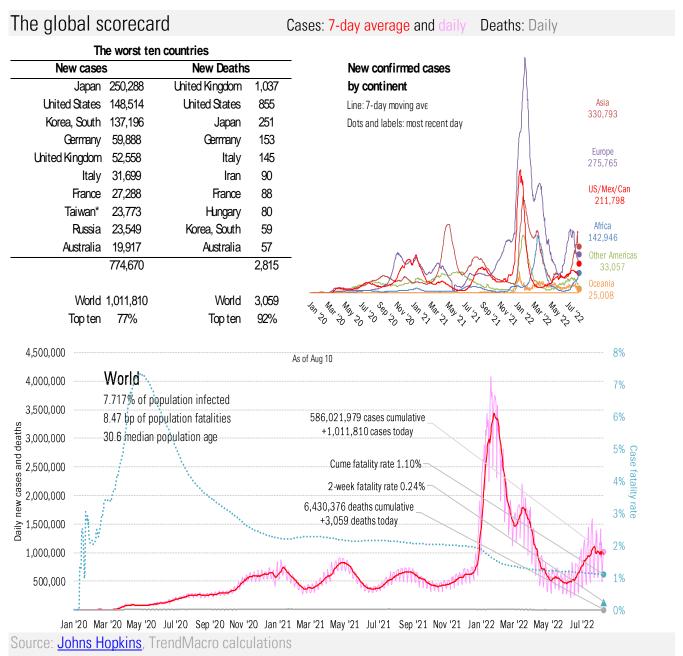


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Thursday, August 11, 2022



For more information contact us:

Donald Luskin: 214 550 2121 don@trendmacro.com

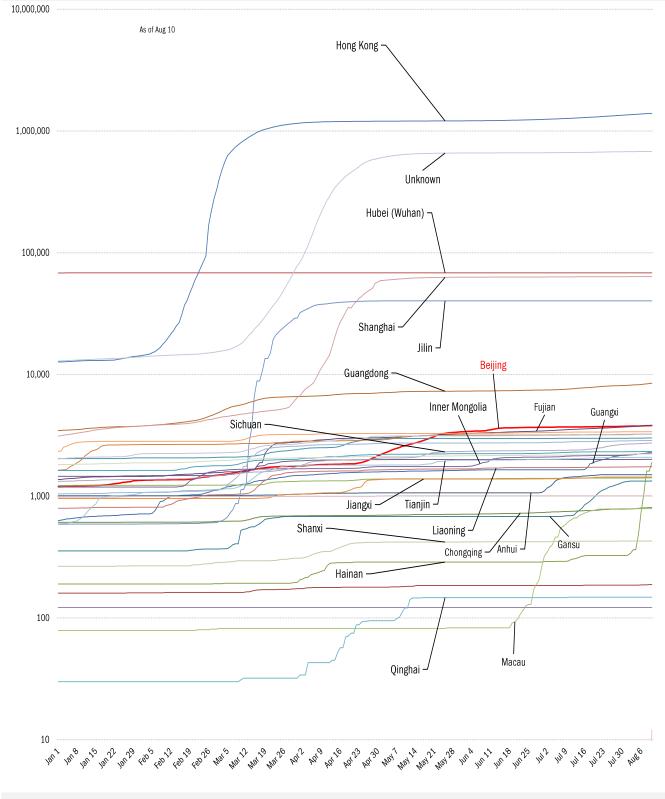
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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The US scorecard Cases: 7-day average and daily Deaths: Daily The ten worst US states New cases New deaths New in hospital Cume cases Cume deaths Cume in hospital Hospital use ICU use 95 IL 265 PA 19,078 Æ CA 10,861,313 CA 93,958 TX 527,288 RI 91% DE 118% CA 18,652 ΤN 86 AL 144 TX 7,658,391 ТΧ 89,609 CA 477,381 MA 85% AK 84% ТΧ 12,574 MO 60 PA 249 FL 6,872,920 78,292 471,993 Æ Æ WA 85% AL 83% Æ 8.304 WA 50 KY 130 NY 5,887,707 70,610 284,728 TX 83% NY NY MN 84% WA 8,206 NV 40 AZ 107 IL 3,611,415 PA 46,374 GA 218,145 DE 83% MA 82% 6,340 37 VT 81% KS NC AR 82 PA 3,125,967 GA 39,319 СН 208,128 GA 83% NY 6,251 ΤX 37 W 108 NC 3,047,625 СН 39,133 PA 194,423 WV 82% NM 81% IN 6,207 CA 34 R 18 CH 2,976,027 IL 39,059 IL 177,472 MD 81% NH 80% IN 33 GA 2,803,517 155,077 NC 4,461 ND 17 MI 37,671 MI MO 81% NE 79% NC 79% NY KY СН 3,969 33 MD 93 MI 2,708,622 NJ 34,375 140,125 MI 81% 94,043 505 1,213 49,553,504 568,400 2,854,760 1,048,236 All states 148,514 855 6,223 All states 92,534,523 5,180,246 All states 70% 67% 63% 59% 19% Top ten 54% 55% 55% Median 76% 73% Top ten Some states not reporting Five most improved US states Fewer daily cases Fewer new deaths Fewer new hospitalizations ΤN -2,336 CA -44 CA -65 -33 ТΧ MD -2.024 NY -50 LA -937 IL -31 MI -48 -934 LA -24 -43 NE IA IL -870 CT -17 FL. -40 1,600,000 12% As of Aug 10 1,400,000 United States 10% 28.41% of population infected 1.200.000 32.18 bp of population fatalities 38.1 median population age Daily new cases and deaths 800,000 900,000 900,000 Cume fatality rate 1.13% 8% 99.8% Omicron variant share Case 67.2% total population immunized 92,534,523 cases cumulative +148,514 cases today 6% rate 2-week fatality rate 0.41% 4% 400,000 1,048,236 deaths cumulative +855 deaths today Ŀ, 2% 200,000 0% Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22 Jul '22

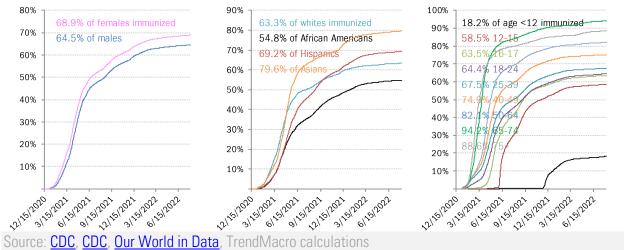
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

China provincial coronavirus <u>case</u> accelerometer... tracking the "zero Covid" curves *Cumulative reported cases this year, log scale: flat line indicates "zero Covid"*

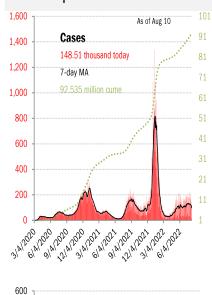


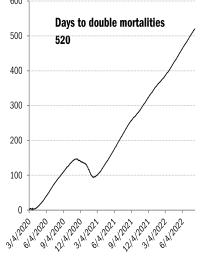
Rolling out the vaccines in the US and the world												
Administered		Cumulative					Today		Immunity	Full	Partial	
Doses		619,466,336						+0.084	million	US	67.2%	78.8%
of which boosters		109,565,113						+0.054	million	UK	75.0%	79.8%
		One dose		% Pop Imm 81% 22		nune	% рор	New imm	une today	France	78.6%	80.9%
Total popu	Total population		269,710,457		22	29,430,100	69%	+0.021 million		Spain	85.5%	86.9%
	Age 12 to 17		18,032,248		1	15,411,357		+0.003 million		Germany	76.0%	77.6%
Age 18 to 64		180,358,338		89%	15	153,011,960		+0.013 million		ltaly	81.0%	85.8%
Age 65 and over		59,584,000		100%		52,121,257	95%	+0.004 million		Australia	83.9%	86.4%
Othe										Israel	66.2%	72.3%
3%										Canada	82.6%	86.0%
		St	ate	Best						Japan	82.3%	83.4%
Pfizer 59% a: a: 71.2% 63.0%				Dest						Africa	20.9%	26.6%
		At least partial immunity		Middle						India	66.4%	72.6%
		as % population		Worst						Brazil	79.4%	86.4%
		Full immunity								China	88.7%	91.1%
		as % population								Global data diff	ers due to sou	rces, timing
		"Immunity" = two doses				WI		As of Aug 4			ME	
						72.9%					92.8%	
											80.9%	
	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	82.4%	62.2%	66.2%	66.7%	76.3%	76.9%	67.7%		91.7%	95.0%	90.2%	
	73.4%	54.9%	57.6%	56.3%	70.0%	69.3%	60.8%		78.2%	82.4%	72.0%	
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		
	79.0%	76.7%	59.0%	78.6%	68.9%	62.9%	64.2%	87.1%	92.0%	95.0%		
	70.5%	61.7%	51.7%	63.2%	62.7%	56.6%	59.1%	70.1%	76.8%	80.5%		7
	CA	UT	CO	NE	MO	KY	WV	VA	MD	СТ	RI	
	83.7%	73.3%	81.0%	71.4%	67.3%	67.2%	66.0%	87.5%	88.4%	95.0%	95.0%	
	73.2%	65.1%	71.2%	64.4%	57.0%	58.2%	58.4%	74.3%	76.9%	80.5%	84.3%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		
		75.0%	89.9%	73.8%	67.9%	63.1%	86.7%	69.0%	95.0%	84.9%		
		62.8%	72.4%	63.0%	55.3%	55.2%	63.1%	58.0%	77.7%	70.5%		
			ОК	LA	MS	AL	GA					
	1			72.4%	61.8%	60.6%	63.7%	66.5%				
HI				58.3%	54.1%	52.7%	51.9%	55.7%		л г		T
89.2%				TX					FL		PR	
79.4%				73.9%					80.6%		95.0%	
				61.4%	l				67.9%	l l	83.8%	l

The demographics of US vaccination



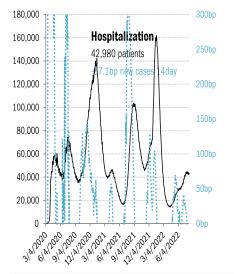
US deep-dive

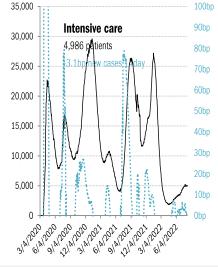


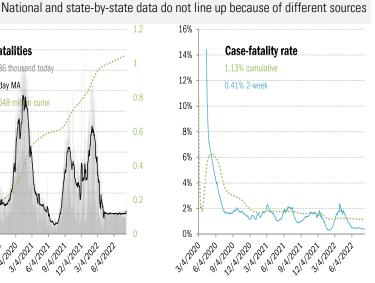


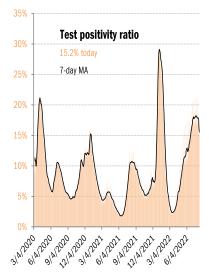


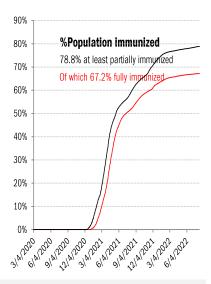




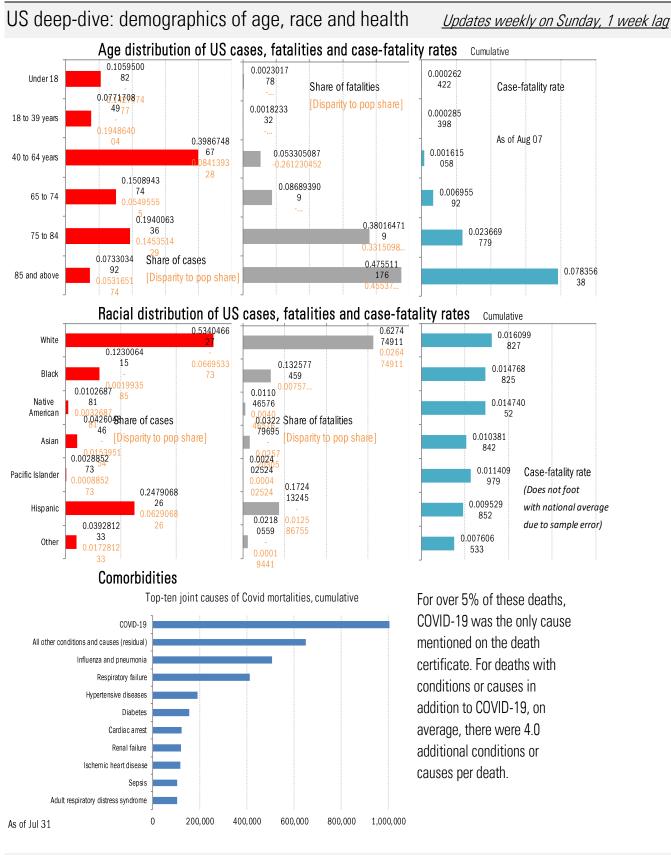








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

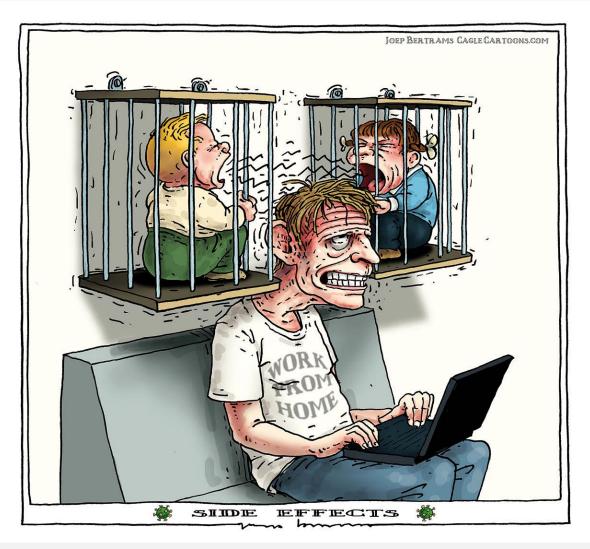
Recommended reading

The Omicron BA.5 Wave Is Starting to Ebb. We Need

<u>to Know Why.</u>

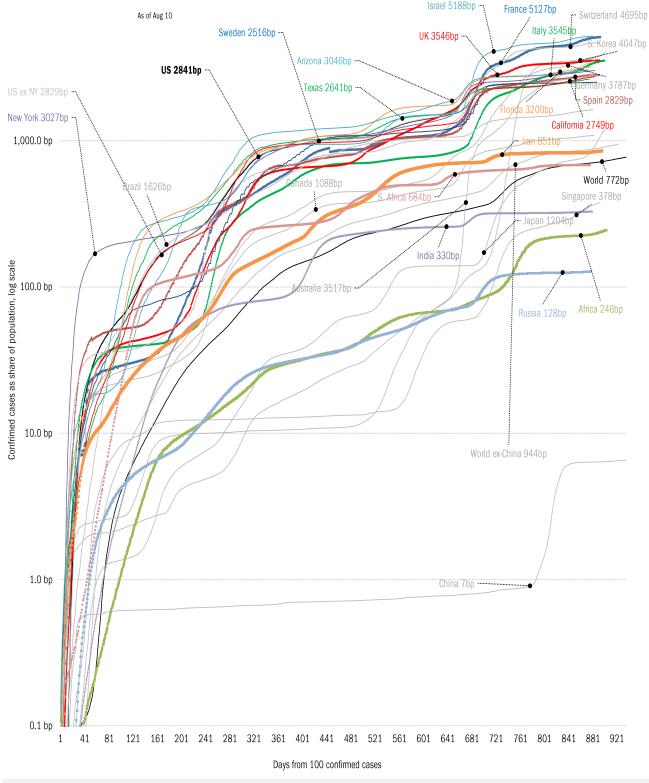
Faye Flam *Bloomberg* August 10, 2022 Dr. Deborah Birx - who helped shape the US response to Covid - doesn't understand basic epidemiology or how clinical trials work Alex Berenson *Unreported Truths* August 10, 2022

Meme of the day

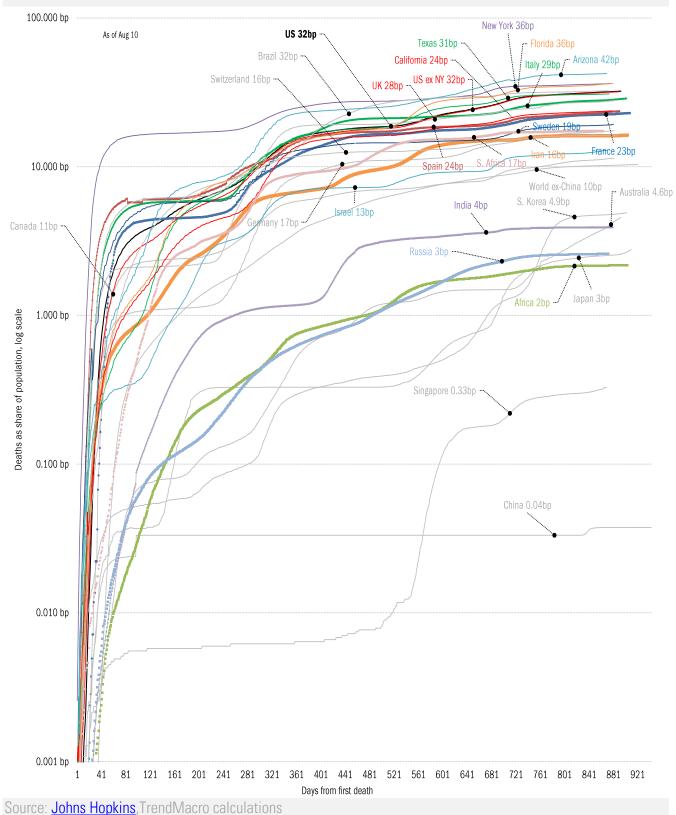


Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

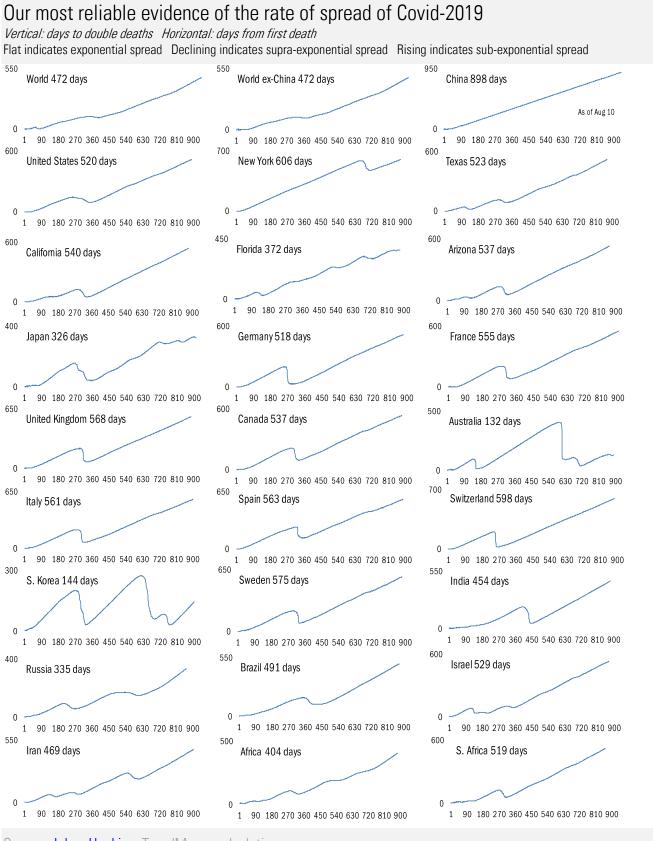
The global coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale* ^{10,000.0 bp}



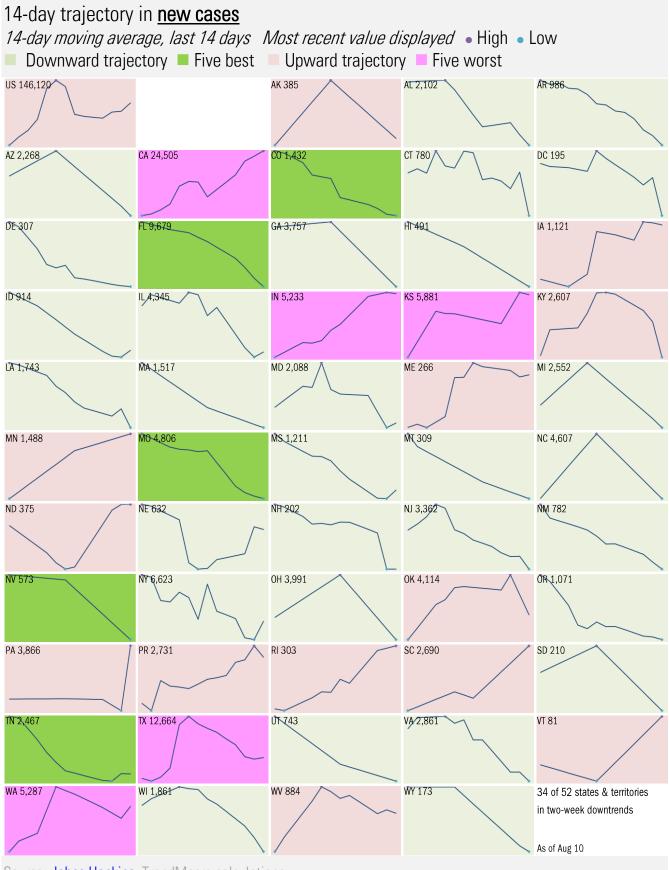
The global coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*

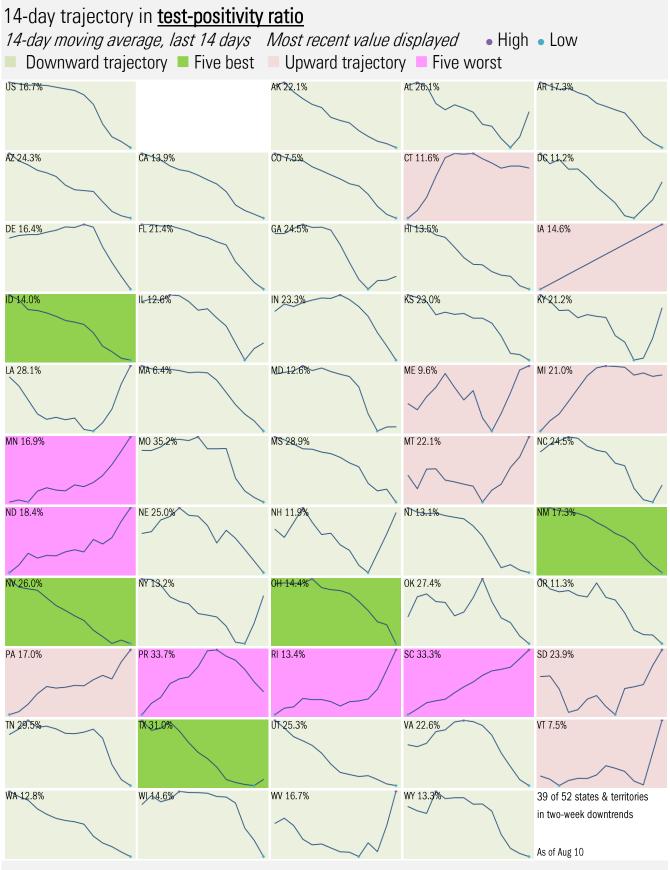


TrendMacro Data Insights: Covid-2019 Monitor



Source: Johns Hopkins, TrendMacro calculations

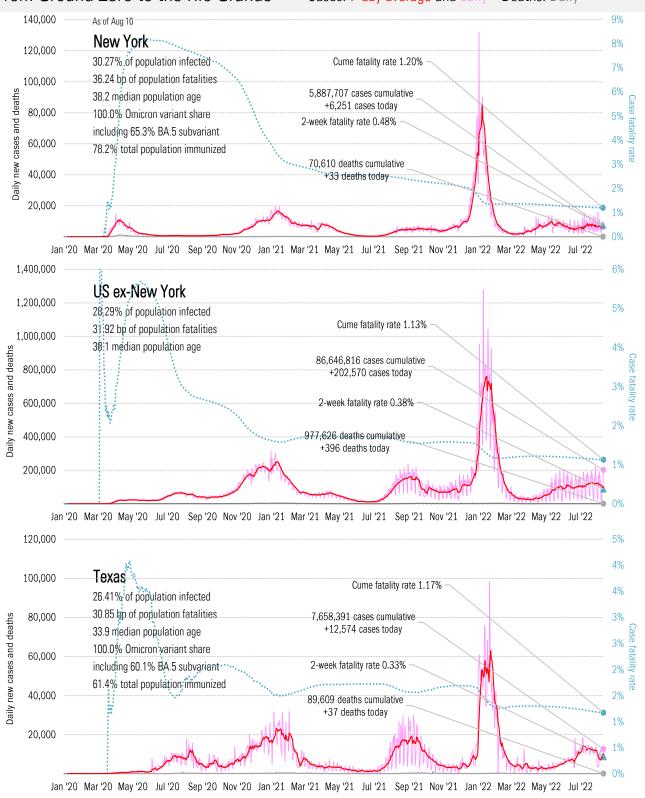




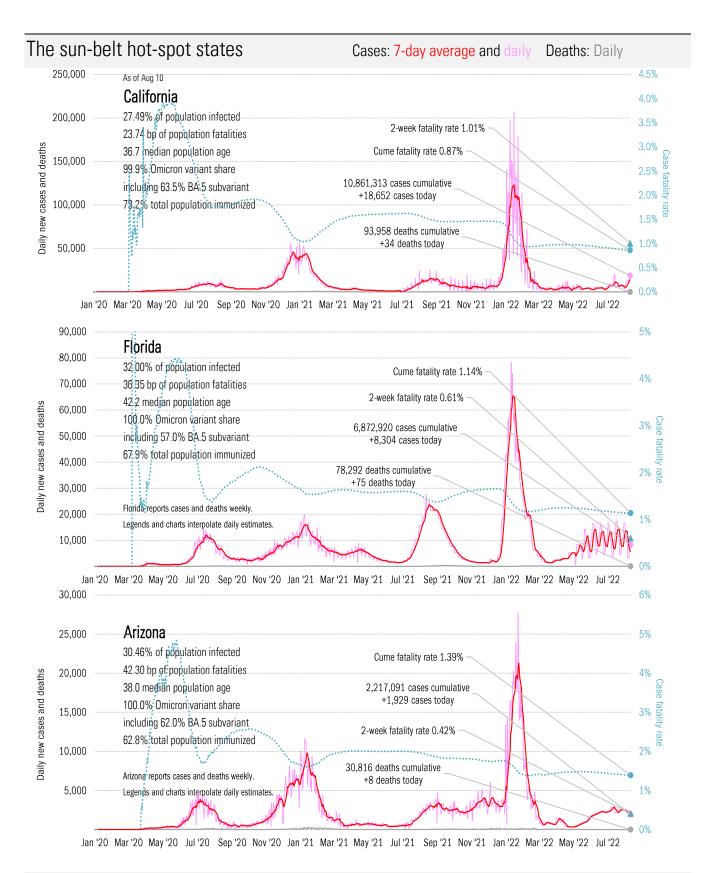
Source: Covid Act Now, TrendMacro calculations

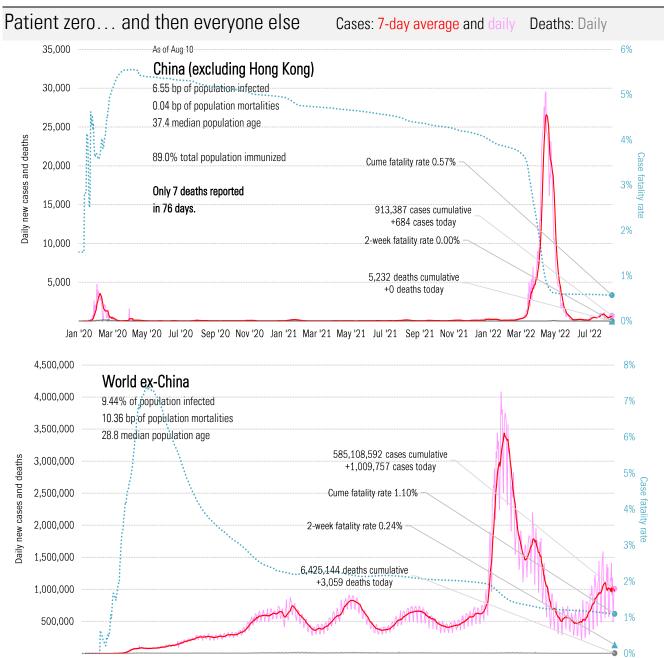
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily

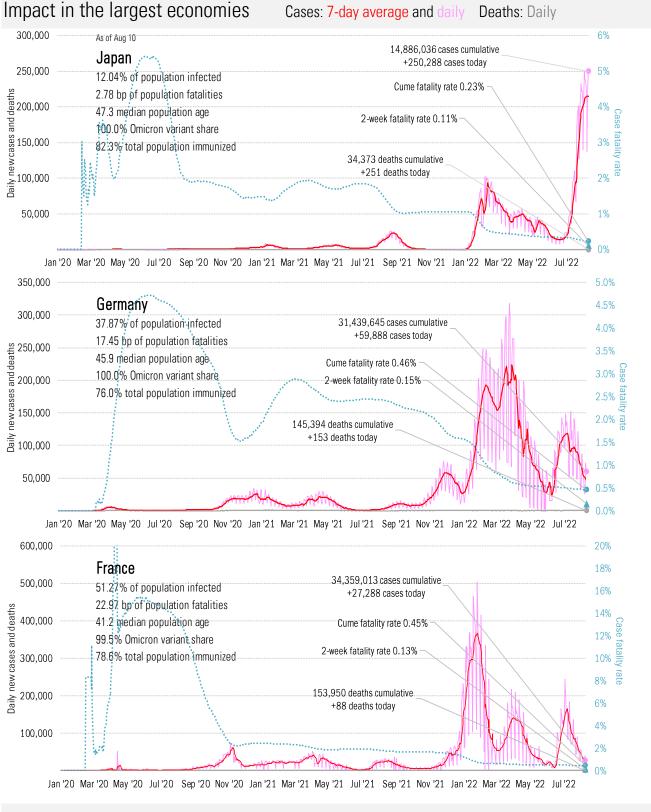


Source: Johns Hopkins, TrendMacro calculations

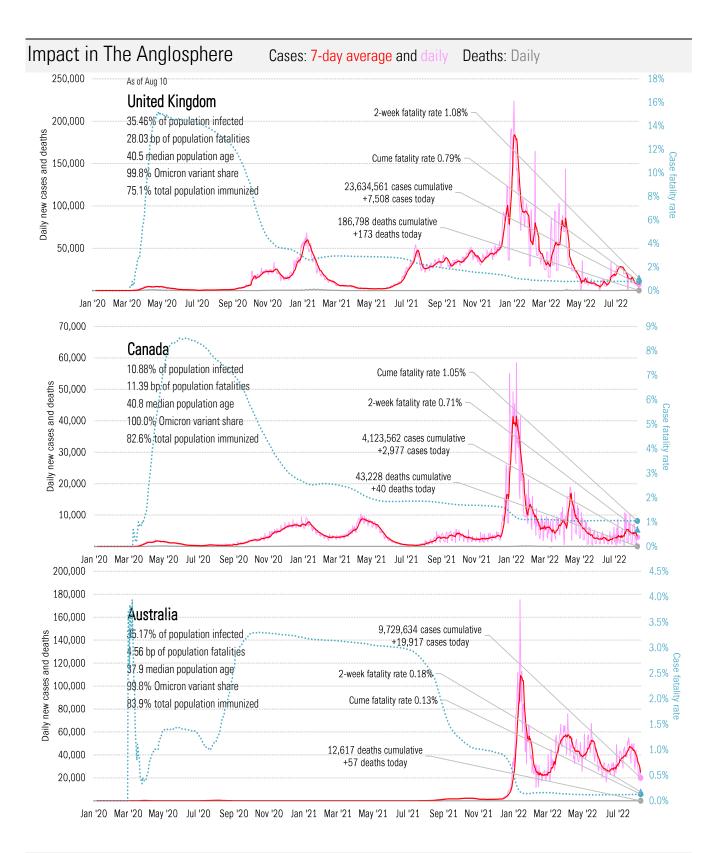


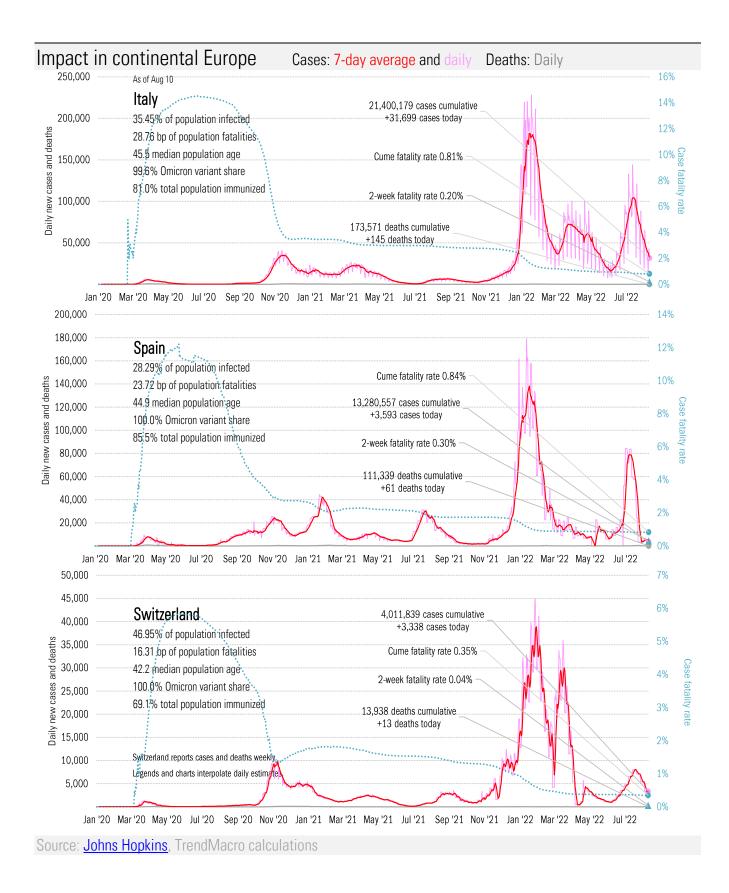


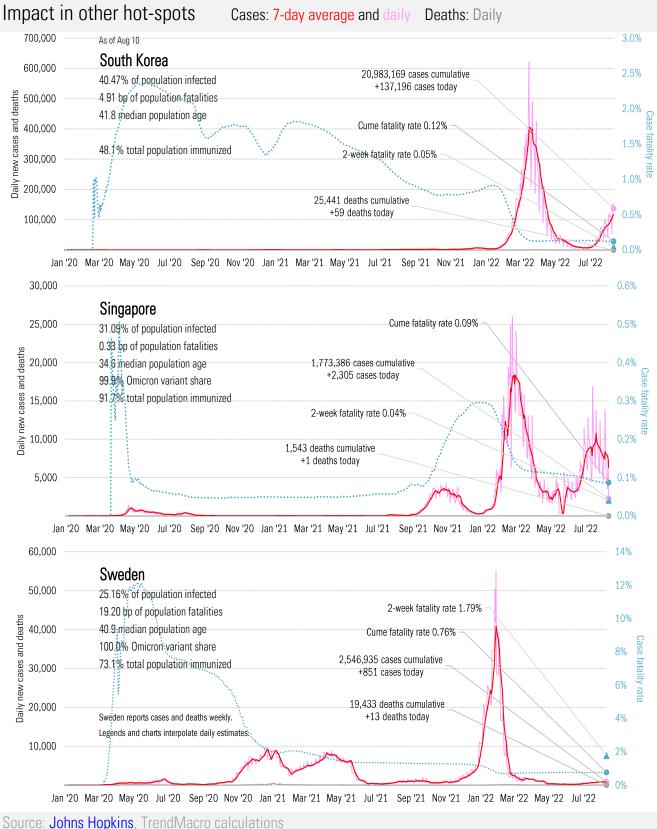
Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22 Jul '22

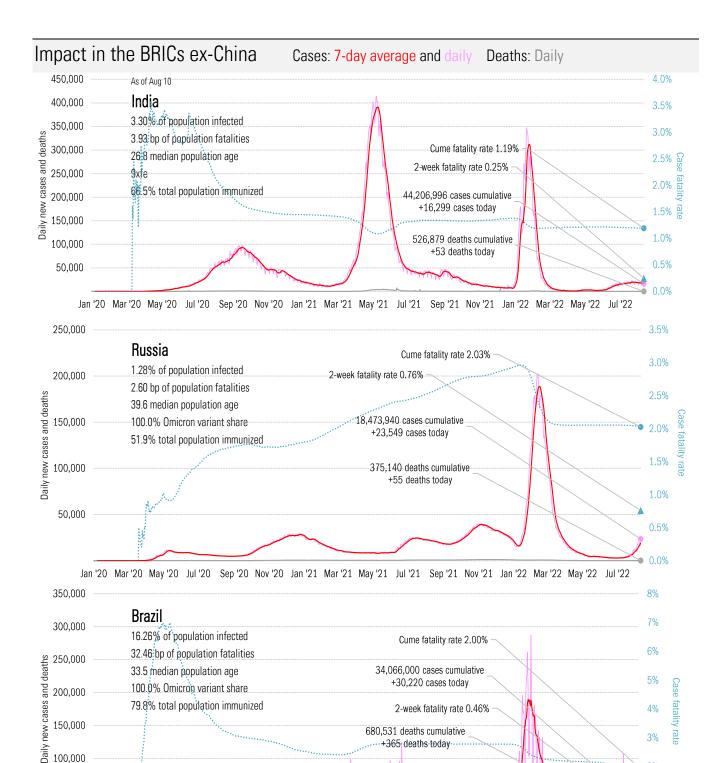


Source: Johns Hopkins, TrendMacro calculations









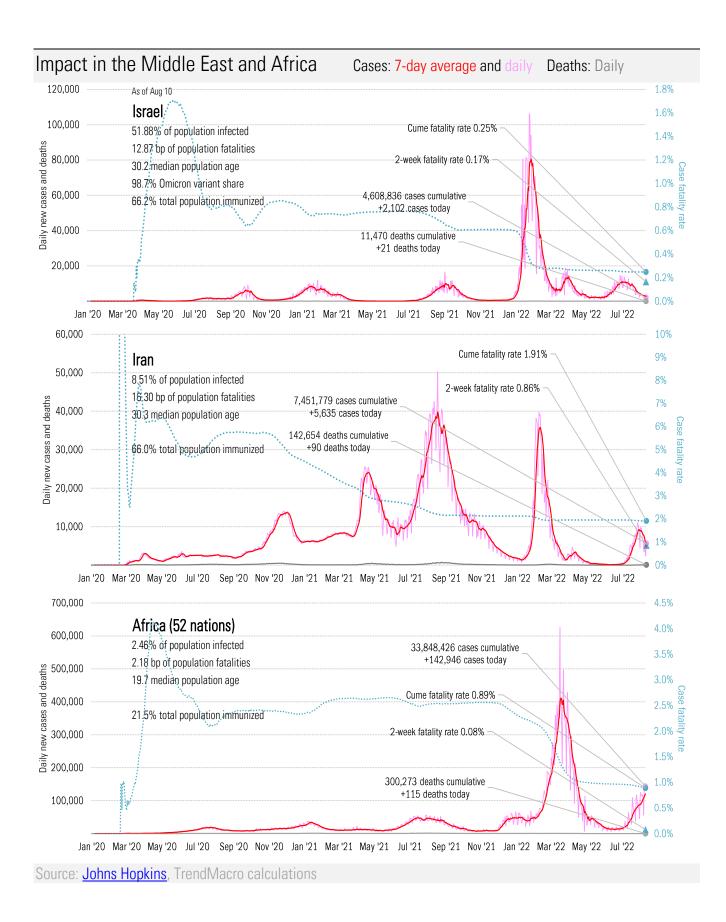
+365 deaths today

100,000

50,000

1%

0%



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

