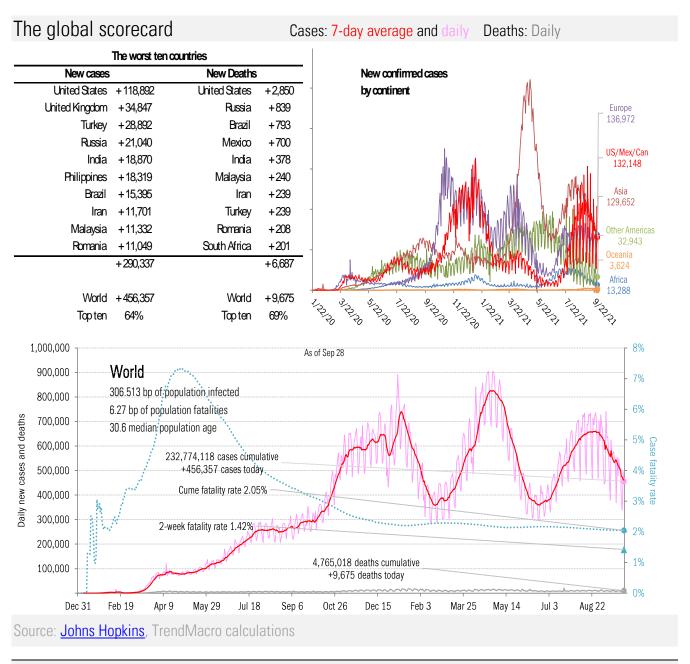


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

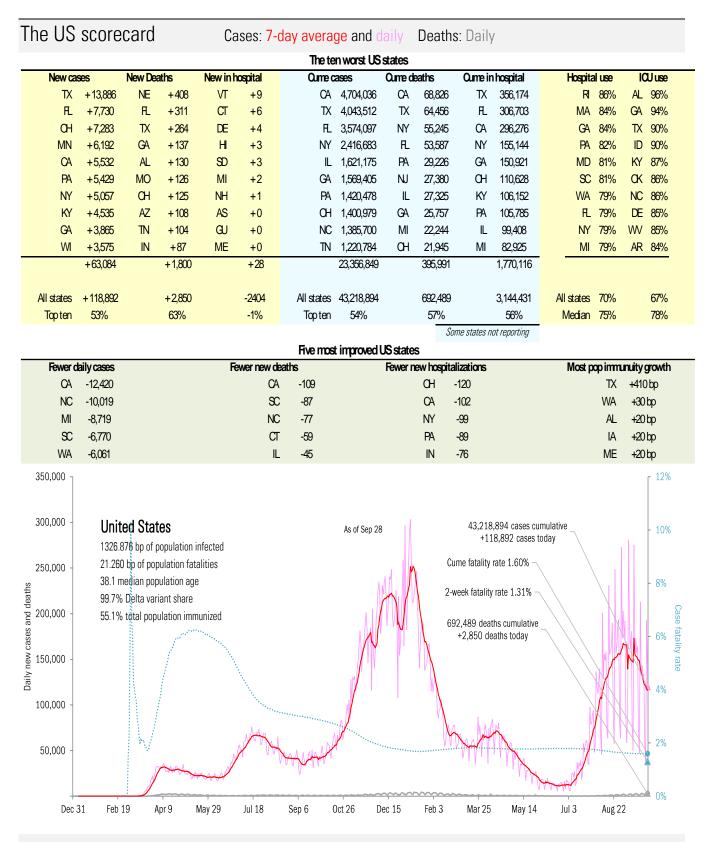
Wednesday, September 29, 2021



For more information contact us:

Donald Luskin: 312 273 6766 don@trendmacro.com Thomas Demas: 704 552 3625 tdemas@trendmacro.com

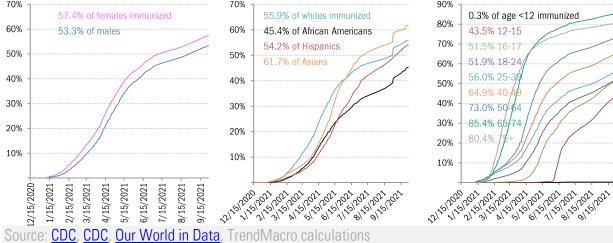
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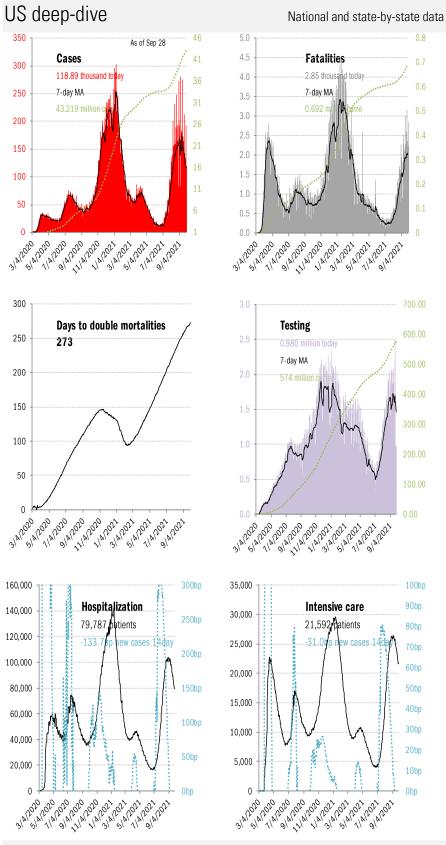


Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

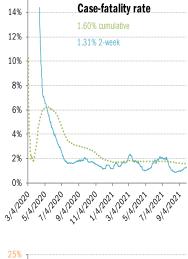
Rolling out			the US	and t	he worl	d	_					
Administered		Cumulative						day	Immunity	Full	Parti	
Doses		402,181,912						million	US	55.1%	63.6	
One dose		<u>% Pop</u>		nune	% pop	New immune today +1.377 million		UK	65.7%	71.5		
Total population					89,890,757 11,008,582	57%			France	65.5%	74.3	
ge 12 to 17		13,615,967				46%	+0.043 million +0.229 million		Spain	78.1%	80.5	
Age 18 to 64		151,456,294			29,731,405	64%			Germany	63.7%	67.3	
Age 65 and over	65 and over 52,816,028 J&J		97%			86% +0.009 million erican >18 immune in		ltaly	67.6%	74.6		
4%					-			in	Australia	42.1%	63.0	
		State At least partial immunity			11/1	אט מ	2VI		lsrael Canada	64.0%	69.4	
Moderna	St			l 175 days						70.6%	76.6	
30%				Dy Mar 22, 2022					Japan	59.0%	70.0	
Pfize		as % population		68.5% of population >18 imm Middle 14.7% previously tested positi					Africa	4.3%	6.6	
517	uc /o p						sted positive dult herd immunity		India	16.6%	46.1	
		Full immunity as % population		orst	83.2%	vs ou% ac	iuit nera In	munity	Brazil	41.6%	70.2	
	as % p	opulation	VV.	JISU			As of Sep 28		China Global data differ	70.8%	76.2	
AK							AS 01 360 20				unning	
57.1%					WI					ME		
50.4%					60.8%					74.0%		
14/4		Гит	ND	N AN I	56.3%	N AL		NN/	VT	68.4%		
WA		MT	ND	MN	IL	MI		NY	VT	NH		
67.1		54.6%	50.8%	63.4%	68.3%	56.9%		71.1%	77.6%	69.5%		
60.7 [°]		48.3% WY	43.9% SD	58.0% IA	53.4% IN	52.2% OH	PA	63.6% NJ	69.4%	61.4%		
OR									MA			
66.4		48.3%	59.0%	58.0%	52.1%	54.1%	72.2%	72.4%	77.3%			
60.6 [°] CA		41.4% CO	51.6% NE	53.9% M0	48.3% KY	50.1% WV	57.7% VA	64.2% MD	67.8% CT	RI		
71.6 58.9		65.5% 59.2%	59.3% 54.6%	54.7% 47.7%	60.5% 52.1%	48.1%	68.3% 60.4%	70.5%	76.0% 68.6%	75.0% 68.1%		
58.9	% 50.4% AZ	59.2% NM	54.6% KS	47.7% AR	52.1% TN	40.4% NC	50.4% SC	64.0% DC	08.6% DE	68.1%		
	59.2%	72.4%	59.6%	55.6%	52.6%	59.4%	55.1%	70.6%	66.0%			
	59.2%	62.9%	59.6% 51.0%	45.4%	52.6% 45.2%	49.6%	47.1%	60.0%	57.3%			
	51.0%	02.9%	0K	45.4% LA	45.2% MS	49.6% AL	47.1% GA	00.0%	57.3%			
			56.4%	51.6%		52.6%						
HI			30.4% 47.4%	45.3%	49.9% 43.1%	42.5%	54.7% 45.1%					
			47.4% TX	40.3%	43.1%	42.3%	40.1%	FL	1 r	PR		
76.6%			59.4%									
57.7%								66.8%		79.1%		
			55.1%					57.1%	JL	70.2%		
he demographics	of US vaccina	tion										
0%	70% -				90% -							
57.4% of females immunized			55.9% of whites immunized				0.3% of age <12 immunized					
50% - 53:3% of mates			60% - 45.4% of African Americans				80% -	80% 43.5% 12-15				
00/			500	54.2% of Hi	spanics		70% -	51.5% 16-1	7			

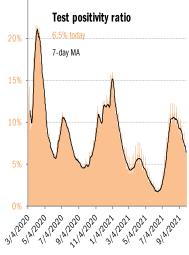
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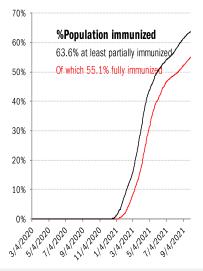




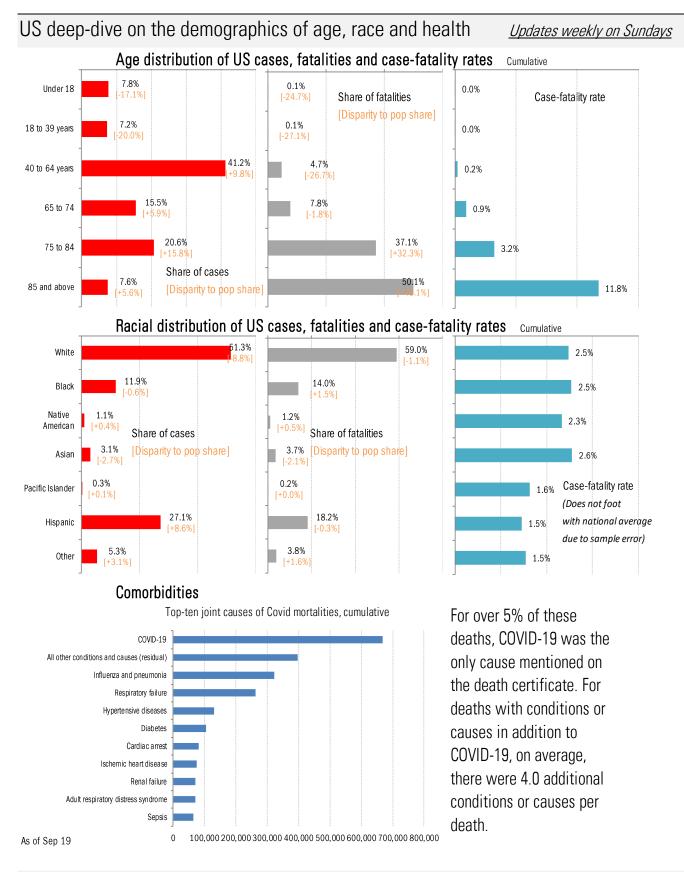








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Lancet Scrubs ENTIRE COVID Origins Investigation Team After National Pulse Exposés. National Pulse

September 28, 2021

<u>The fear of Delta, more than rewards or mandates, is</u> <u>motivating Americans to get shots, a survey finds.</u> Jan Hoffman

New York Times September 28, 2021

<u>Pfizer and BioNTech Submit Data Backing Vaccine for</u> Children 5 to 11

Sharon LaFraniere, Shashank Bengali and Noah Weiland *New York Times* September 28, 2021

Thousands of N.Y. Health Care Workers Get Vaccinated Ahead of Deadline

By Sharon Otterman and Joseph Goldstein *New York Times* September 28, 2021

Biden's Lawless Vaccine Mandate

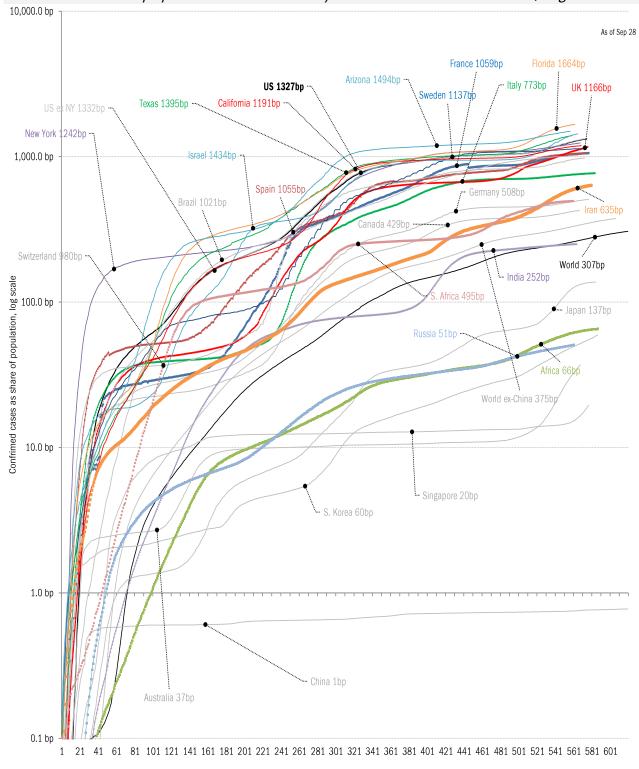
David B. Rivkin Jr. and Robert Alt *Wall Street Journal* September 28, 2021

Meme of the day

When Biden's vaccine mandates for fed employees cuts the size of the fed govt by 50%



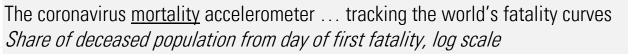
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

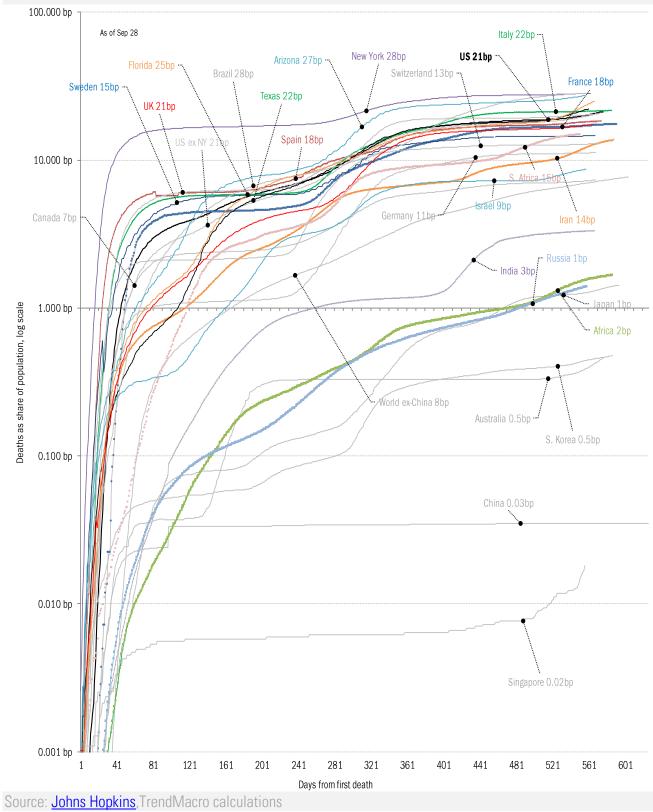


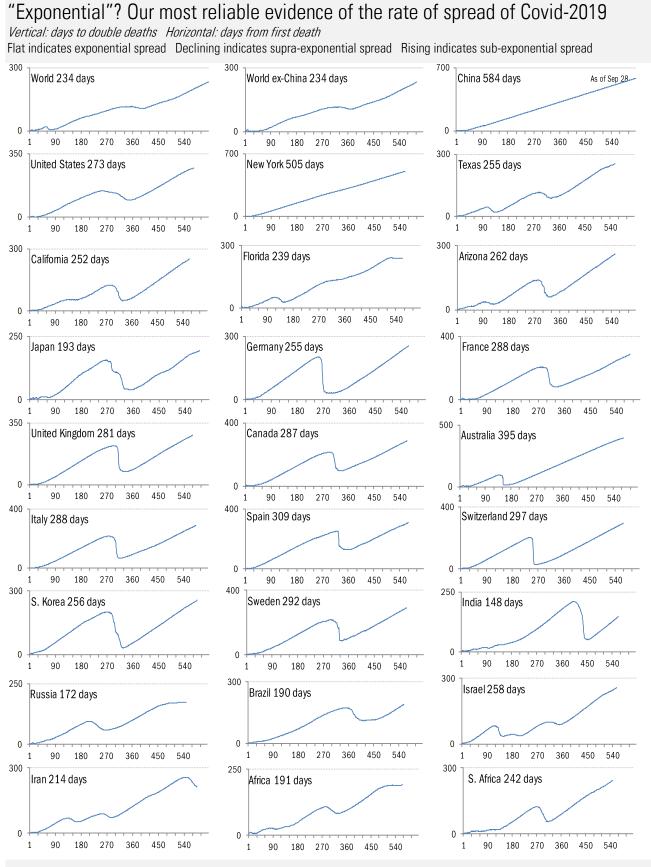
The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*

Source: Johns Hopkins, TrendMacro calculations

Days from 100 confirmed cases







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



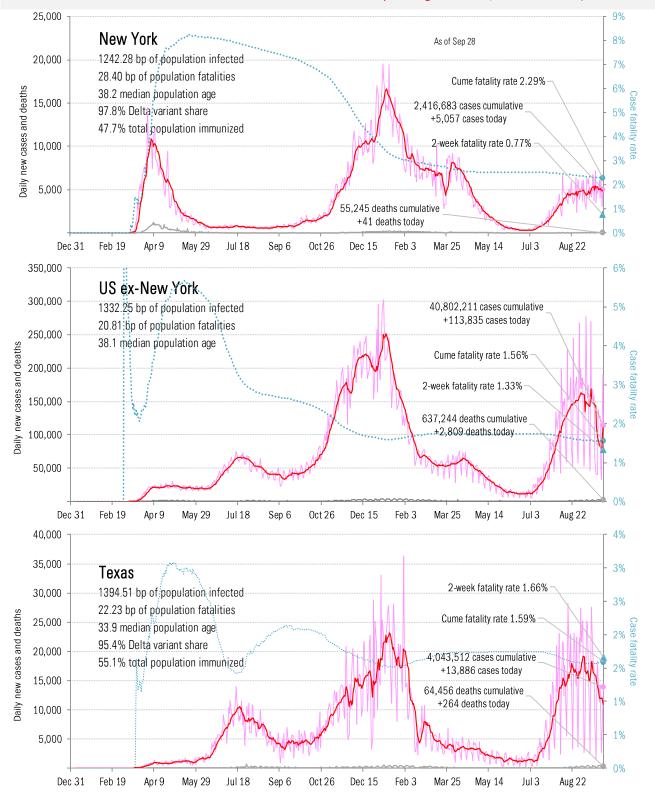
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



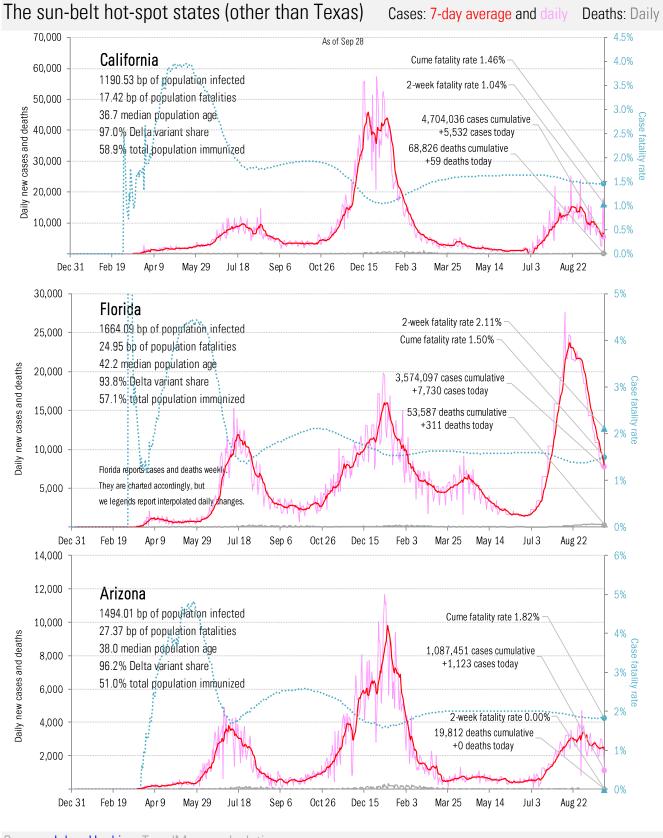
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande

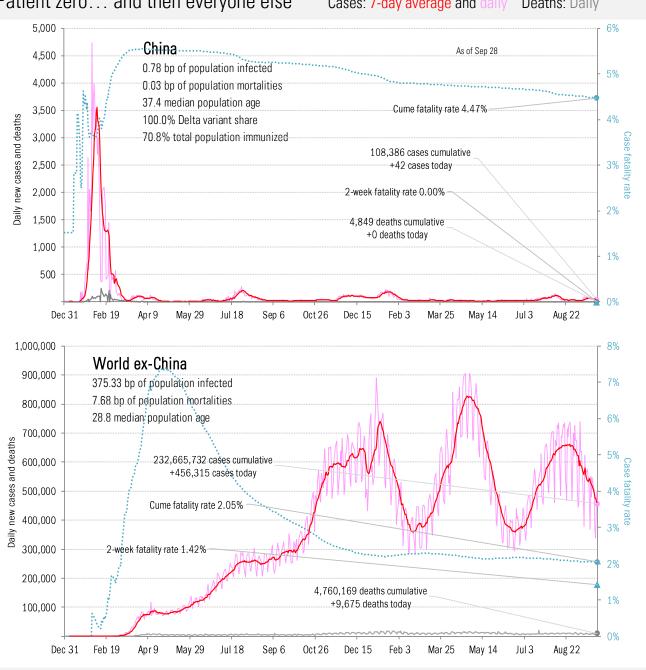
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations

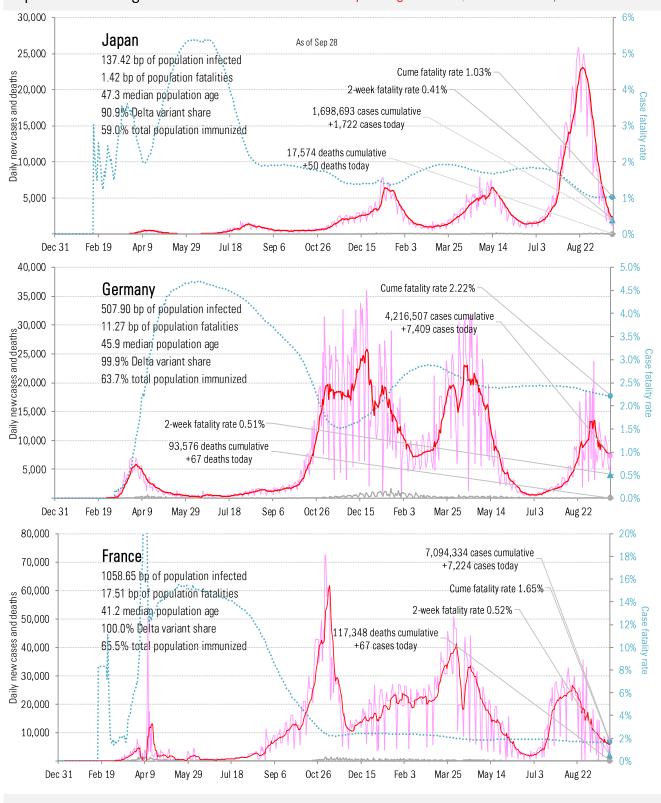


Patient zero... and then everyone else

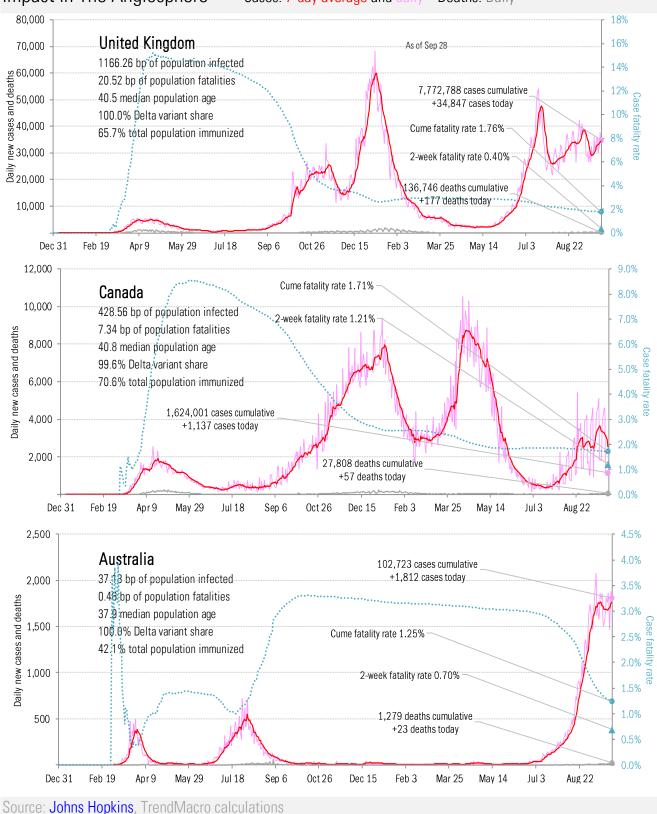
Cases: 7-day average and daily Deaths: Daily

Source: Johns Hopkins, TrendMacro calculations

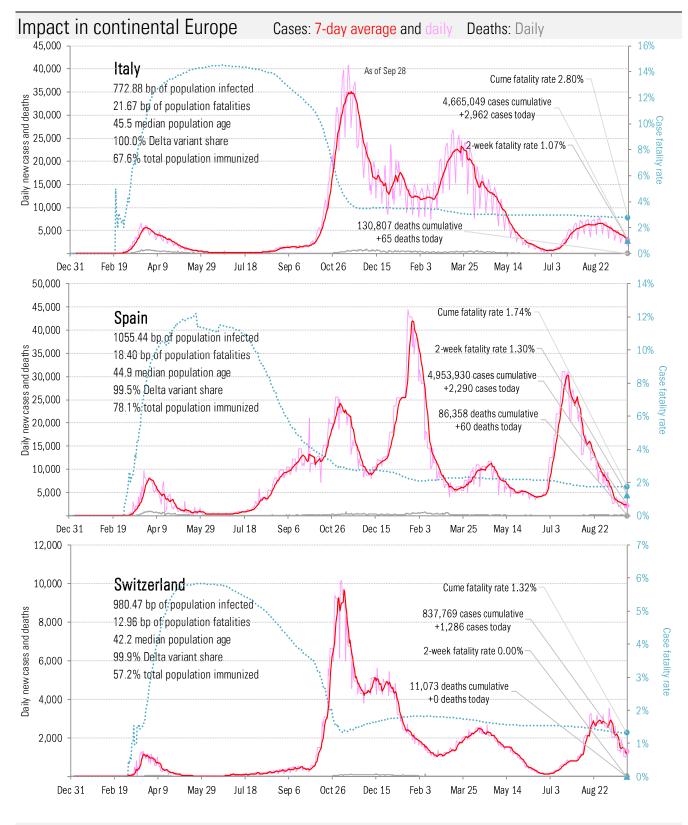
Impact in the largest economies Cases: 7-day average and daily Deaths: Daily

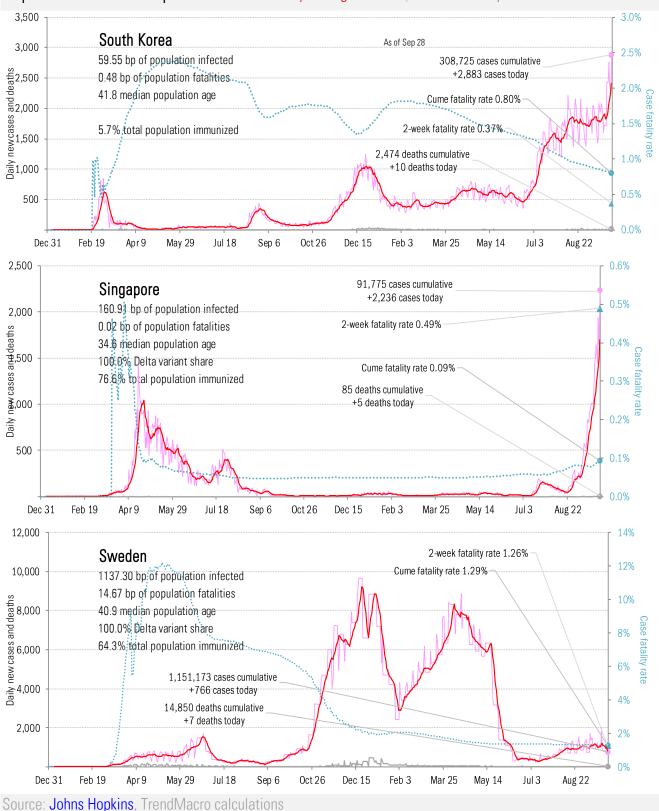


Source: Johns Hopkins, TrendMacro calculations



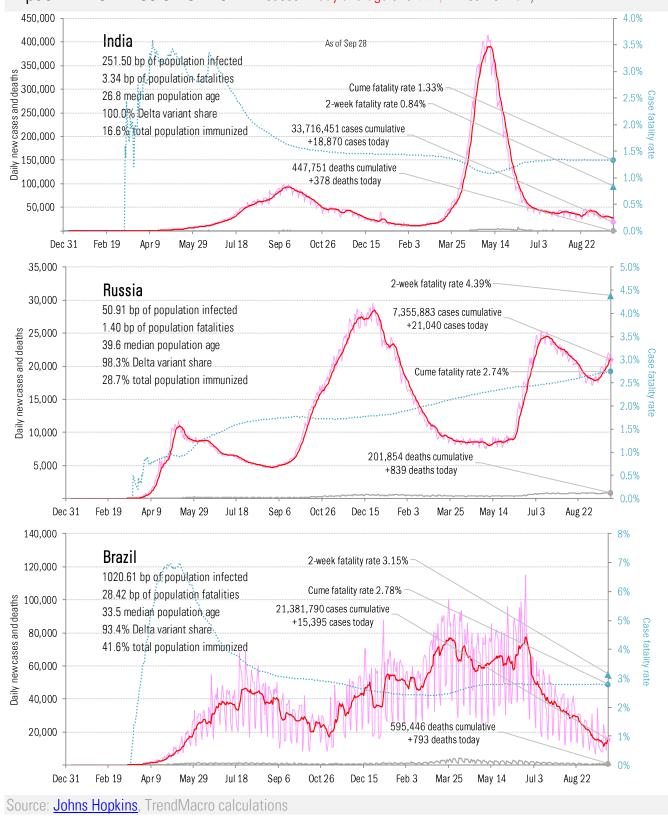
Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily





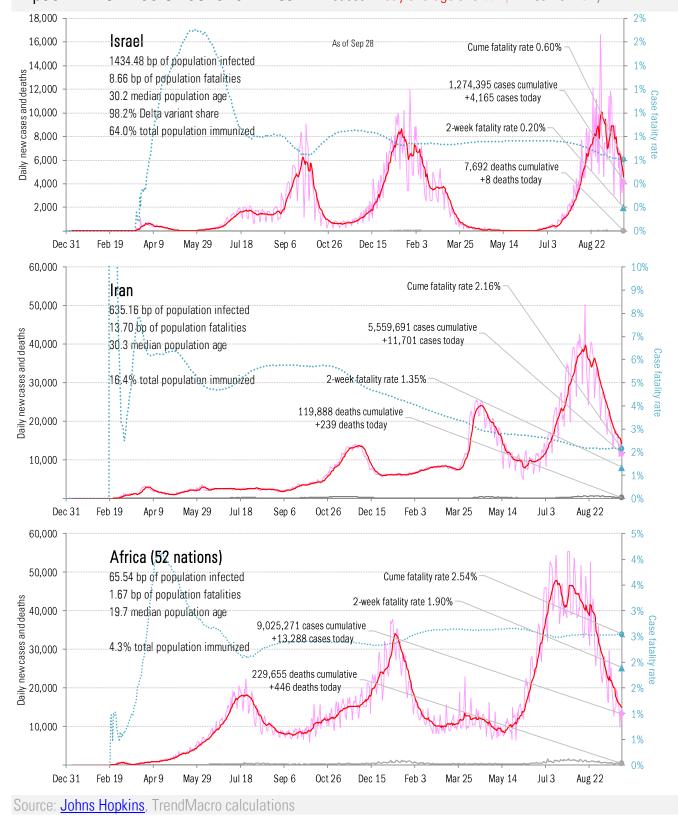
Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily

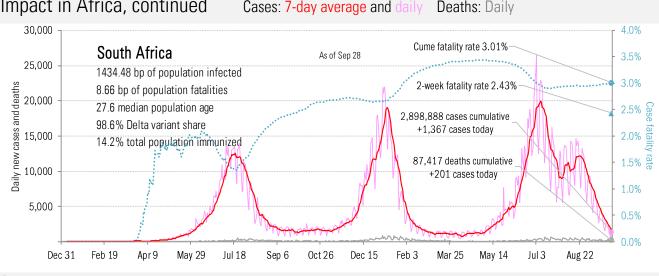
Impact in the BRICs ex-China Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa

Cases: 7-day average and daily Deaths: Daily





Impact in Africa, continued Cases: 7-day average and daily Deaths: Daily