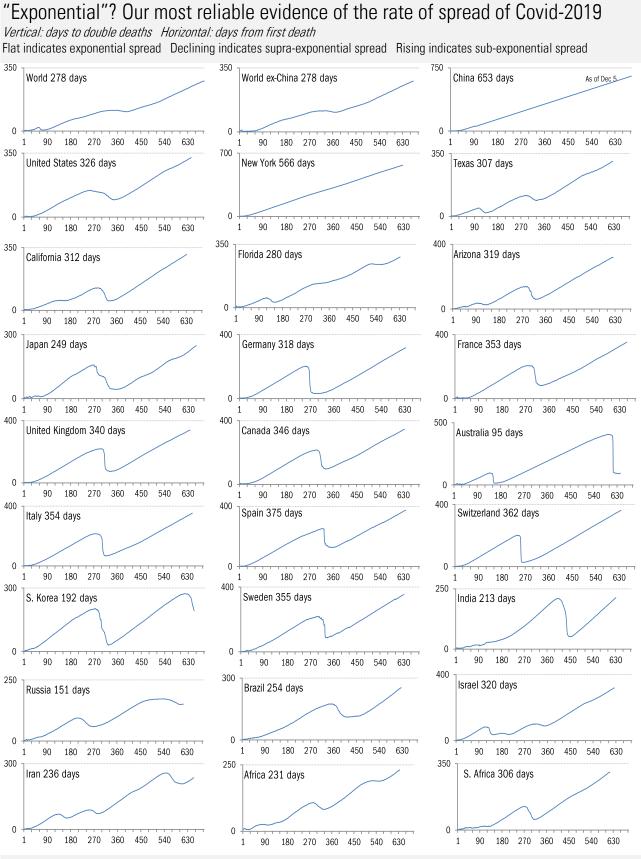
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP



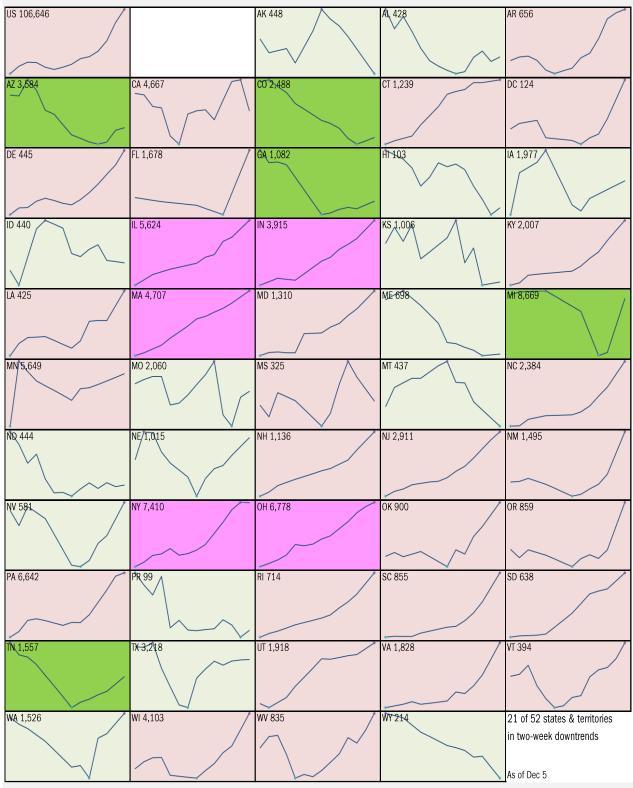
The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*



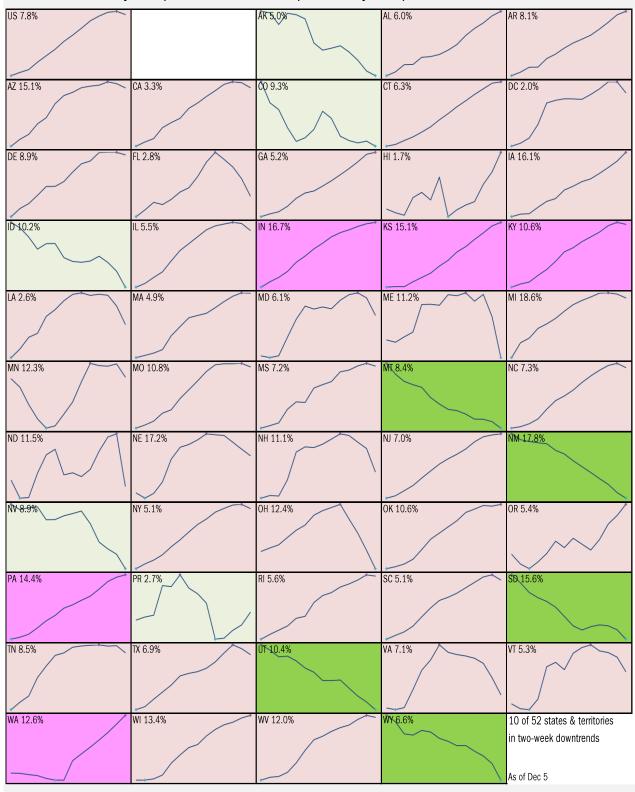
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*



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



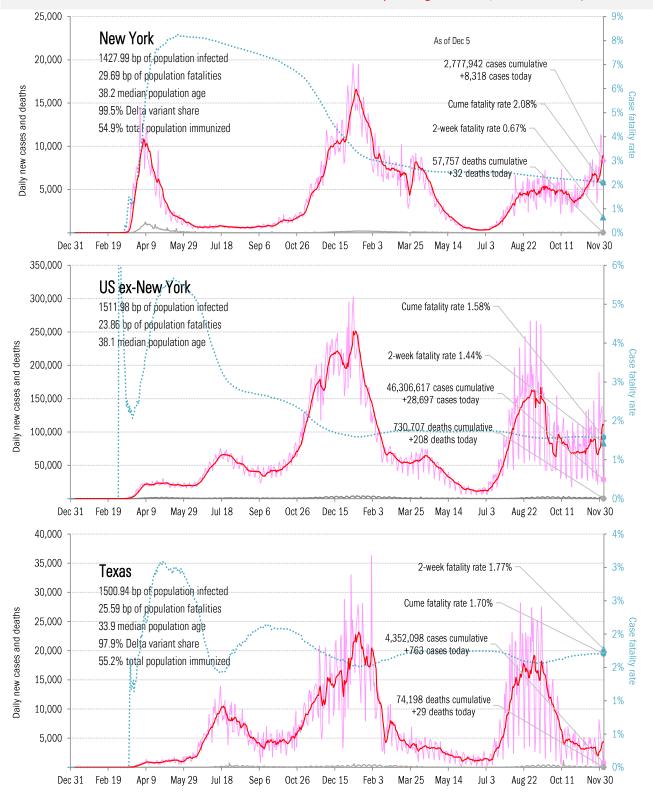
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



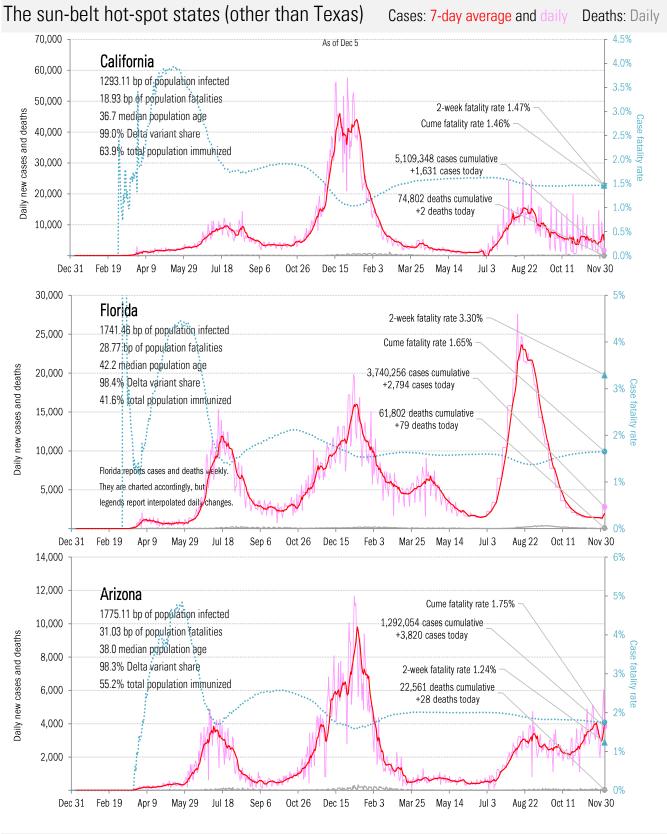
Source: Covid Act Now, TrendMacro calculations

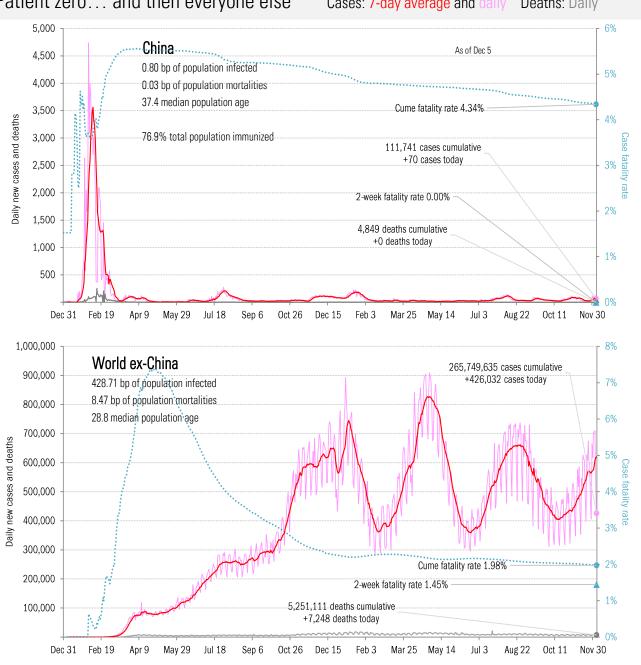
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



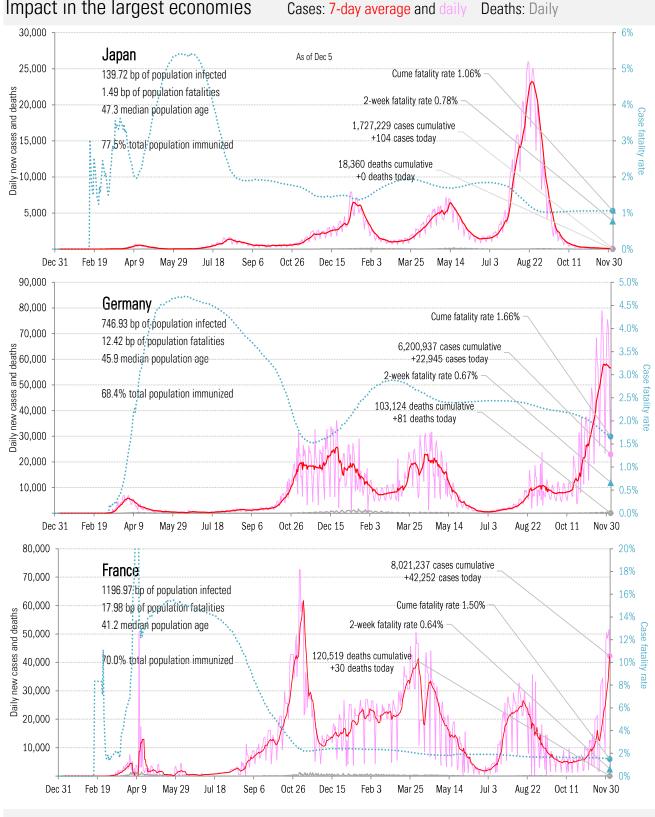


Patient zero... and then everyone else

Cases: 7-day average and daily Deaths: Daily

Source: Johns Hopkins, TrendMacro calculations

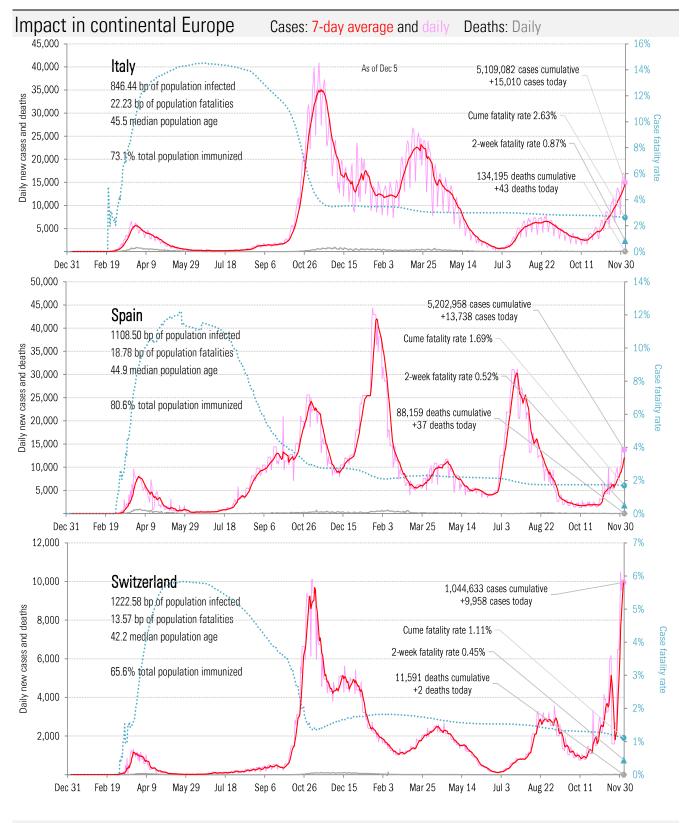
Impact in the largest economies Cases: 7-day average and daily



Source: Johns Hopkins, TrendMacro calculations

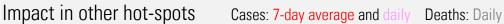
Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily 80,000 18% United Kingdom 16% 70,000 As of Dec 5 1578.96 bp of population infected strap pure set 60,000 50,000 \$80 Met 20,000 30,000 14% 10,523,316 cases cumulative 21.91 bp of population fatalities +43,361 cases today 12% 40.5 median population age 10% Cume fatality rate 1.39% fatality 68.2% total population immunized 8% 2-week fatality rate 0.31% rate 6% Alia 20,000 146,055 deaths cumulative 4% +54 deaths today 10,000 2% 0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Oct 11 Jul 3 Aug 22 Nov 30 12,000 9.0% Canada 1,815,686 cases cumulative 8.0% 10,000 +2,382 cases today 479.14 bp of population infected 7.0% 7.87 bp of population fatalities Daily new cases and deaths Cume fatality rate 1.64% 8,000 6.0% 40.8 median population age 5.0% 6,000 76.4% total population immunized 2-week fatality rate 0.77% 4.0% 4,000 3.0% 2.0% 2,000 29,821 deaths cumulative 1.0% +2 deaths today 0.0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30 3,000 4.5% Australia 4.0% 219.121 cases cumulative 2,500 79 20 bp of population infected +1,285 cases today 3.5% 0.74 bp of population fatalities Daily new cases and deaths 2,000 379 median population age 3.0% Cume fatality rate 0.94% 2.5% 1,500 73.7% total population immunized 2.0% 2-week fatality rate 0.60% 1,000 1.5% 1.0% 2,056 deaths cumulative 500 +6 deaths today 0.5% 0.0% Jul 18 Aug 22 Dec 31 Feb 19 Apr 9 May 29 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30





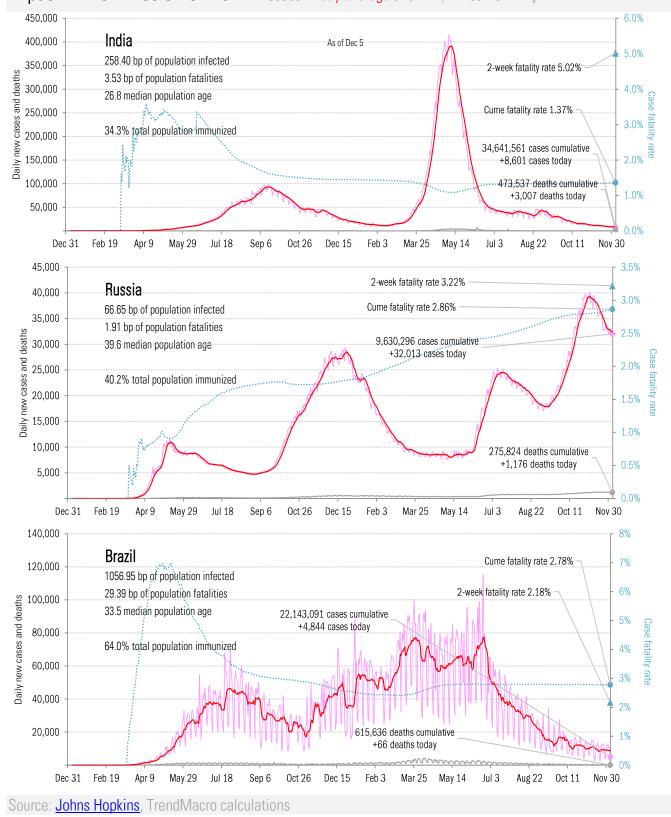
Source: Johns Hopkins, TrendMacro calculations

6,000 3.0% South Korea As of Dec 5 5,000 2.5% 92.08 bp of population infected Addition of the set of 477,358 cases cumulative 0.75 bp of population fatalities, +4,324 cases today 2.0% 41.8 median population age 2-week fatality rate 1.60% 1.5% Cume fatality rate 0.82% 18.7% total population immunized rate 3,893 deaths cumulative 1.0% +41 deaths today ****** 1,000 0.5% 0.0% Apr 9 Dec 31 Feb 19 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30 4,500 0.6% Singapore 4,000 0.5% 472.00 bp of population infected 3,500 Cume fatality rate 0.28% 0.16 bp of population fatalities Daily new cases and deaths 3,000 34.6 median population age 0.4% Case 2-week fatality rate 0.26% 2,500 91.9% total population immunized 0.3% 2,000 269,211 cases cumulative rate +552 cases today 0.2% 1,500 759 deaths cumulative 1,000 +13 deaths today 0.1% 500 0.0% Feb 19 Oct 26 Jul 3 Dec 31 Apr 9 May 29 Jul 18 Sep 6 Dec 15 Feb 3 Mar 25 May 14 Aug 22 Oct 11 Nov 30 12,000 14% Sweden 1,212,145 cases cumulative 12% 10,000 1197.54 bp of population infected +2,210 cases today 14.99 bp of population fatalities 10% Daily new cases and deaths 8,000 40.9 median population age Cume fatality rate 1.25% Case fatality rate 8% 70.7% total population immunized. 6,000 2-week fatality rate 0.48% 6% 4,000 15,170 deaths cumulative 4% +0 deaths today 2,000 2% 0% Apr 9 May 29 Jul 18 Sep 6 Aug 22 Dec 31 Feb 19 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30



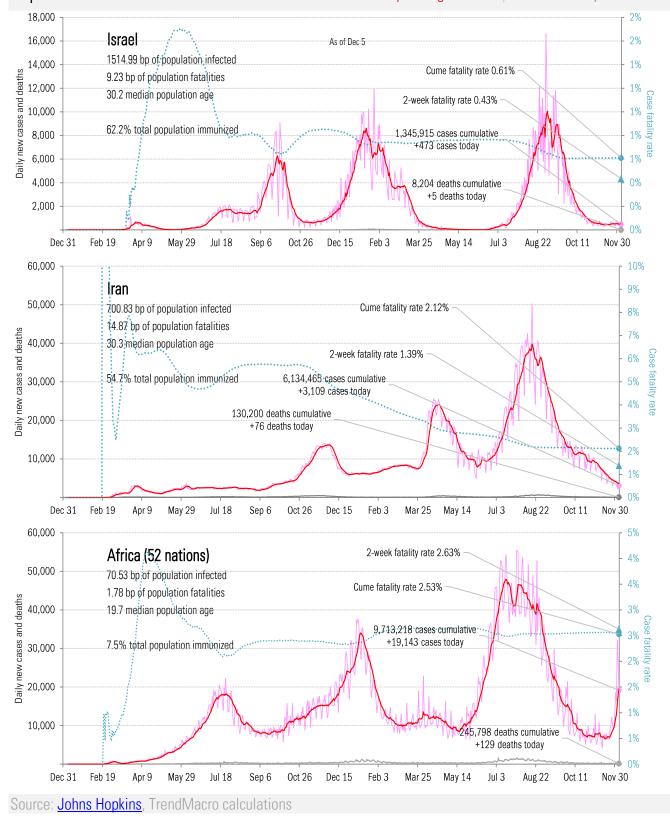
Impact in the BRICs ex-China

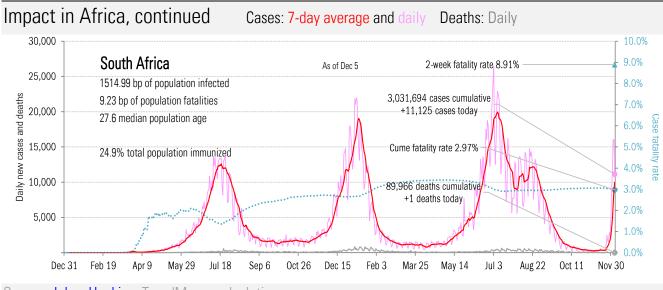
Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa

Cases: 7-day average and daily Deaths: Daily





Source: Johns Hopkins, TrendMacro calculations