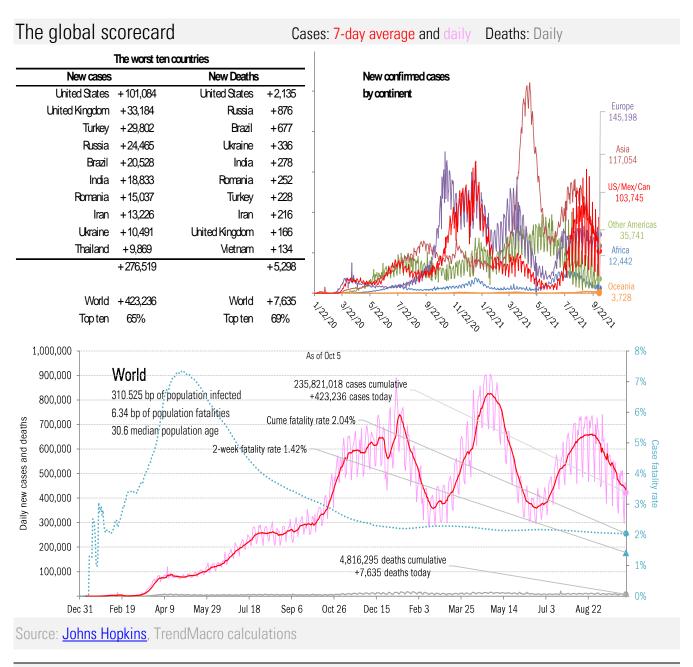


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

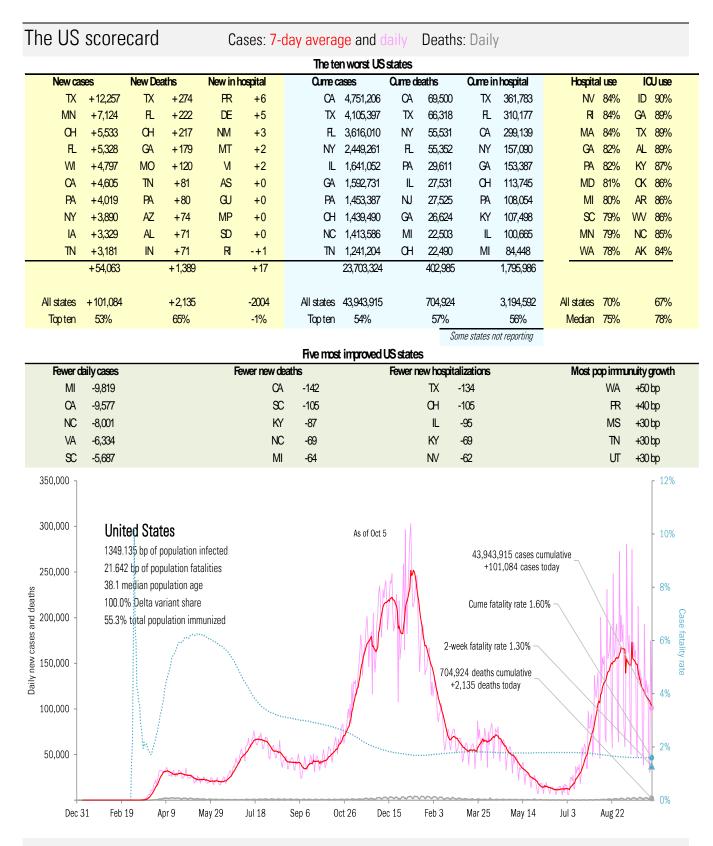
Wednesday, October 6, 2021



For more information contact us: Donald Luskin: 312 273 6766 don@trendmacro.com

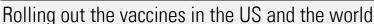
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

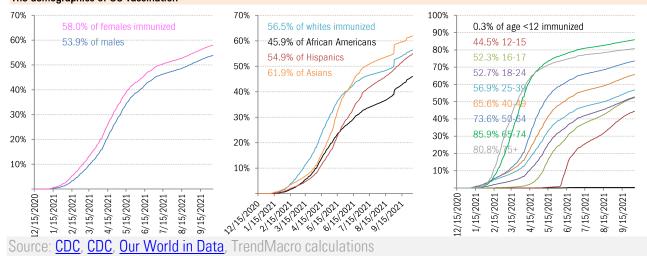
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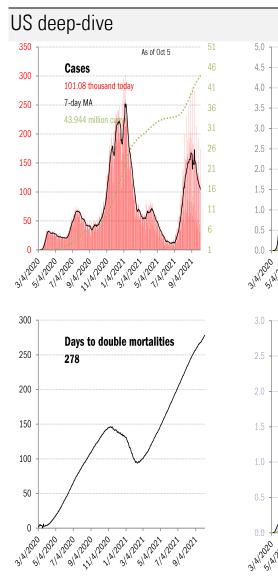


Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

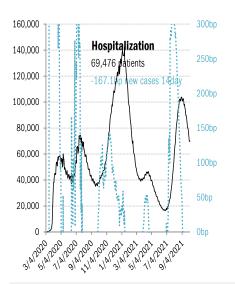
Rolling	out th	e vacci	nes in	the US	and th	ne worl	d					
Administered Cumulative									day	Immunity	Full	Partial
Doses 408,894,652		08,894,652					+0.800	million	US	55.3%	64.2%	
		One dose		% Pop	Imn	nune	% рор	New immune today		UK	66.0%	71.8%
Total population 220,978,782		20,978,782	66%	1	90,719,566	57%	+0.272 million		France	66.2%	74.7%	
Age 12 to 17 13,783,59		3,783,590	58%		11,248,093	47%	+0.035 million		Spain	78.7%	80.7%	
Age 18 to 64 152,802,032		52,802,032	75%	1	31,263,499	64%	+0.209 million		Germany	64.3%	67.7%	
		53,312,849	97%		47,324,330			million	ltaly	68.5%	75.4%	
J&J					Every Ame	erican >18	3 immune	in	Australia	46.9%	66.8%	
4%						101	1 1 2			Israel	64.5%	70.1%
Moderna 38% Pfizer 58% At least partial immunity as % population Full immunity as % population			. .			LO.	1 da	1y5		Canada	71.5%	77.3%
			ale	Best by Jan 13, 2022						Japan	62.6%	72.5%
							opulation >18 immunized			4.6%	6.9%	
			pulation	Mic	Idle	15.0% previously tested positive				India	18.1%	47.8%
					84.1% vs 60% adult herd immunity				Brazil	44.3%	71.3%	
			Worst					China	72.6%	76.2%		
AK				As of Oct 5						Global data diffe	s from sources,	timing
57.6%						WI					ME	
50.9%			61.2%						74.4%			
			56.8%							68.7%		
Γ	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	67.7%	47.4%	55.1%	51.3%	63.7%	68.9%	57.4%		71.9%	78.1%	70.8%	
	61.5%	42.0%	48.8%	44.5%	58.4%	53.9%	52.7%		64.3%	69.8%	61.8%	
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		•
	66.9%	61.2%	48.9%	59.6%	58.4%	52.5%	54.5%	73.2%	72.9%	77.9%		
	61.2%	51.2%	42.0%	51.9%	54.3%	48.7%	50.6%	58.2%	64.7%	68.2%		
	CA	UT	CO	NE	MO	KY	WV	VA	MD	СТ	RI	
	72.2%	59.4%	65.9%	59.7%	55.2%	61.2%	48.3%	68.9%	71.0%	76.8%	75.8%	
	59.4%	51.2%	59.8%	55.0%	48.3%	52.9%	40.5%	61.0%	64.4%	69.1%	68.8%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		•
		59.6%	73.0%	60.3%	56.0%	53.1%	60.4%	55.7%	71.4%	66.6%		
		51.5%	63.5%	51.5%	46.0%	45.9%	50.2%	47.8%	60.5%	57.9%		
				OK	LA	MS	AL	GA				
				57.0%	52.1%	50.5%	53.0%	55.1%				
HI 77.0% 58.3%			48.1%	45.8%	43.9%	43.1%	45.7%					
			TX					FL	l í	PR		
			59.9%					67.3%		79.8%		
				51.6%					57.8%		71.1%	
					I							
The demog	raphics of l	US vaccinat	ion									

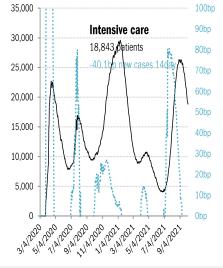


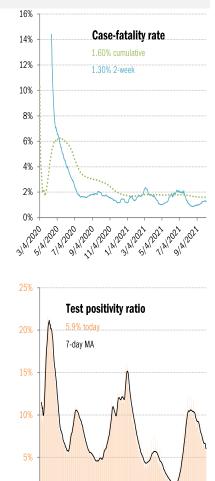




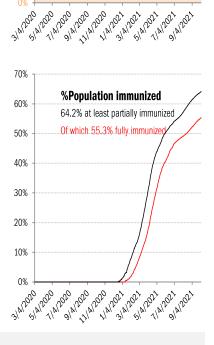




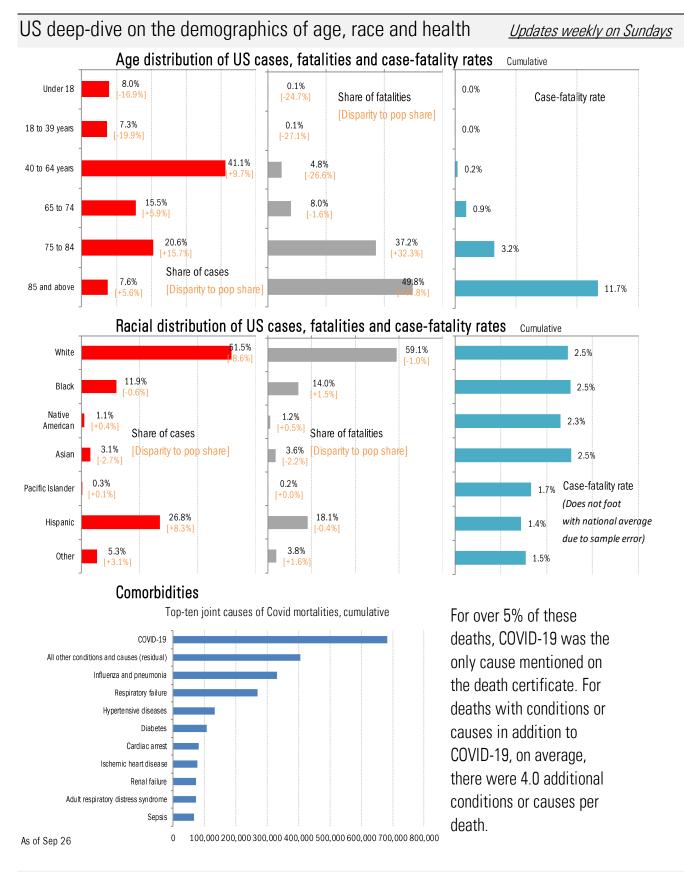




National and state-by-state data do not line up because of different sources



Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Science Closes In on Covid's Origins

Richard Muller and Steven Quay *Wall Street Journal* October 5, 2021

With New COVID Policy, Israel Redefines What It

Means to Be Vaccinated

Sam Sokol *Haaretz* October 4, 2021

Vaccines Work: 97% Of COVID Deaths, 95% Of Hospitalizations And 94% Of Cases Are Among Unvaccinated Pennsylvanians

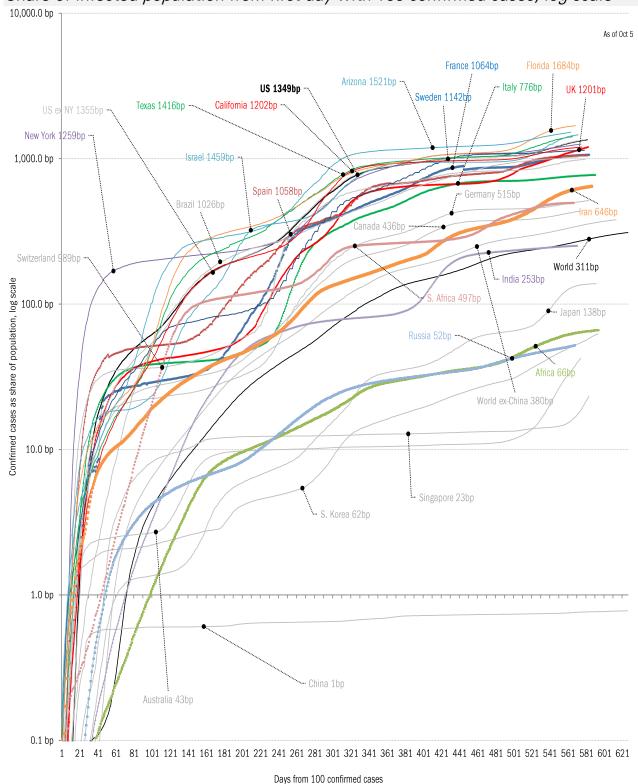
Pennsylvania Department of Health September 14, 2021

<u>The country with the best data shows infection rates</u> <u>higher among the vaccinated</u> Daniel Horowitz *The Blaze* October 4, 2021

Meme of the day

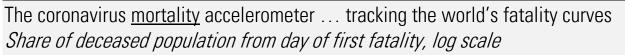


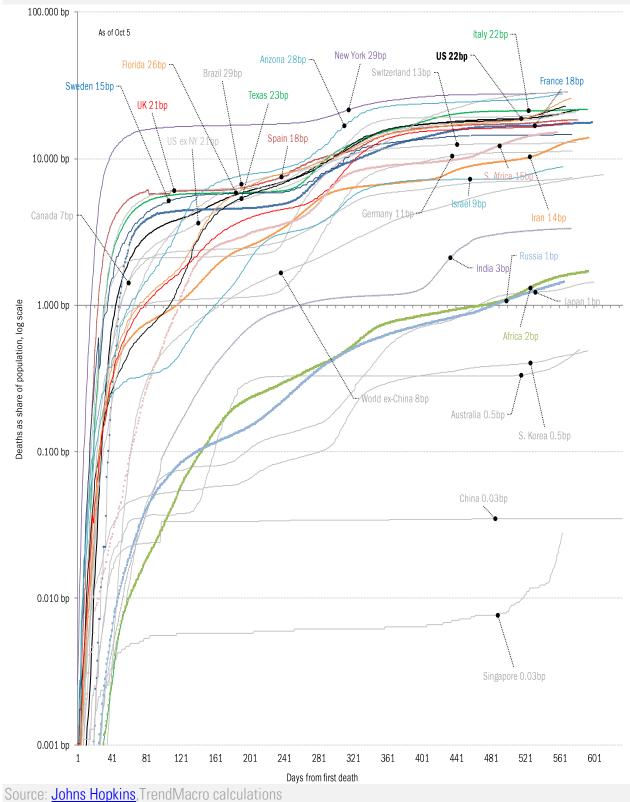
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

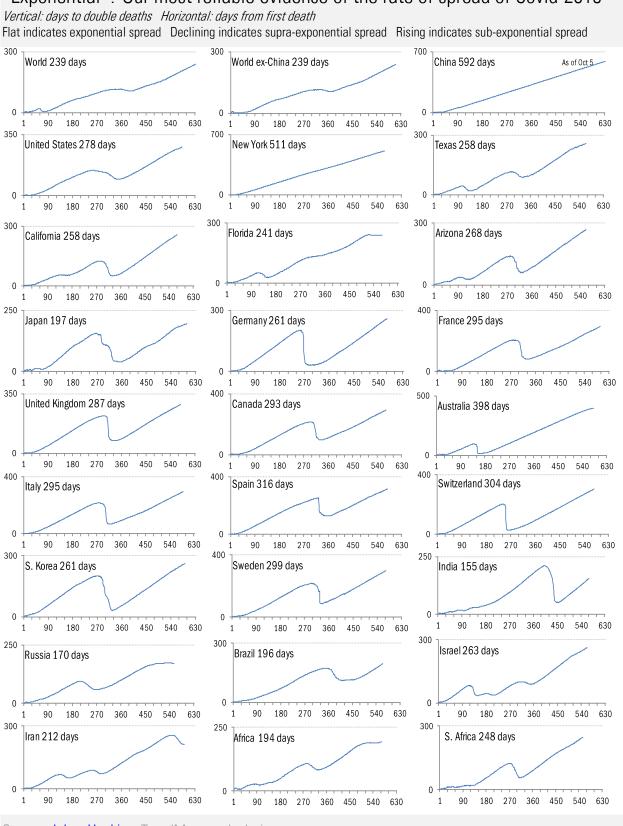


The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*

Source: Johns Hopkins, TrendMacro calculations



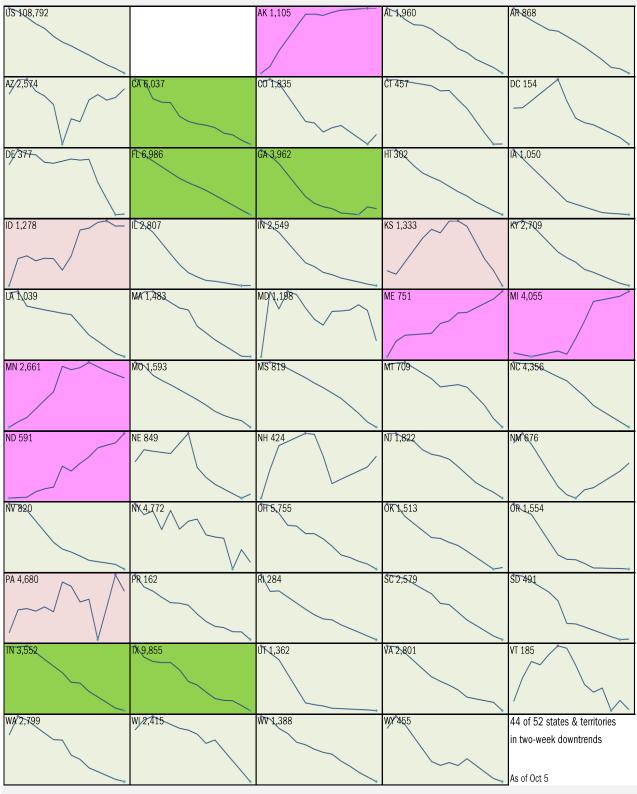




"Exponential"? Our most reliable evidence of the rate of spread of Covid-2019

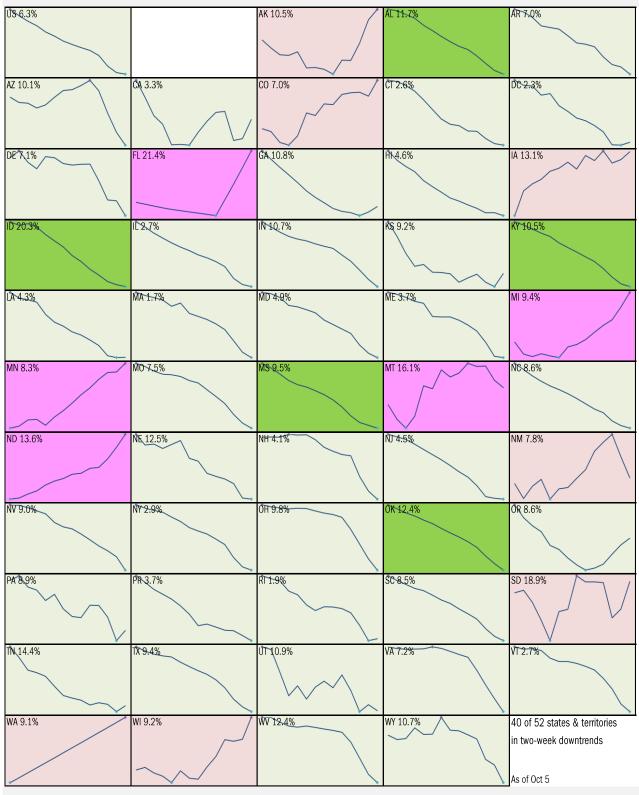
Source: Johns Hopkins, TrendMacro calculations

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

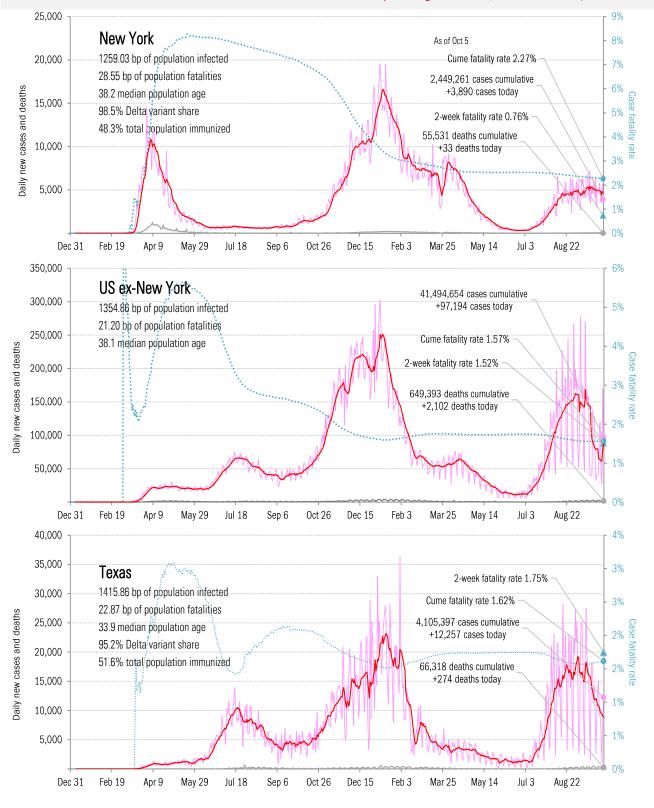
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



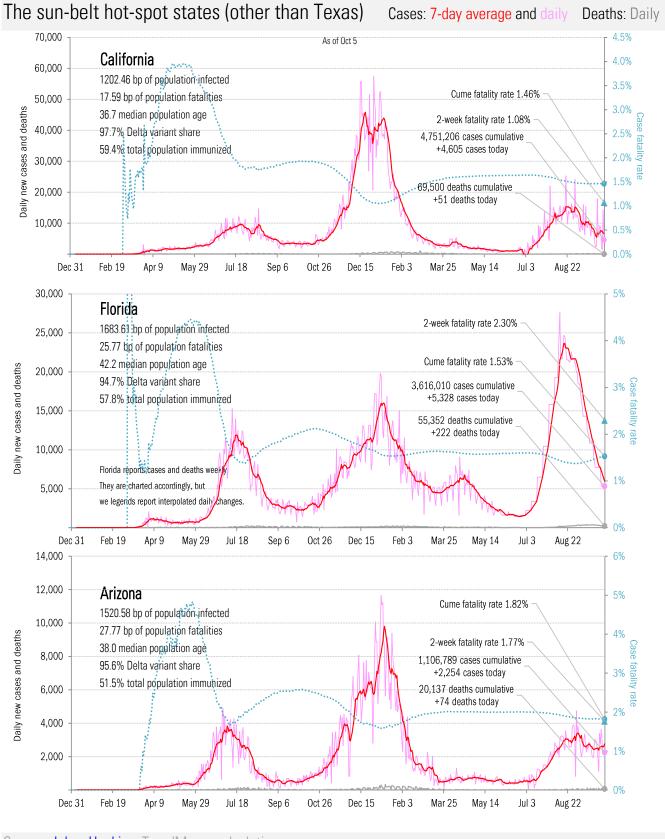
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande

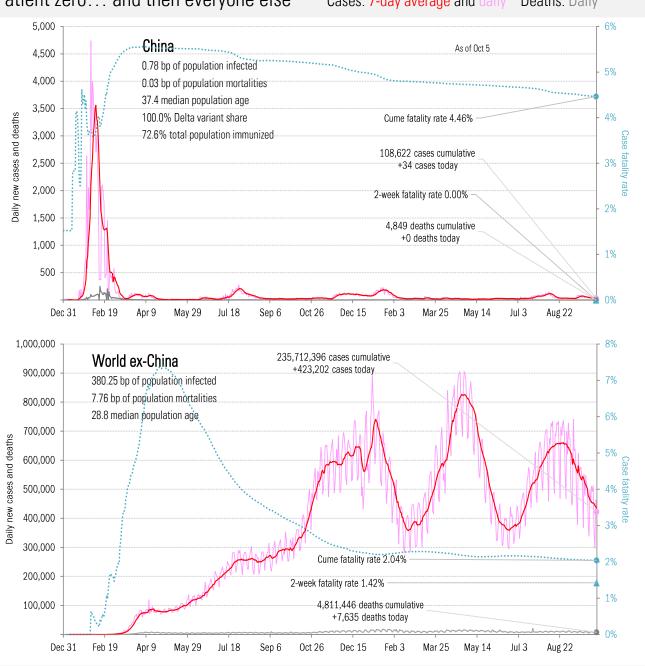
Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations

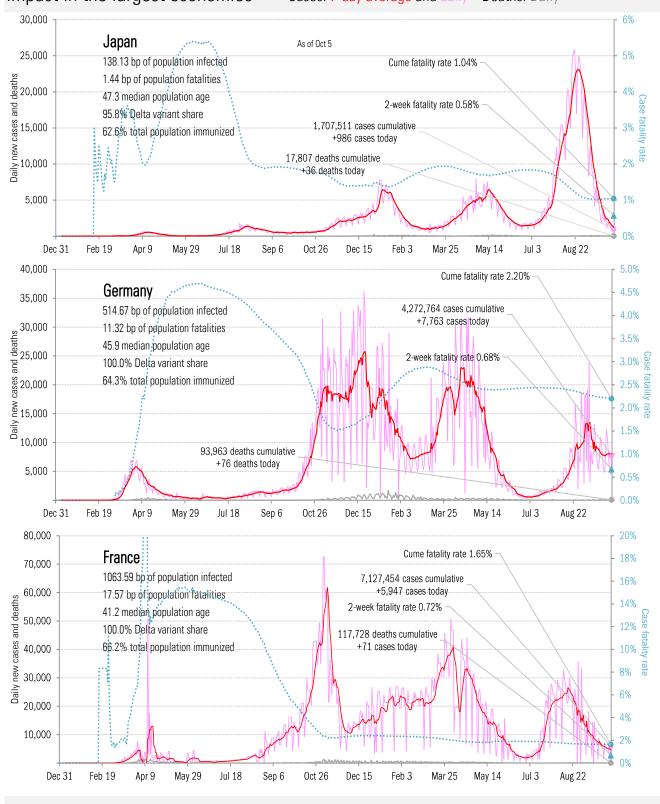


Patient zero... and then everyone else

Cases: 7-day average and daily Deaths: Daily

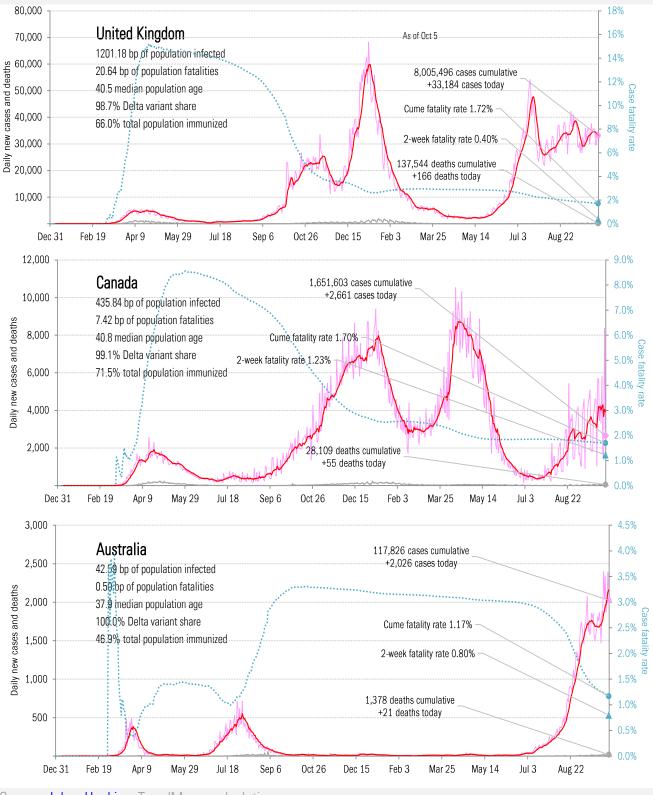
Source: Johns Hopkins, TrendMacro calculations

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

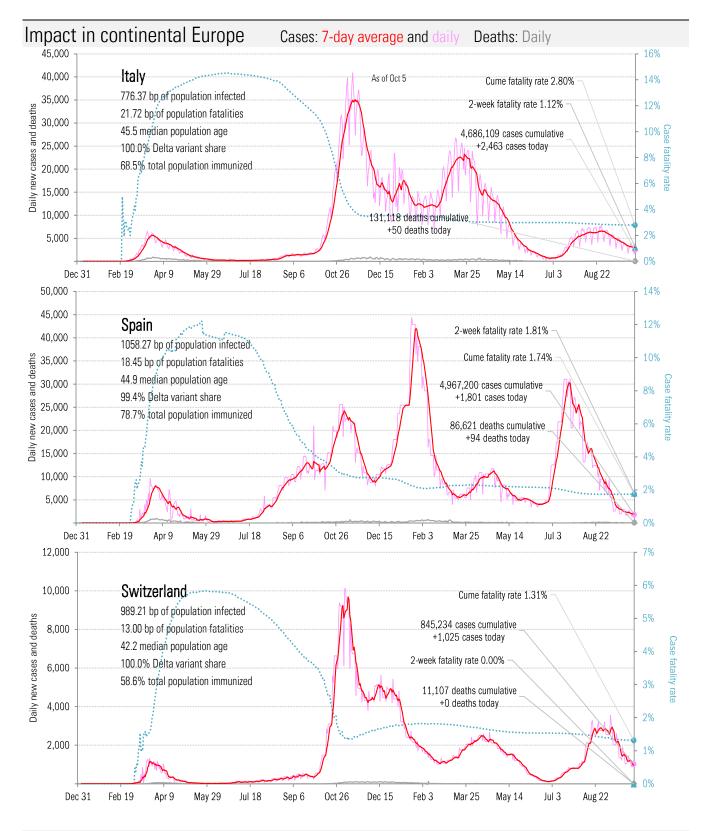


Source: Johns Hopkins, TrendMacro calculations

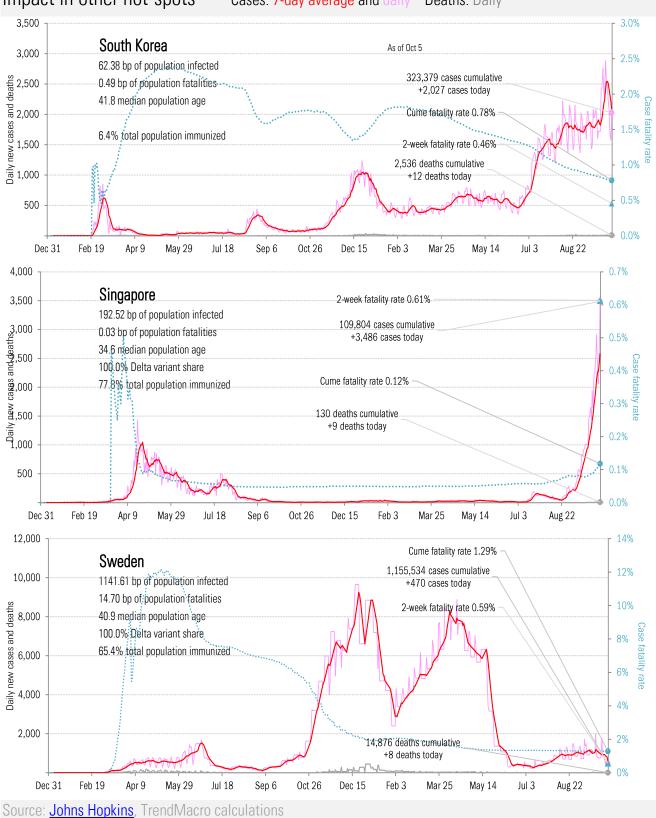
Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations

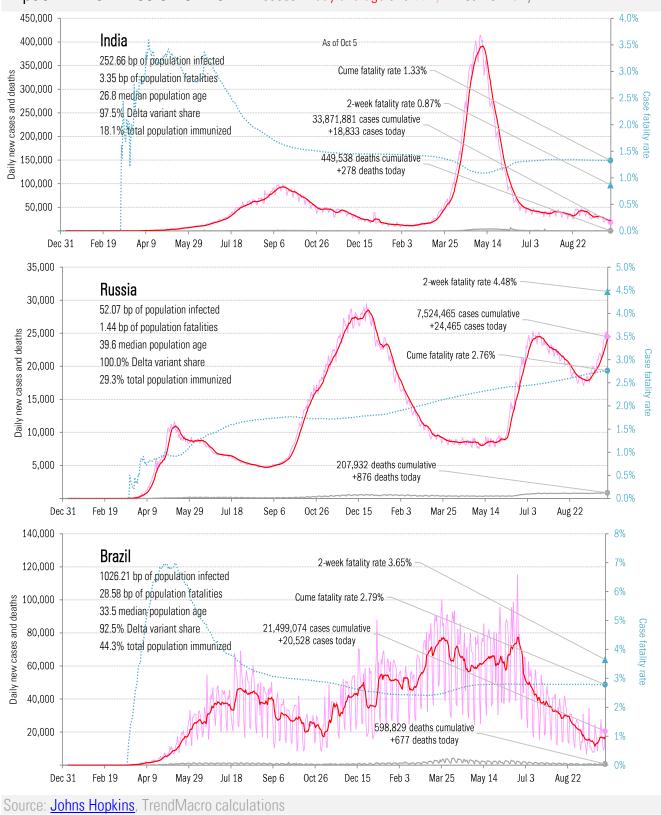






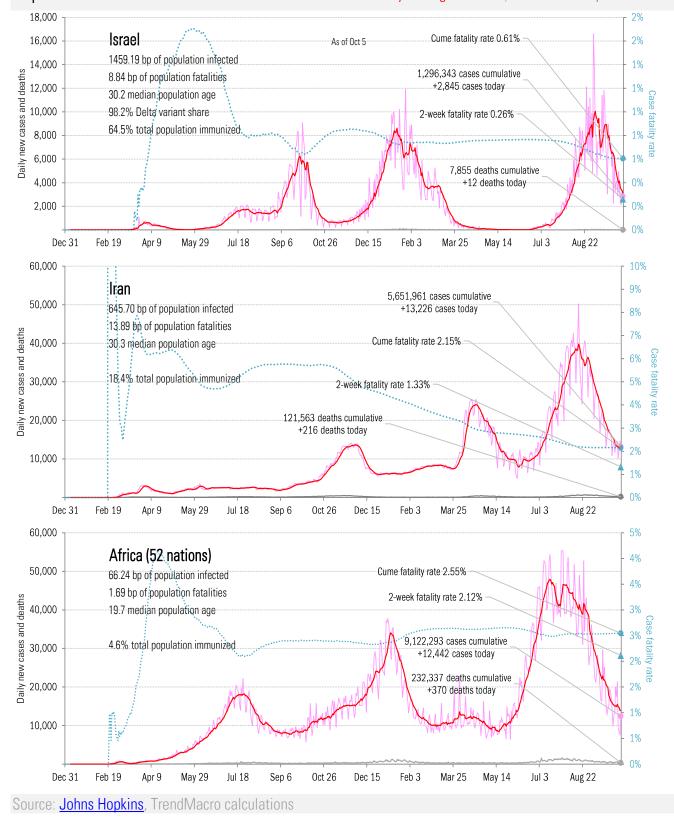
Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily

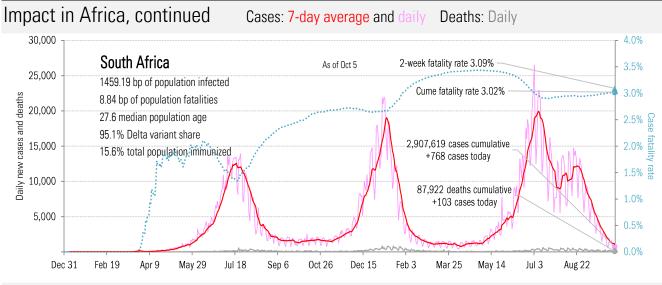
Impact in the BRICs ex-China Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa

Cases: 7-day average and daily Deaths: Daily





Source: Johns Hopkins, TrendMacro calculations