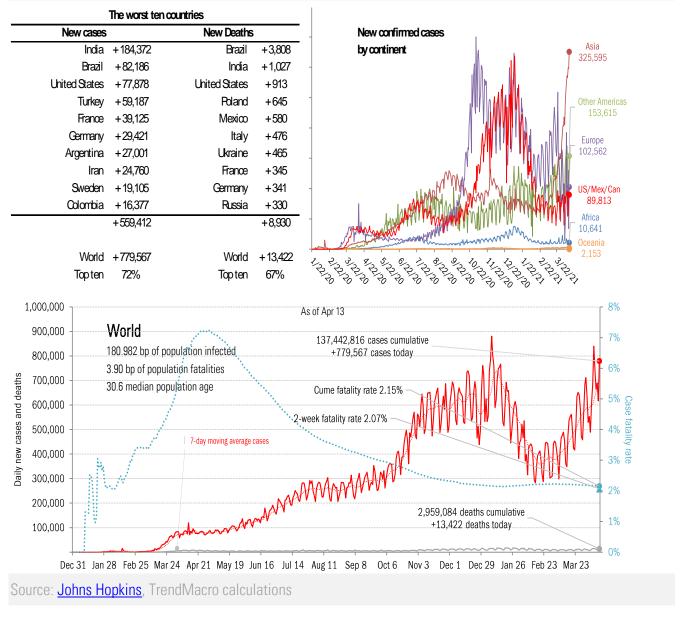


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Wednesday, April 14, 2021

The global scorecard



For more information contact us:

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The US scorecard

							en worst US								
New cases		New Deaths		New in hospital		Cume cases		Quime deaths		Oume in hospital		Hospital use		ICU use	
MI	+ 10,277	Ю	+90	FR	+205		3,706,629	CA	60,547	TX	230,397		90%	MI 2	
R.	+9,068	MO	+83	MI	+124	TX		NY	51,258	CA	225,627	MA	84%		5%
PA	+6,017	MI	+81	GA	+108	Æ	2,134,914	TX	49,289	R.	157,459	MD	83%		0%
TX	+5,188	RL.	+64	IL	+54	NY	1,967,248	R.	34,120	NY	120,811	PA	81%	NY 1	8%
NY	+5,023	TX	+58	R.	+38	IL	1,285,298	PA	25,451	GA	96,993	MO	81%	DC 1	8%
NJ	+3,963	NY	+54	NJ	+30	PA	1,083,953	NJ	24,945	CH	77,697	MI	80%		6%
IL	+3,184	PA	+54	ND	+25	GA	1,076,644	IL	23,826	PA	77,625	CT	80%	MN 1	6%
CA	+2,559	CA	+52	MN	+24	CH	1,043,729	GA	19,548	L	70,990	MN	79%	NJ 1	4%
СН	+2,340	NJ	+49	WA	+21	NJ	959,921	СН	18,917	KY	69,597	Æ	78%	TX 1	4%
VA	+2,048	GA	+25	ω	+ 18	NC	936,425	MI	17,657	AZ	59,058	W	78%	WV 1	3%
	+49,667		+610		+647		17,031,921		325,558		1,186,254				
All states	+77,878		+913		+776	ΔII states	31,345,985		563,446		2,115,580	All states	70%	6	57%
Topten	64%		67%		83%	Topten	54%		58%		56%	Median			0%
	07/0		01/0		0070	lopitari	5470			me states r	ot reporting	Weddar	11/0	'	070
						Five mos	t improved	US state			, ,				
Fewer da	aily cases			Fe	ewer new de	aths		Fewer n	ew hospita	lizations		Most p	opimmu	unuity gro	wth
NC	-4,291				NY	-33			MI	-93			AK	+282 bp	S
CT	-1,867				NC	-27			MD	-69			ME	+198 bp	S
TN	-1,372				MA	-12			KY	-68			GA	+134 bp	S
CA	-1,040				LA	-11			CT	-27			NE	+122 bp	S
OK	-859				GA	-10			IN	-26			MD	+102 bp	S
350,000 _T														г 12.0%	, D
300,000 -	Unit	ed Stat	es				As of Apr 13	}			11			- 10.0%	ò
	962.362 bp of population infected														
250,000 -	17.299 bp of population fatalities														
250,000 -	38.1 median population age 31,345,985 cases cumulative										- 8.0%				
						+77,8	378 cases tod	ay		M	4 N / I			0.070	
200,000 -						Cume fa	atality rate 1.8	0% —							Case
					••••	2-week fatality	/ rate 1.45% -							0.000	a a
				1000	and the second	563,446 death	ns cumulative					N		- 6.0%	
150,000 -			4		N.	+913 deat						N.			
			1			A.			/'						
						a de la composición de la comp								- 4.0%	
100,000 -			1			in the second	·····		Ň		<u> </u>	M Ì			
									N			MA	1.11	1	
50.000	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW											- 2.0%			
50,000 -												4			
			لمسركم	min	nnn		V -	y moving ave	rado opena						
			11						LAVE CASES						

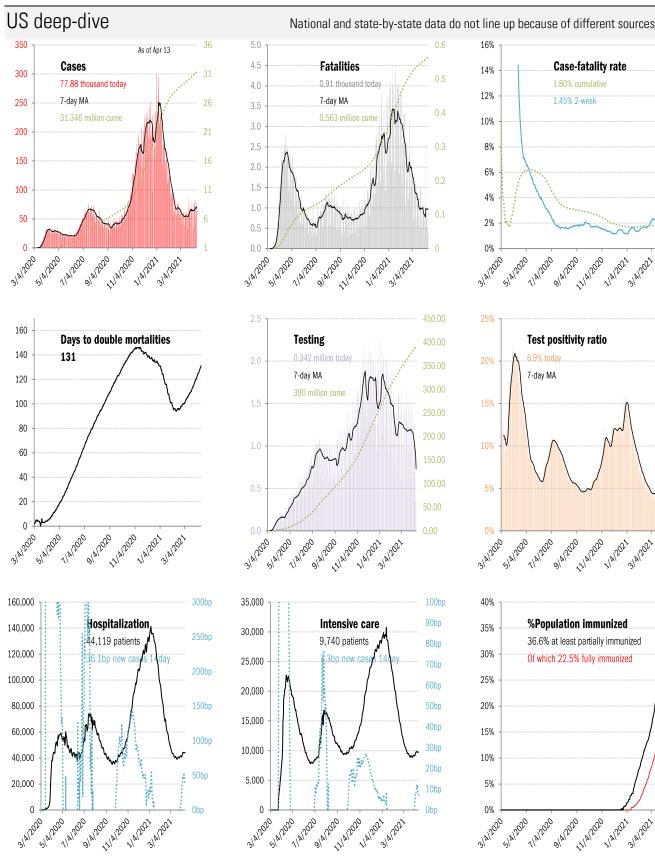
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

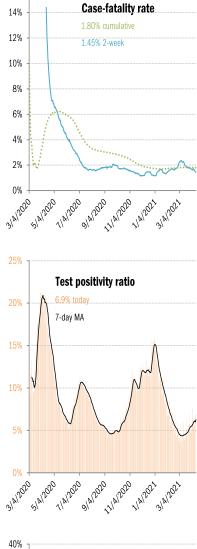
Rolling out the vaccines in the US and the world												
US overall							Over last d	lay		Immunity	Full	Partial
255.94 mill	lion doses (distributed		+7.88 million/day						US	22.5%	36.6%
<mark>199.53 mill</mark>	lion doses a	administere	ed	+2.61 million/day					181	UK	11.6%	47.5%
126.16 mill	lion person	s partially i	mmunized				+1.45 milli	on/day	4%	France	5.6%	16.2%
78.18 millio							+1.27 million/day				6.7%	17.0%
7.77 millio	n shots lon	g-term care	residents/	/staff			+0.00 milli	on/day		Germany	6.2%	16.8%
<mark>78.0% of c</mark>			inistered					Moderna	Pfizer 51%	itury	6.7%	15.8%
	37.8% of US pop partial				immunity			<mark>4</mark> 5%	51%	Australia	0.8%	0.6%
100% of L	100% of LTC partial				immunity					Israel	57.3%	61.6%
							s dosing p			Canada	2.2%	20.6%
				1			erican >18		Japan	0.5%	0.9%	
	State Doses distributed					88	day	S	Africa	0.3%	0.7%	
								J	India Brazil	1.0% 3.4%	7.1%	
						by Jul 9, 2	2021 /es adult h	nitut in	Global data differ		11.1%	
AK	as % population							nity* in	China NA	ME	1	
98.1%	,			Be	st	26	day	S			79.3%	
38.6%						by May 8		Ŭ			45.2%	
30.4%			pulation	Mid	dle	by May O	, 2021			J	29.6%	
00.170		uu /u pu	pulation			WI				VT	NH	
				Wo	rst	73.7%				84.7%	75.4%	
						39.9%				43.1%	53.3%	
						25.9%				27.8%	25.5%	
	WA	ID	MT	ND	MN	IL	MI		NY	MA		•
	74.5%	67.1%	77.8%	73.5%	69.0%	75.9%	74.3%		76.6%	79.7%		
	37.6%	31.1%	36.7%	36.8%	39.7%	39.1%	35.7%		39.8%	44.5%		
	24.4%	21.4%	25.1%	27.1%	26.3%	22.6%	23.3%		25.9%	26.2%		•
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	CT	RI	
	71.9%	66.0%	78.3%	85.2%	72.7%	68.6%	73.8%	75.6%	74.5%	86.9%	78.3%	
	35.9%	34.1%	31.4%	41.3%	38.3%	31.3%	35.8%	40.1%	42.8%	45.0%	41.8%	
	22.7% CA	21.6% UT	23.2% CO	28.6% NE	25.5% M0	21.0% KY	23.2% WV	23.3% VA	26.9% MD	28.6% DE	29.5%	
	75.3%	62.5%	72.6%	75.5%	69.6%	73.6%	80.4%	74.7%	76.3%	77.0%		
	39.1%	33.1%	38.8%	38.3%	32.0%	36.4%	33.7%	39.4%	39.5%	38.7%		
	21.6%	17.1%	23.1%	25.1%	21.0%	24.1%	24.4%	23.4%	24.8%	22.1%		
		AZ	NM	KS	AR	TN	NC	SC	DC			
		72.7%	84.5%	73.8%	73.8%	68.4%	71.9%	70.3%	87.4%			
		35.4%	45.1%	37.9%	31.6%	30.4%	34.3%	32.8%	36.9%			
		22.2%	29.8%	23.2%	19.1%	18.3%	21.8%	20.7%	20.4%			
				OK	LA	MS	AL	GA		-		
				80.7%	72.5%	70.7%	68.5%	70.6%				
				35.7%	29.9%	28.1%	28.7%	30.6%				
· · · · ·	l			24.0%	21.2%	19.4%	17.2%	16.4%		ı r	00	1
HI				TX					FL 77.7%		PR	
83.4%				68.2%							77.5%	
37.1%				32.8%							27.6%	
25.7%	l			20.2%					21.7%	I L	16.6%	1

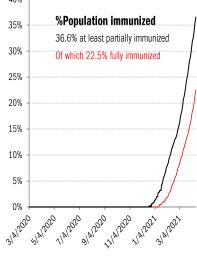
Rolling out the vaccines in the US and the world

 \ast Adult herd immunity is 60% of population over 18 years either fully vaccinated or prior tested positive, no overlap

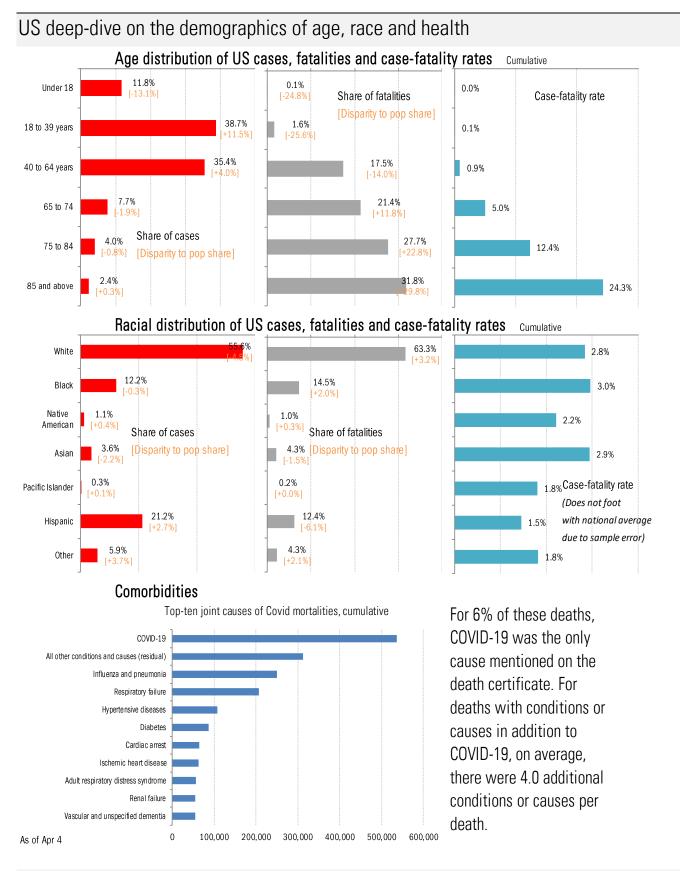
Source: <u>CDC</u>, <u>CDC</u>, <u>Our World in Data</u>, TrendMacro calculations







Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Masks for Children, Muzzles for Covid-19 News

Jay Bhattacharya *Wall Street Journal* April 13, 2021

U.S. Seeks to Pause J&J Covid-19 Vaccine Use After Rare Blood-Clot Cases

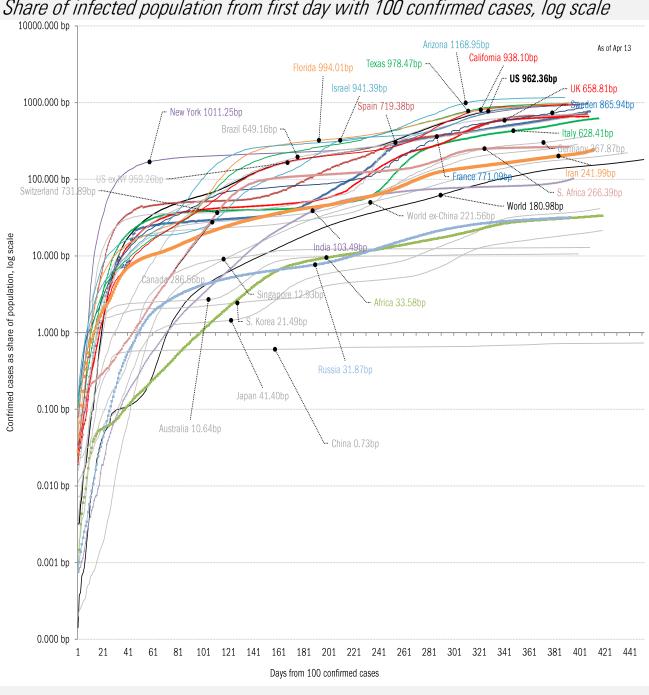
Peter Loftus *Wall Street Journal* April 13, 2021

Meme of day



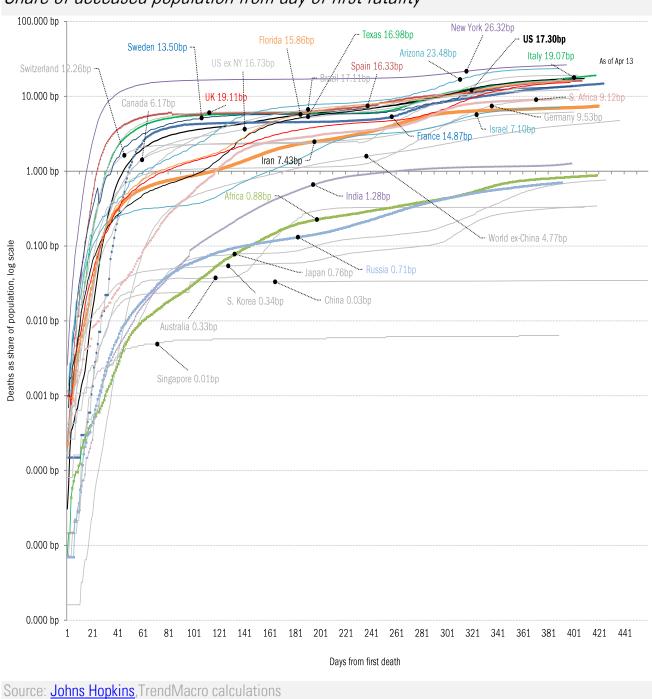
Pope Announces Vaccine Selfies Can Now Be Turned In To Spring A Relative Out Of Purgatory

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*

Source: Johns Hopkins, TrendMacro calculations

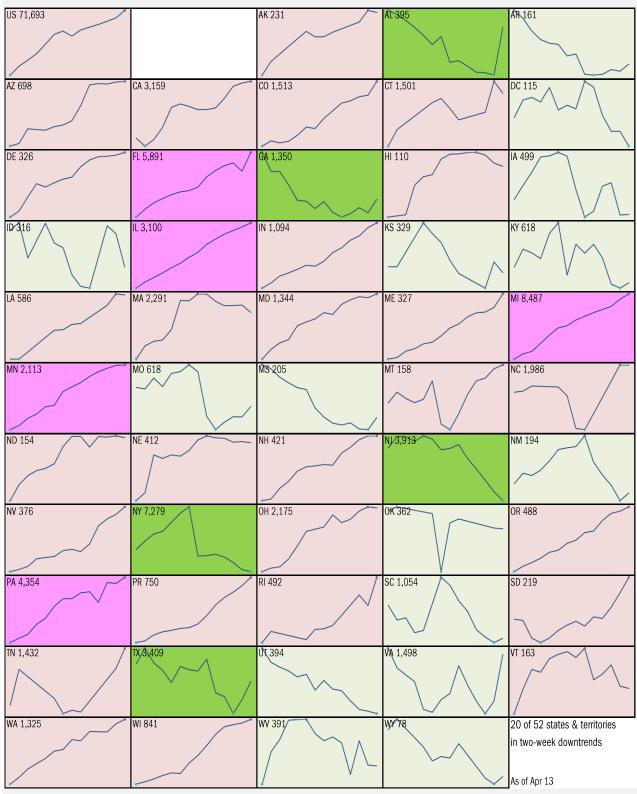


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*



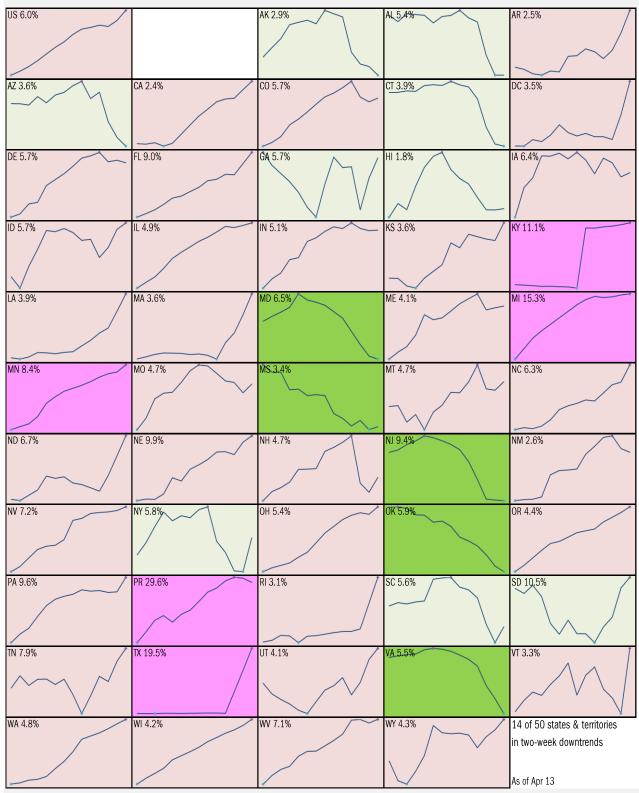
Source: Johns Hopkins, TrendMacro calculations

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

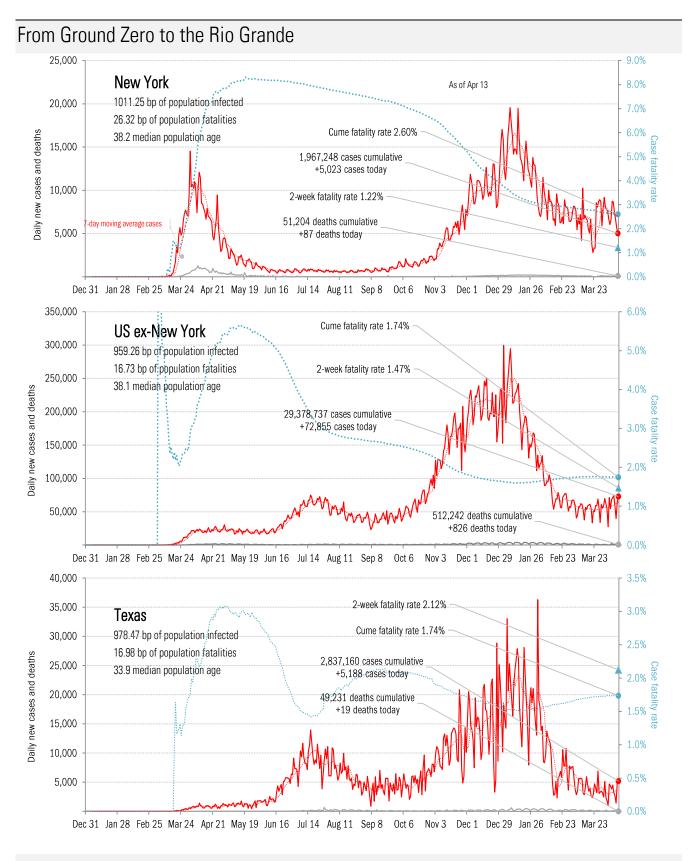


Source: Johns Hopkins, TrendMacro calculations

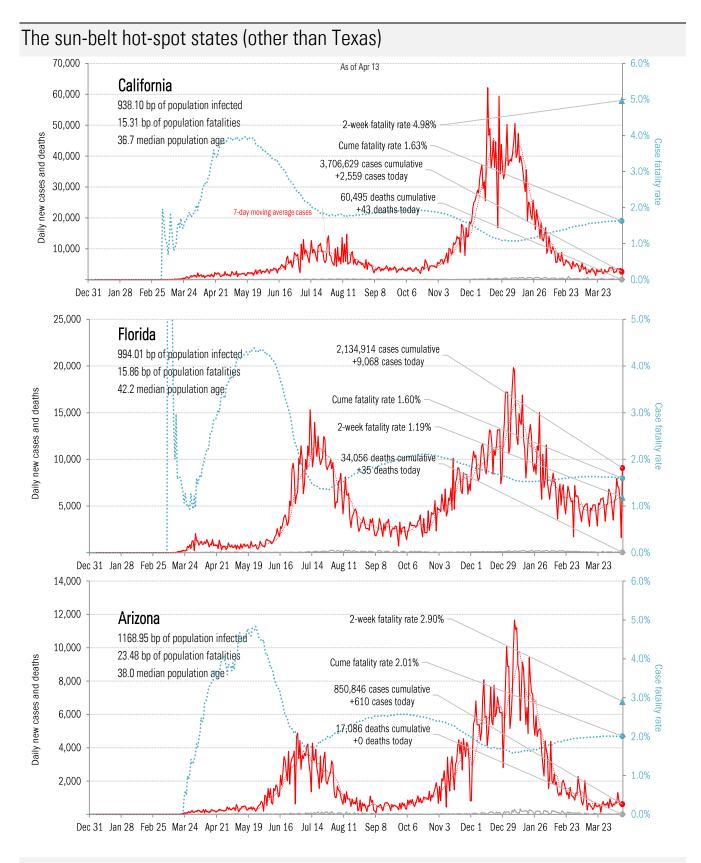
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



Source: Covid Act Now, TrendMacro calculations

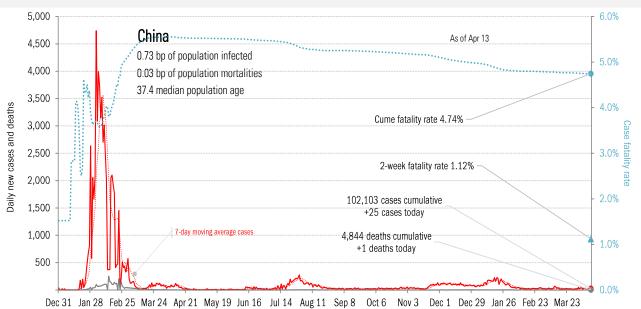


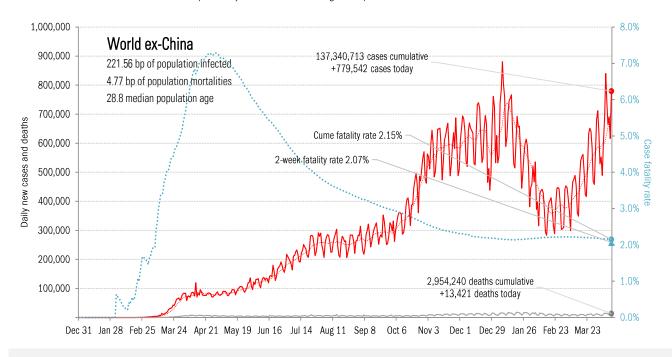
Source: Johns Hopkins, TrendMacro calculations



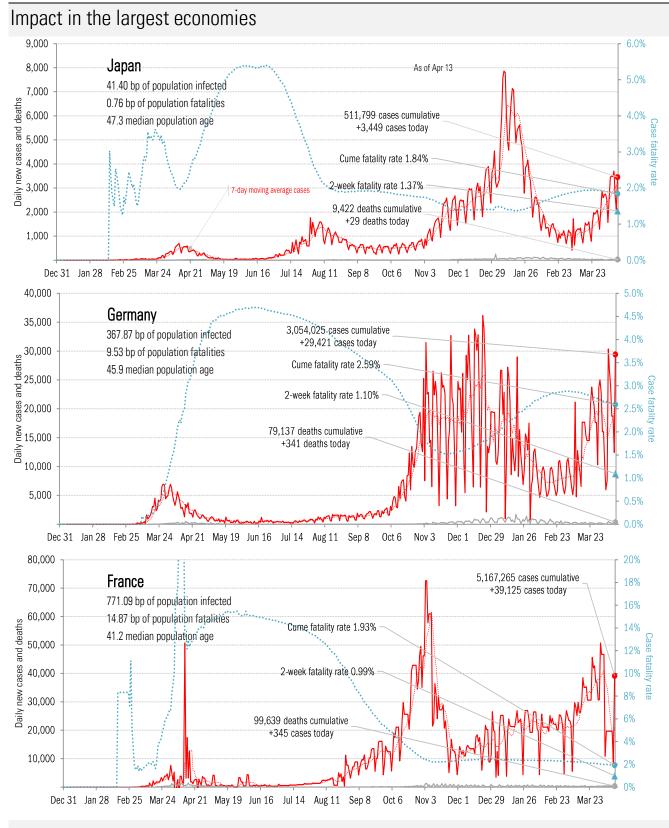
Source: Johns Hopkins, TrendMacro calculations

Patient zero... and then everyone else

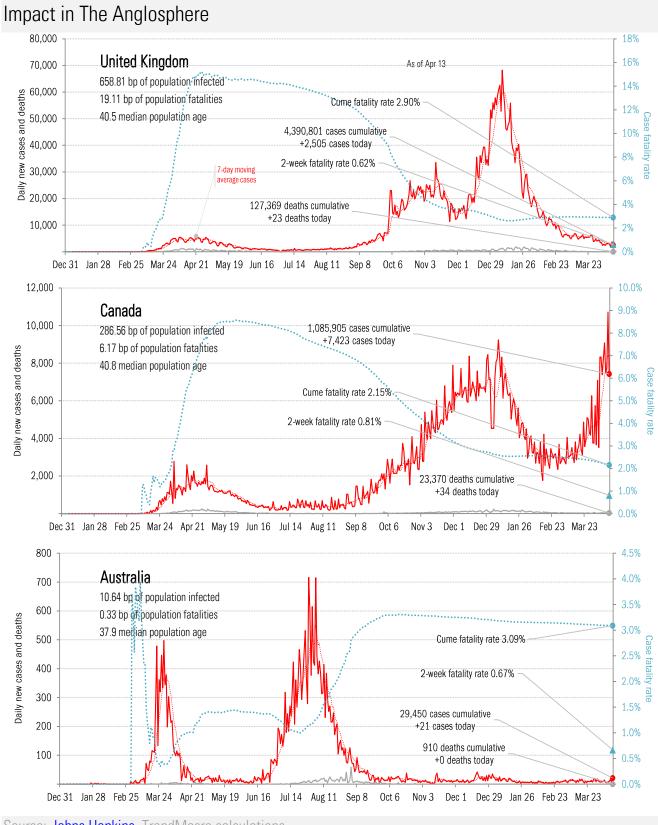




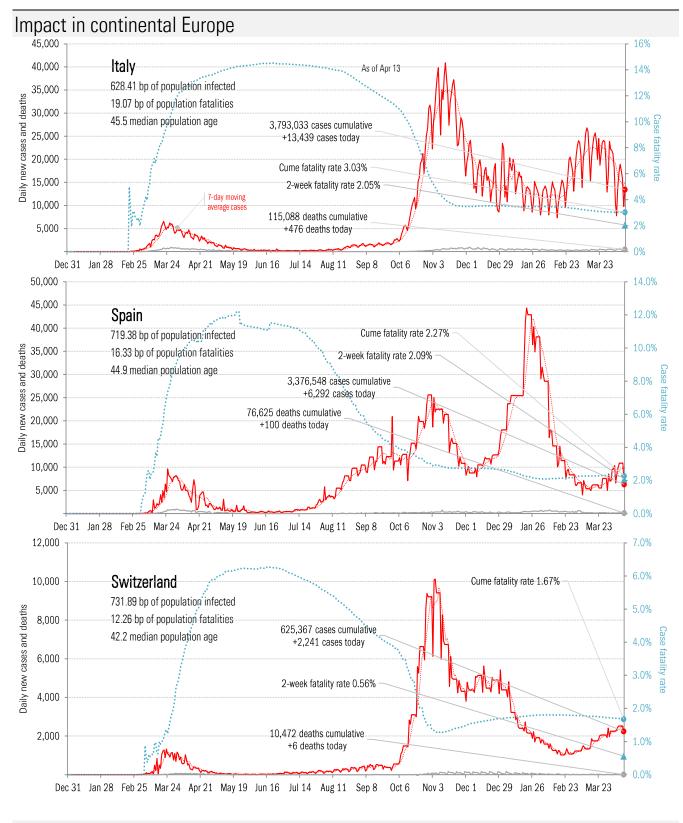
Source: Johns Hopkins, TrendMacro calculations





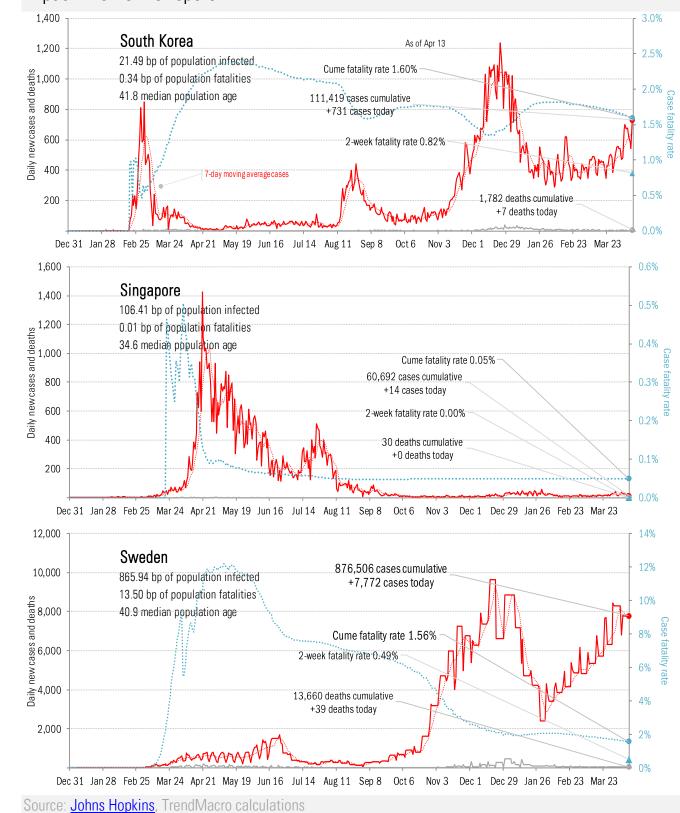


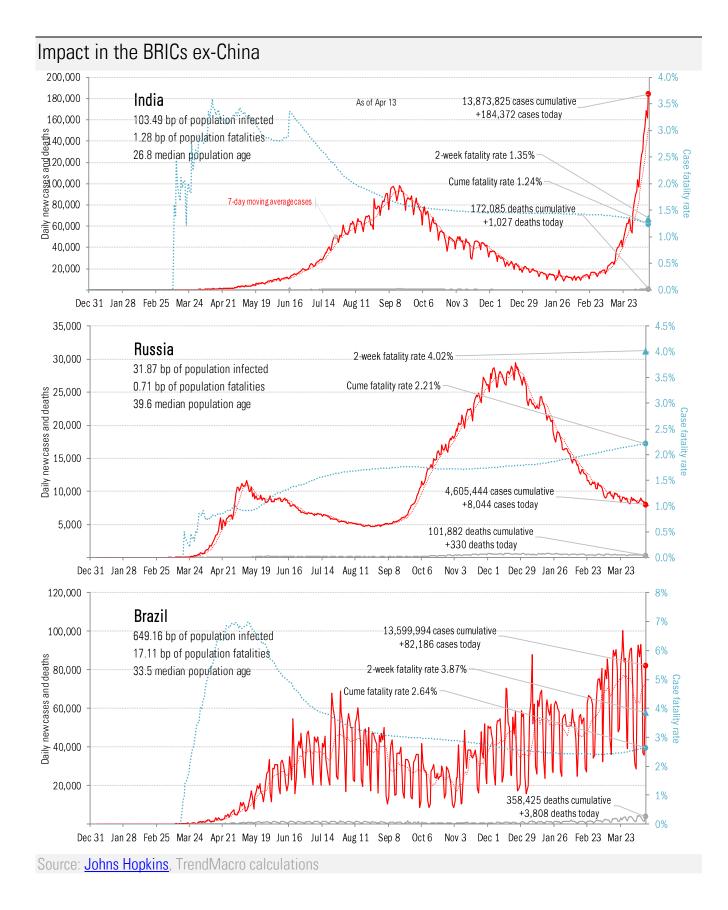
Source: Johns Hopkins, TrendMacro calculations

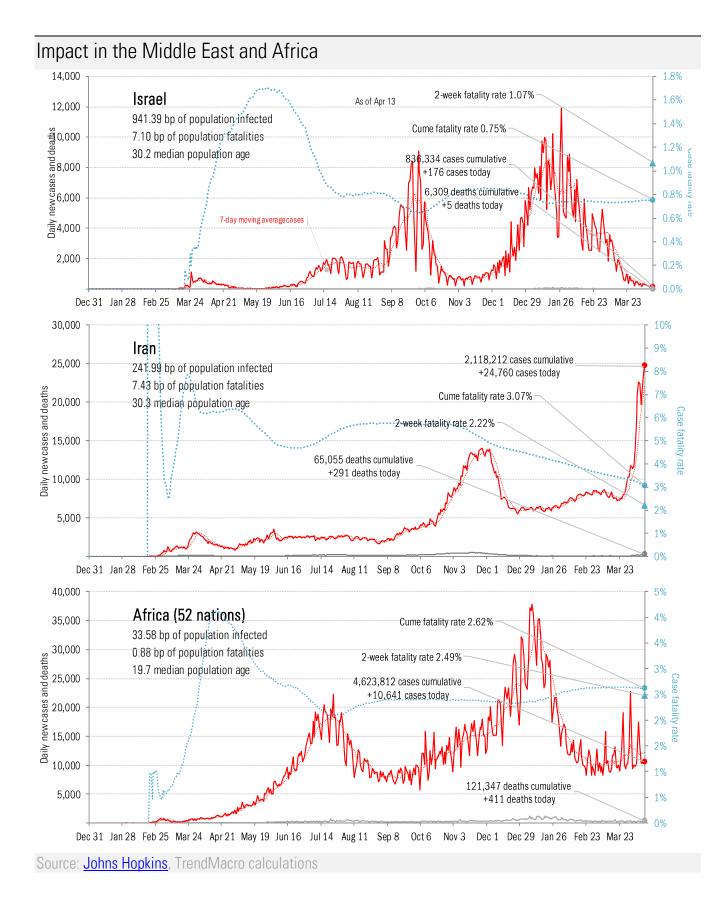




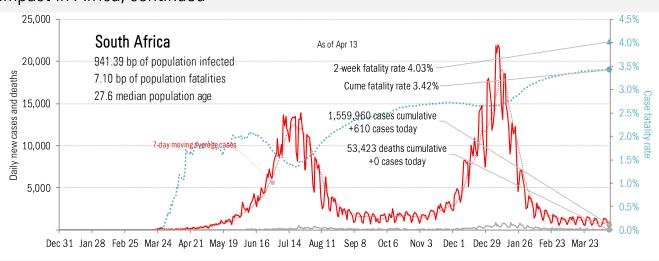
Impact in other hot-spots







Impact in Africa, continued



Source: Johns Hopkins, TrendMacro calculations