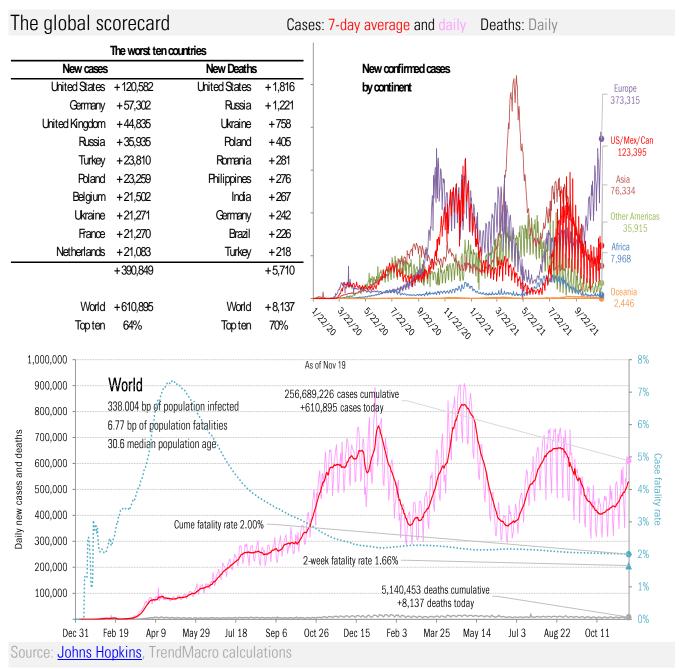


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

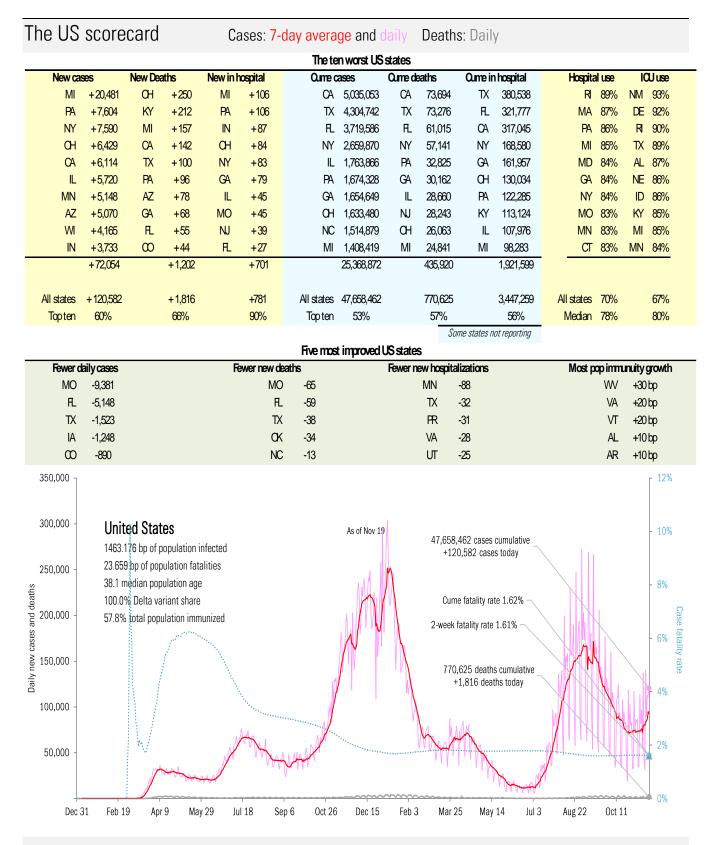
Saturday, November 20, 2021



For more information contact us: Donald Luskin: 214 550 2121 don@trendmacro.com

Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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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												
Administer	Administered Cumulative							То	day	Immunity	Full	Partial
Doses	s 460,483,470							+1.948	million	US	57.8%	68.2%
Boosters	osters 34,028,8		34,028,880					+1.006	million	UK	67.6%	74.3%
		One dose		% Pop Imn		nune	% рор	New imm	une today	France	69.0%	76.4%
Total population 235			35,071,490	70%	2	00,975,259	60%	+0.212	million	Spain	80.3%	81.7%
Age 12 to 1			31,609,343	973%			51%	+0.016 million		Germany	67.3%	69.8%
Age 18 to 6			56,434,645)	-28%	138,981,910		68%	+0.155 million		Italy	72.9%	77.8%
Age 65 and over		56,434,645	100%		48,872,298	89%		million	Australia	70.8%	76.6%	
1&1						Every Am	erican >18	3 immuniz	ed in	Israel	62.0%	67.4%
4%				_	134 da			ave		Canada	75.7%	79.2%
		State		Bes				iyə		Japan	76.2%	78.9%
Moderna				005	by Apr 2, 2022					Africa	6.9%	10.1%
38%	Pfizer		tial immunity	Midd	Middle 72.8% of population >18					India	28.1%	54.7%
	58%		pulation	TVITGO	17.0% previously te					Brazil	60.0%	75.9%
		Full immunity		Wor	Worst 89		vs 60% ac	dult herd in	nmunity	China	74.5%	84.8%
	AK as % population		pulation	100						Global data diffe		s, timing
	61.7%			WI				As of Nov 19			ME	
53.8%						64.8%					80.2%	
1						59.1%		1		1.000	71.8%	
	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	71.6%	50.2%	58.9%	57.0%	67.7%	66.6%	60.2%		76.7%	83.0%	83.4%	
	64.5%	44.8%	51.5%	48.4%	62.0%	60.9%	54.2%		67.9%	72.4%	63.9%	
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		
	70.4%	65.4%	52.8%	65.0%	61.7%	55.0%	57.5%	83.3%	77.8%	83.9%		
	63.6%	54.0%	45.2%	54.0%	56.3%	50.4%	52.7%	61.9%	67.3%	70.6%	DI	
	CA	UT	CO	NE	MO	KY	WV	VA	MD	CT	RI	
	77.4%	63.3%	70.1%	63.0%	58.7%	59.3%	53.7%	74.1%	74.3%	82.3%	81.5%	
	62.6%	55.1%	62.7%	57.0%	50.6%	51.7%	41.5%	64.4%	66.9%	71.6%	72.0%	
		AZ	NM	KS	AR	TN	NC	SC		DE		
		63.1%	75.0%	64.9%	59.6%	56.1%	68.3%	59.4%	79.0%	71.3%		
		54.2%	63.1%	54.1% OK	48.9% LA	49.2% MS	53.7% AL	51.0% GA	63.8%	60.9%		
Н				61.7%	54.9%	53.4%	55.7%	58.2%				
				51.1% TX	48.5%	46.7%	45.7%	49.1%	FL	1 1	PR	
81.0% 60.6%			63.2%					70.9%		84.3%		
00.0 %				54.3%					60.8%		04.3 <i>%</i> 74.4%	
				04.5%	1				00.0%		/4.4 70	
The demon	ranhics of	US vaccinat	tion									
The demographics of US vaccination				80%								
70%52.6% of females immunized			80% 58.5% of whites immunized				40% 0.1% of age <12 immunized					
60% - 47.4% of mates			70% 10.1% of African Americans				35% 4.2% 12-15					
				60% 18.8% of Hispanics				30%				
50%				6.1% of Asians				8.8% 18-24				
40%				50% -				25% 21/2% 25-39				
				40% -				20% - 1448 40 49				
30% -				30%				15% 2/8% 50-04				
20%								15% 14.4% 65-74				
20%				20% -				10%				
10%)		-	

10%

5%

12/17/2020

1/17/2021 -

2/17/2021 -3/17/2021 -

5/17/2021 -6/17/2021 -7/17/2021 -

4/17/2021 -

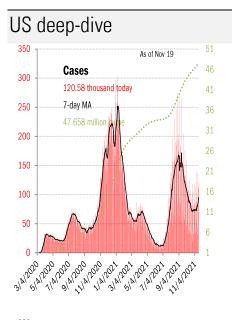
8/17/2021 -9/17/2021 -10/17/2021 -11/17/2021 -

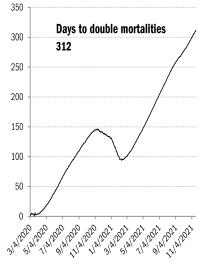
9/17/2021 -10/17/2021 -11/17/2021 -

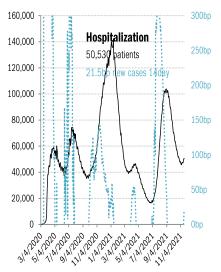
8/17/2021 -

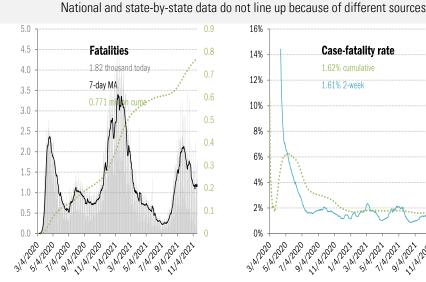
10%

Sonce: CDC ' CDC' ' CDC

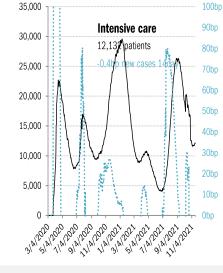


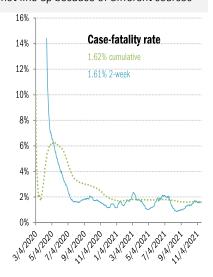


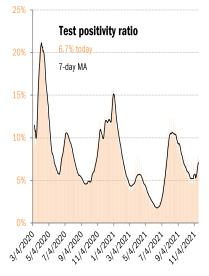


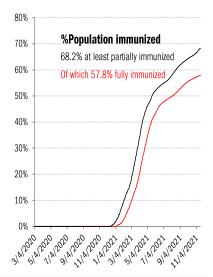




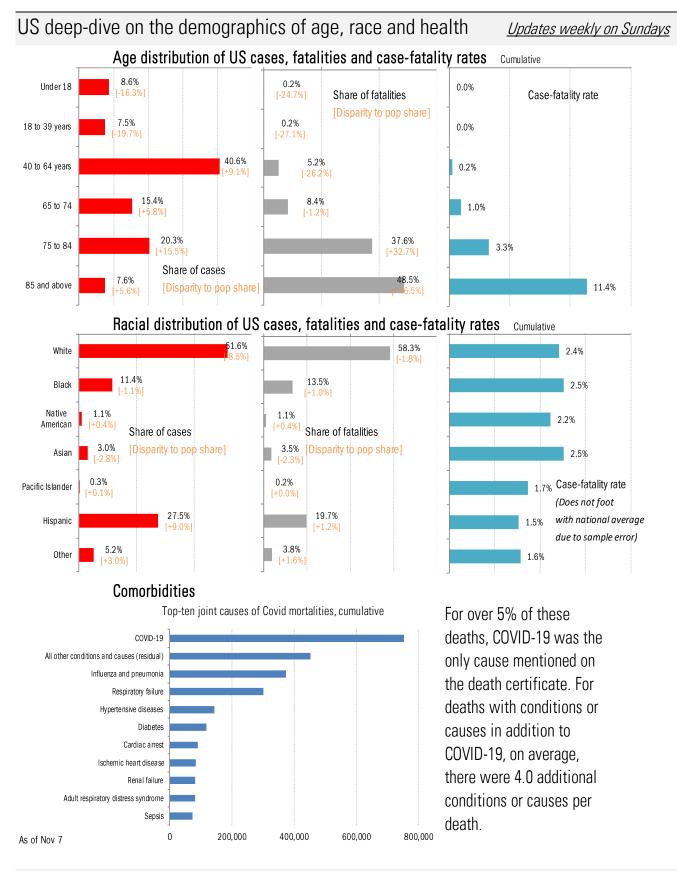








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Assembly Report on Cuomo Contains Grounds for Impeachment, Lawmaker Says

Grace Ashford *New York Times* November 19, 2021

C.D.C. Endorses Covid Vaccine Booster Shots for All Adults Apoorva Mandavilli

Apoorva Mandavilli New York Times November 19, 2021

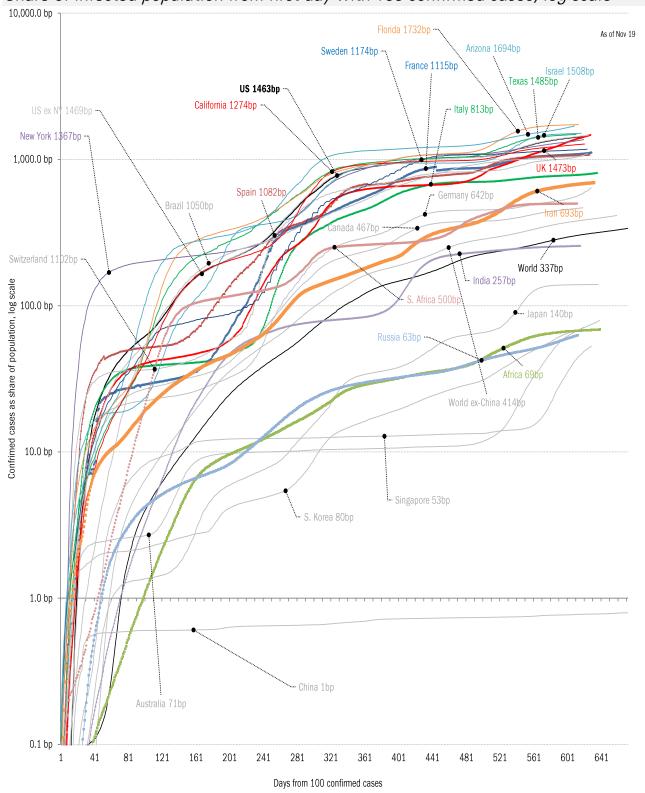
FDA Claims It Needs 55 Years Before Revealing Data on Approval of Pfizer Vaccine

Eric Lendrum *American Greatness* November 19, 2021

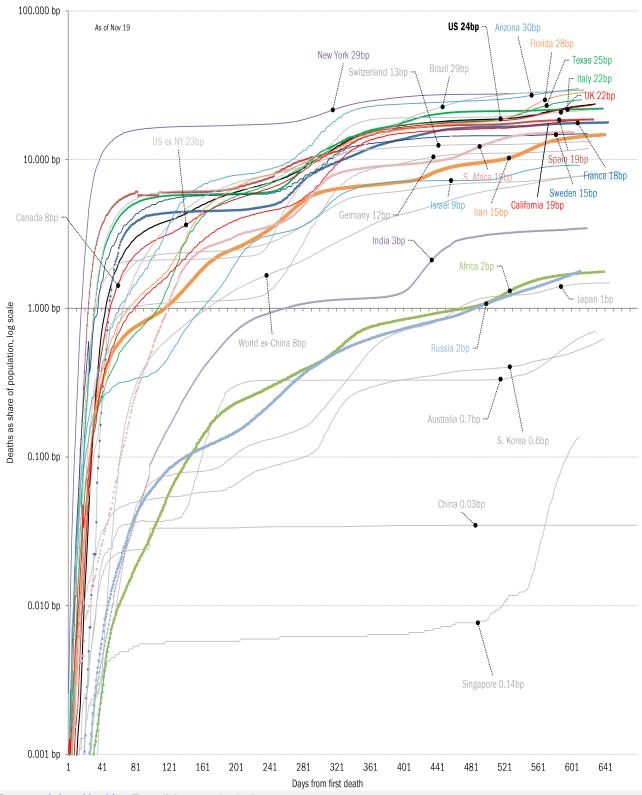
Meme of the day



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

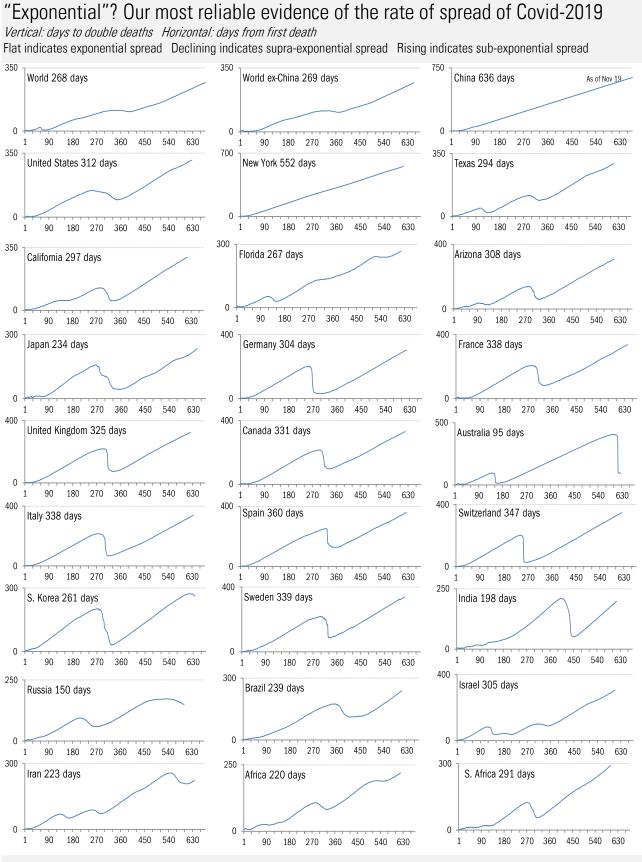


The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*

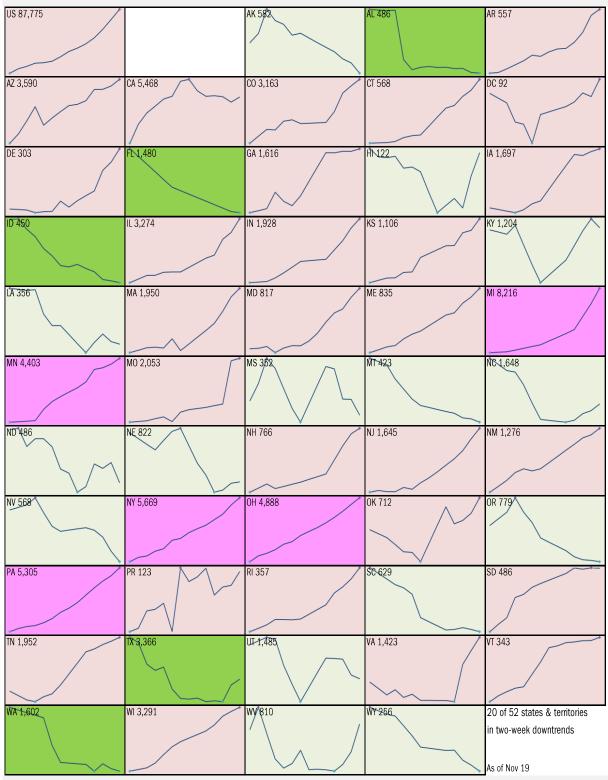


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*

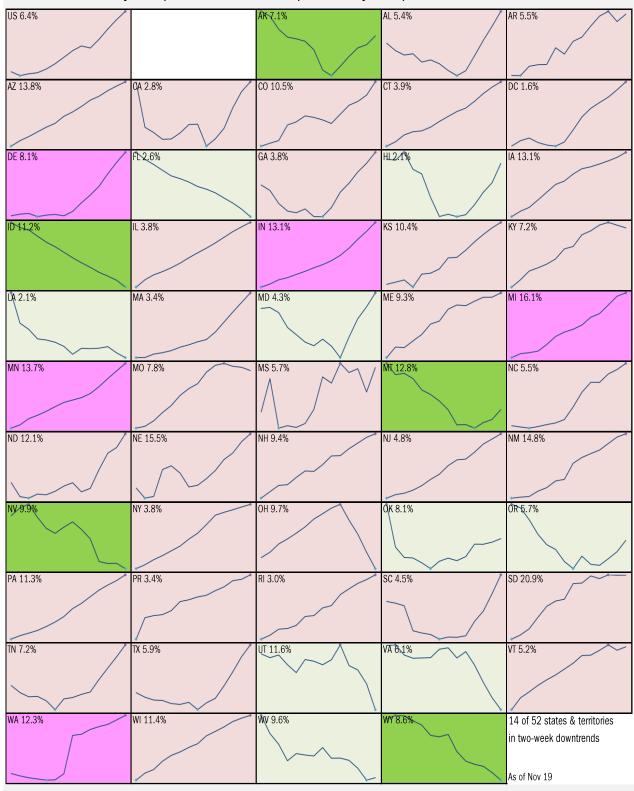
Source: Johns Hopkins, TrendMacro calculations



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



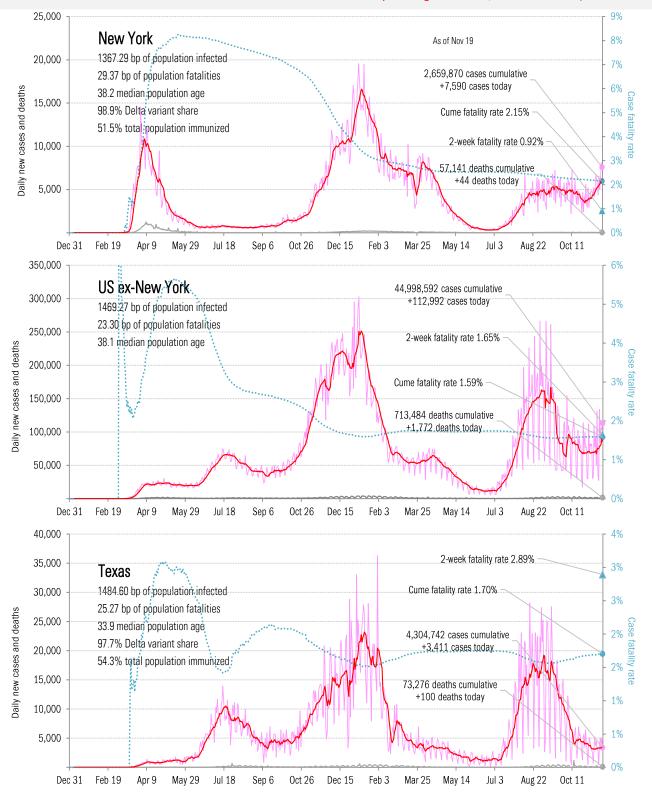
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



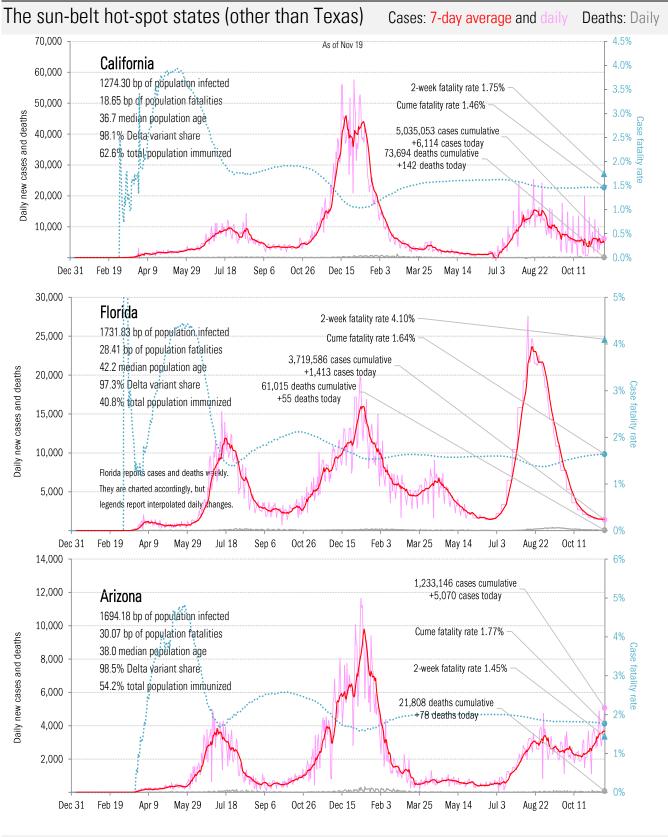
Source: Covid Act Now, TrendMacro calculations

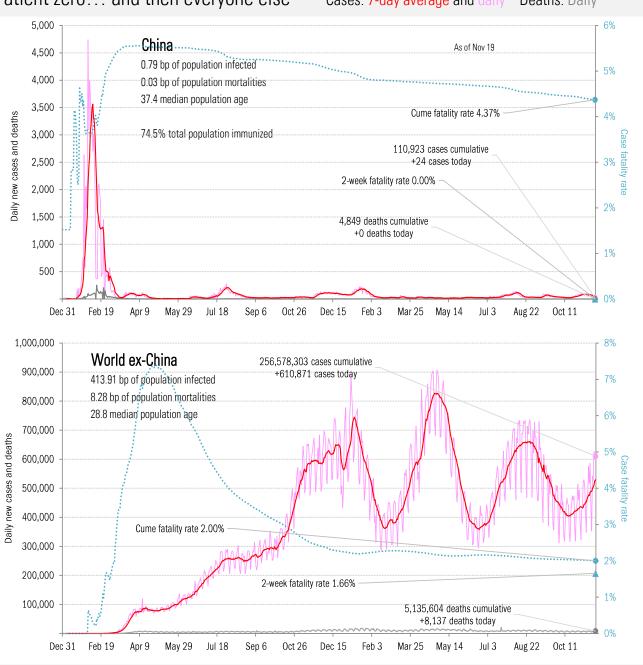
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



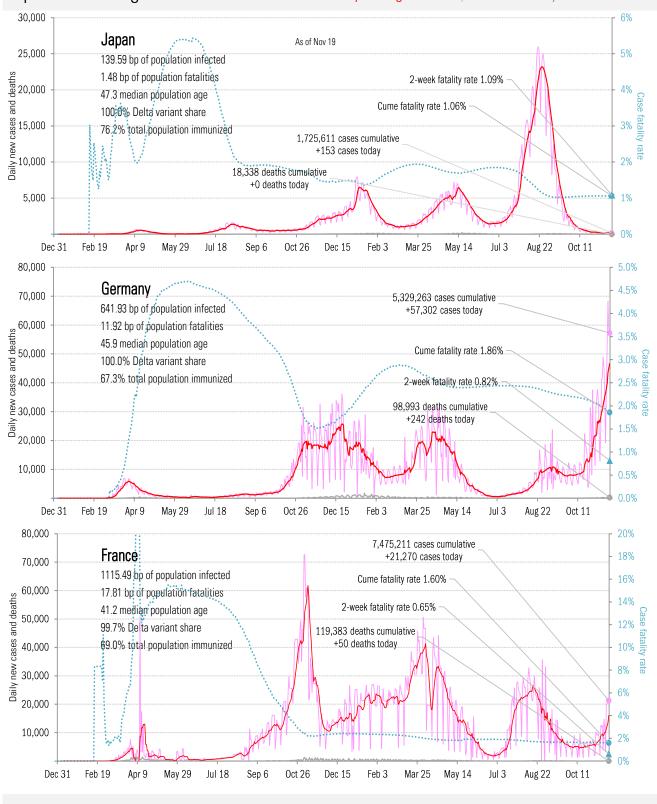


Patient zero... and then everyone else

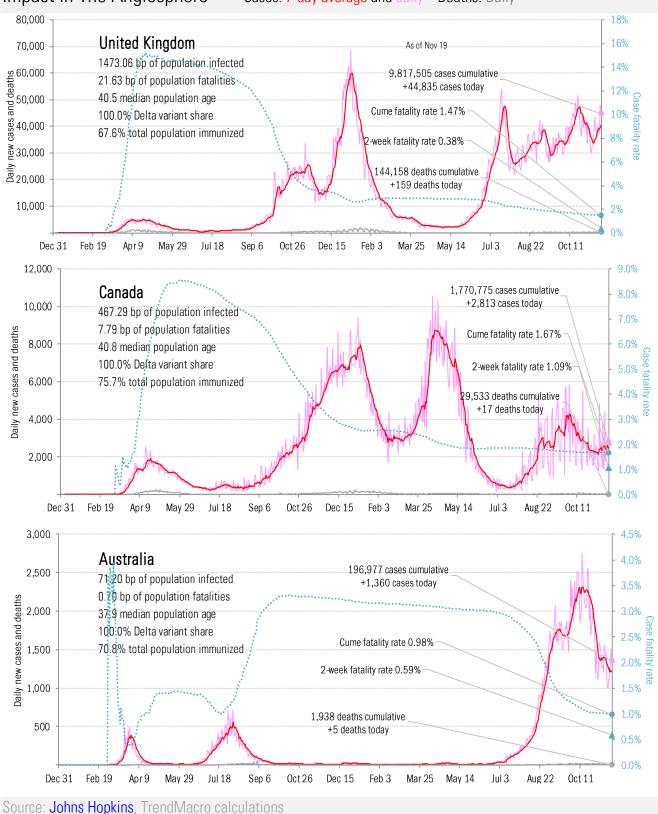
Cases: 7-day average and daily Deaths: Daily

Source: Johns Hopkins, TrendMacro calculations

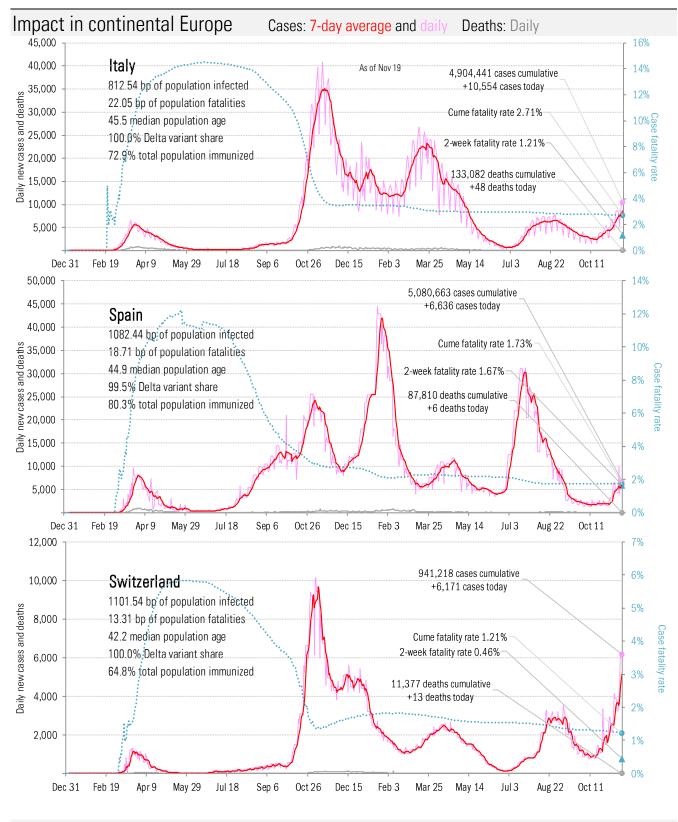
Impact in the largest economies Cases: 7-day average and daily Deaths: Daily

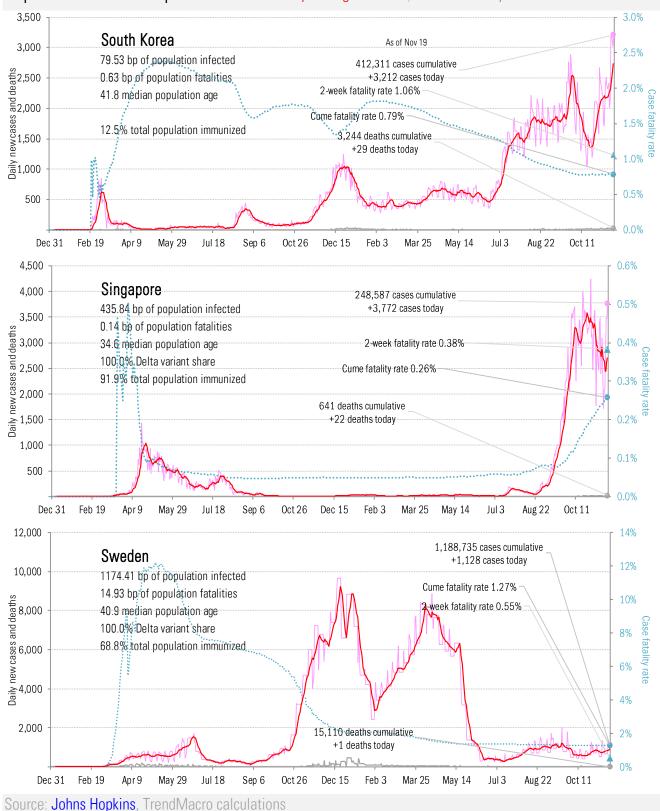


Source: Johns Hopkins, TrendMacro calculations



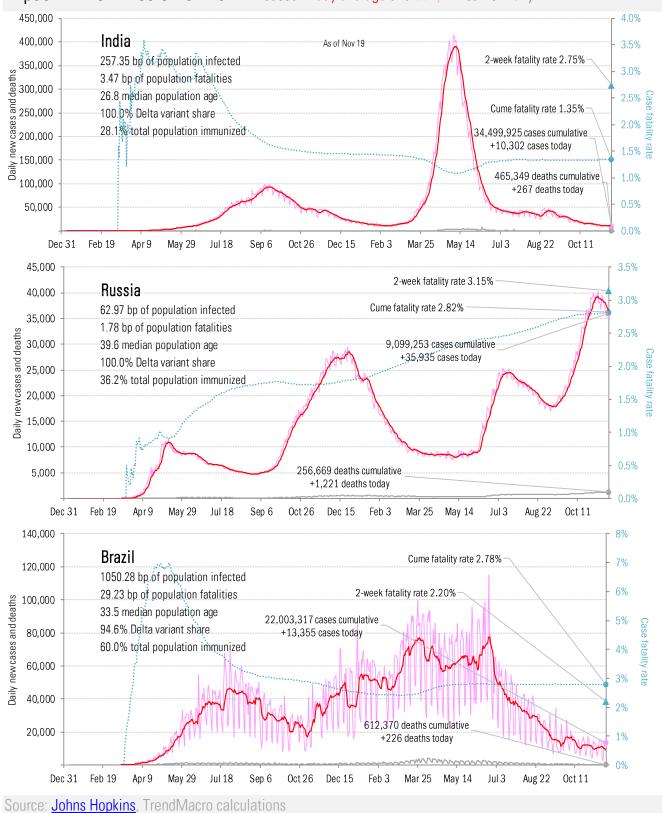
Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily





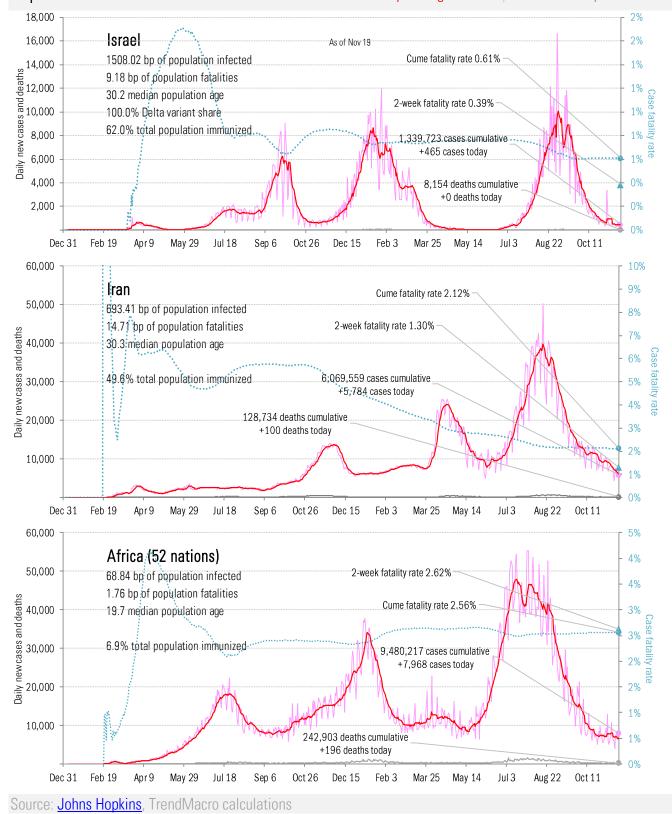
Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily

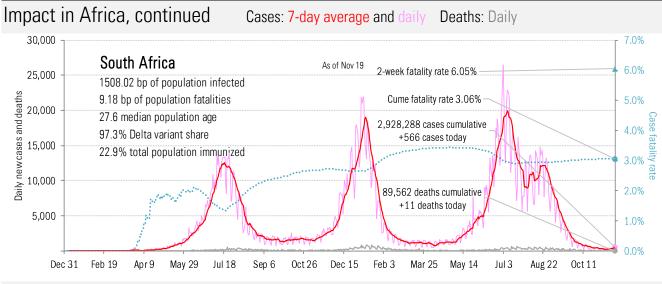
Impact in the BRICs ex-China Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa

Cases: 7-day average and daily Deaths: Daily





Source: Johns Hopkins, TrendMacro calculations