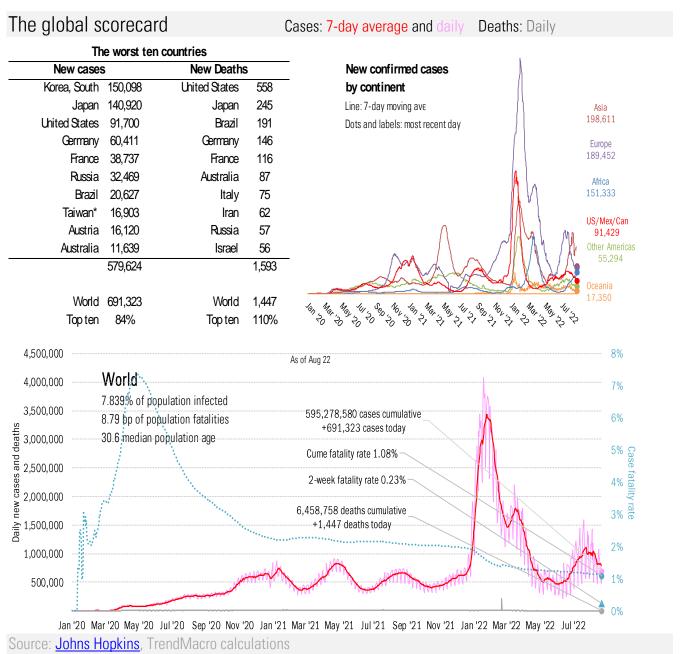


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Tuesday, August 23, 2022



For more information contact us:

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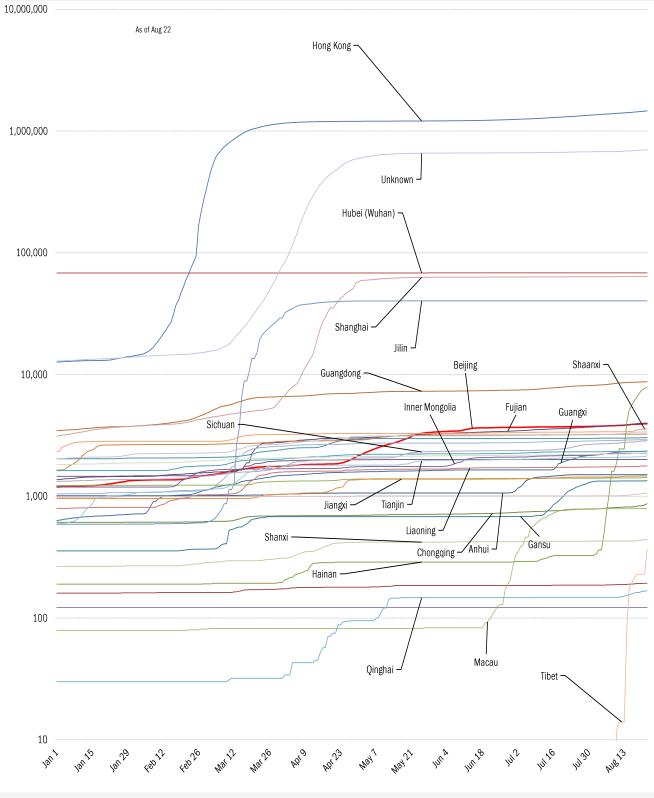
The US scorecard

Cases: 7-day average and daily Deaths: Daily

						The te	en worst US	states								
New cas	New cases New deaths			New in h	ospital	al Qurre cases			Quine deaths Quine in hospital				tal use		ICU use	
CA	12,138	R	72	TX	481		10,990,337	CA	94,476	TX	533,200		89%		85%	
TX	6,519	TX	47	CA	546		7,777,905	TX	90,037	CA	484,107	M			83%	
Æ	6,488	CA	36	СН	220	Æ		R.	79,152	R.	478,888	IM			83%	
NY	6,108	NY	32	GA	228	NY	5,947,458	NY	70,882	NY	288,482	W			83%	
NC	3,906	ω	22	MN	99		3,653,947	PA	46,514	GA	220,586	G			82%	
GA	3,681	CK	21	PA	220		3,151,539	GA	39,472	CH	210,746	M			82%	
CH	3,438	GA	21	VA	128		3,074,964	СН	39,310	PA	196,895	W		R	81%	
IN	3,426	PA	20	MO	100	сн	3,026,110	IL.	39,199	IL 	179,977		< 81%		80%	
MI	3,309	IL.	19 10	MA	101	GA		MI	37,774	MI	156,883		E 81%	WA		
WA	3,278	LA	18	TN	106	MI	2,731,787	NJ	34,467	KY	141,323		0 80%	NM	79%	
	52,292		308		2,229		50,150,092		571,283		2,891,087					
	01 700		FEO		F 000		00 004 550		1 054 046		E 0/E 170		- 700/		670/	
All states	91,700 57%		558 55%		5,090 44%	Topten	93,621,553 54%		1,054,246 55%		5,245,178 55%	All state	s 70% n 7 6%		67% 71%	
Topten	5/%		00%		44%	lopten	04%			mo ototoo r		Ivieura	1 /0%		/ 1%	
Some states not reporting																
Fewer daily cases Fewer new deaths Fewer new hospitalizations																
CA	-15,489				CA	-106			-	-87						
CK	-2,967				IN	-23				-33						
IN	-2,461				WA	-19				-16						
PA	-1,483				VA	-13				-15						
NJ	-1,322				ID	-7				-10						
1,600,000	1-														12%	
_,,	As of A	.uq 22														
4 400 000		0														
1,400,000	Unit	ed Stat	es												10%	
United States 28.74% of population infected															1070	
1,200,000	· · · · · · · · · · · · · · · · · · ·					Cume fatality rate 1 13% –										
	32.37 bp of population fatalities Cume fatality rate 1.13%											00/				
g 1,000,000	38.1 [‡] median population age 99.6 [*] % Omicron variant share										8%					
1,000,000 99.6% Omicron variant share 67.4% total population immunized 93,621,553 cases cumulative +91 700 cases today										Case						
	07.17			namzou			+91,	700 case	s today						5	
800,000												6% atality				
000,008 Gaily new cases 000,000 000,000			$\sim \sqrt{2}$				2-wee	k fatality r	ate 0 43% —						6% 6%	
<u>}</u> 600,000	2-week fatality rate 0.43%															
											4%					
400,000 1,054,246 deaths cumulative										$\langle \rangle$						
1001000					and the second	1.	+558 deaths	today				\sim	$ \setminus $			
		V.				<u></u>			····					\mathbf{X}	2%	
200,000					M				1 march						3	
					and the second s	· · · ·	-		<u>A</u> IIII)		ייזא	N	menter of the second se		2	
				· ·					•	aloud		11 WWWWW	1400		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 Jul '22																
Source: Johns Honkins, Dont, of Health and Human Sonvices, CDC, Trand Macro calculations																

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

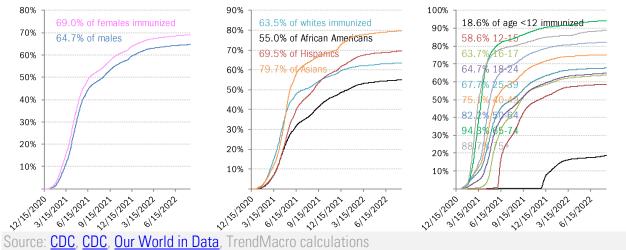
China provincial coronavirus <u>case</u> accelerometer... tracking the "zero Covid" curves *Cumulative reported cases this year, log scale: flat line indicates "zero Covid"*



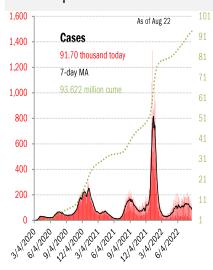
Source: Johns Hopkins, TrendMacro calculations

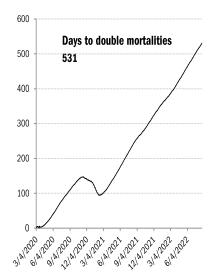
Rolling out the vaccines in the US and the world <u>Updates weekly on Friday</u>												
Administered Cumulative							Today		Immunity	Full	Partial	
Doses		62	2,906,809					+0.209	million	US	67.4%	79.0%
of which	boosters	11	0,327,935					+0.051 million			75.2%	79.9%
		One	dose			nune	% pop 69%	New immune today		France	78.6%	80.9%
Total popu	Ilation	27	0,471,978	81%	23	230,193,455		+0.034 million		Spain	85.5%	86.9%
Age 12 to	o 17	1	8,095,150	72%	1	15,459,413		+0.003 million		Germany	76.0%	77.6%
Age 18 to		18	0,661,461	89%	15	153,482,893		+0.015 million		Italy	81.0%	85.8%
Age 65 a	nd over	5	9,665,647	100%	5	52,194,513	95%	+0.005 million		Australia	83.9%	86.5%
Othe										Israel	66.2%	72.3%
3%)									Canada	82.6%	86.3%
		St	ate	Best						Japan	82.3%	83.5%
Moderna 38%				Dest						Africa	21.8%	27.9%
3070	Pfizer	At least par	tial immunity	Midd	lo					India	66.7%	72.7%
	59%		pulation	IVIIdu	10					Brazil	79.9%	86.8%
		Full im	munity	Wors	-+				China	89.0%	91.3%	
AK			pulation	VV01	51					Global data diff	ers due to sou	rces, timing
71.3%		"Immunity" = t	wo doses			WI		As of Aug 18				
63.2%						73.1%					93.0%	
						66.5%					81.1%	
	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	82.6%	62.3%	66.4%	66.9%	76.6%	77.1%	67.9%		91.8%	95.0%	90.5%	
	73.6%	55.1%	57.8%	56.6%	70.2%	69.5%	61.0%		78.3%	82.6%	72.2%	ļ
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		
	79.2%	76.8%	59.1%	78.9%	69.0%	63.1%	64.3%	87.3%	92.2%	95.0%		
	70.6%	61.9%	51.8%	63.5%	62.8%	56.8%	59.2%	70.4%	77.0%	80.7%		-
	CA	UT	CO	NE	M0	KY	WV	VA	MD	СТ	RI	
	83.9%	73.5%	81.2%	71.6%	67.5%	67.3%	66.1%	87.6%	88.7%	95.0%	95.0%	
	73.4%	65.3%	71.4%	64.6%	57.2%	58.3%	58.6%	74.4%	77.1%	80.6%	84.6%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		
		75.3%	90.2%	74.0%	68.1%	63.2%	87.0%	69.2%	95.0%	85.1%		
		63.0%	72.6%	63.2%	55.5%	55.3%	63.3%	58.2%	78.5%	70.7%		
				OK	LA	MS	AL	GA				
· · · · · · · · · · · · · · · · · · ·				72.5%	62.0%	60.8%	63.8%	66.6%				
HI				58.5%	54.3%	52.9%	52.1%	55.8%		1 r		т
89.3%				TX					FL		PR	
79.6%				74.3%					80.8%			
				61.6%	l				68.1%	l l	84.1%	1

The demographics of US vaccination



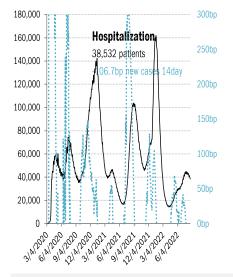
US deep-dive

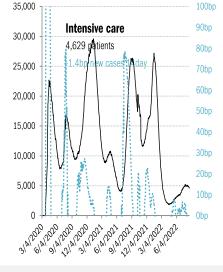


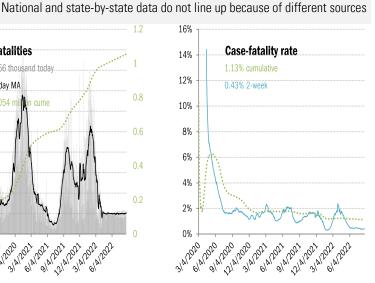


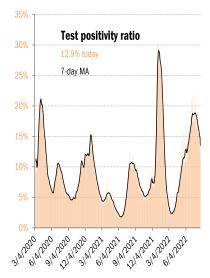


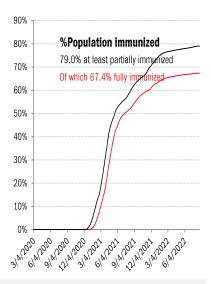




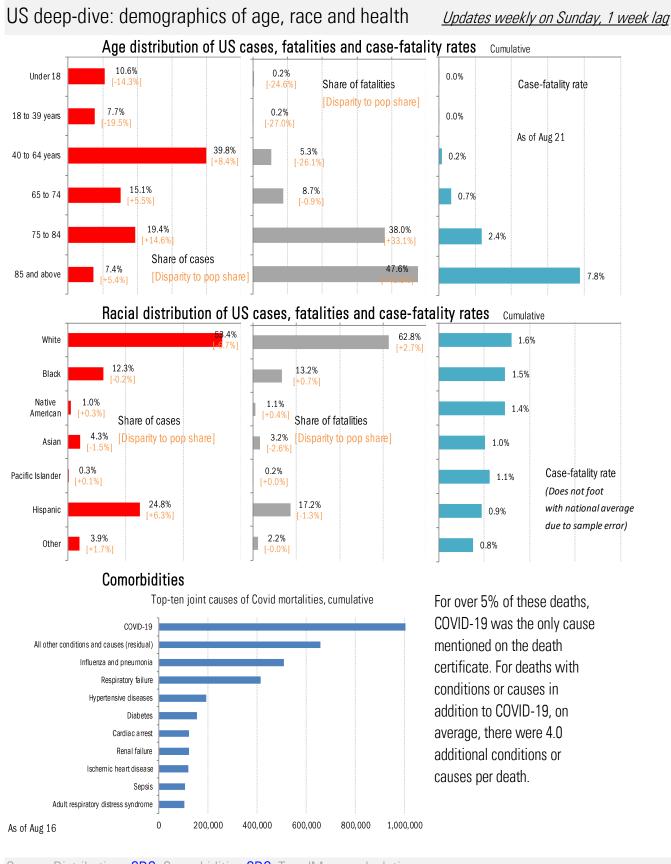








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



Recommended reading

New York ending COVID-19 rules in schools

Alejandra O'Connell-Domenech *Changing America* August 22, 2022

Oral Nirmatrelvir and Ritonavir in Non-hospitalized Vaccinated Patients with Covid-19

Sarju Ganatra et al. *Clinical Infectious Diseases* August 20, 2022

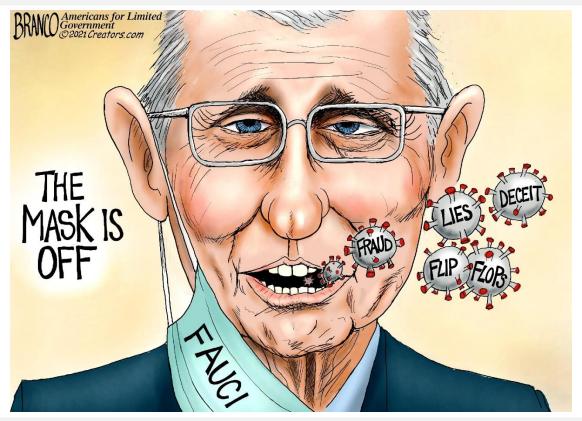
Paxlovid works, the vaccines don't

Alex Berenson *Unreported Truths* August 22, 2022

Fauci Says He Will Step Down in December to Pursue His 'Next Chapter'

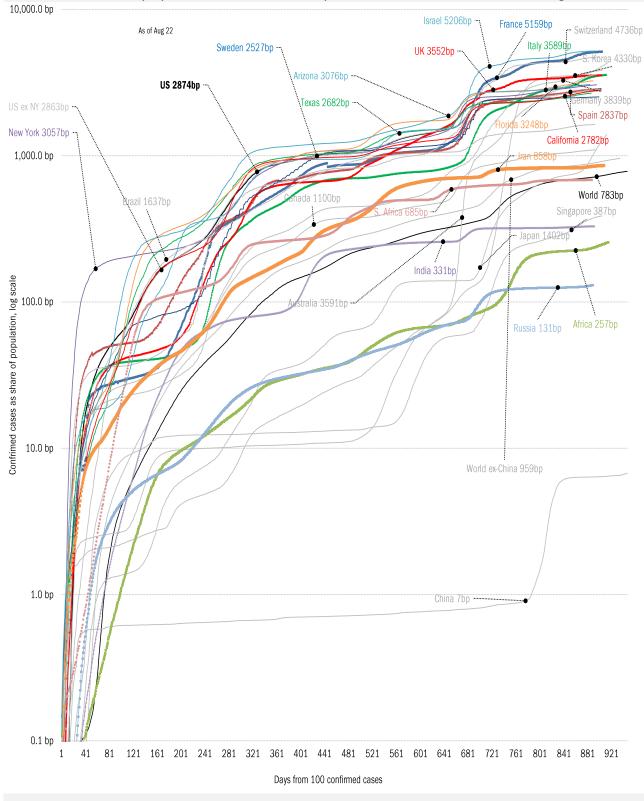
Sheryl Gay Stolberg *New York Times* August 22, 2022

Meme of the day

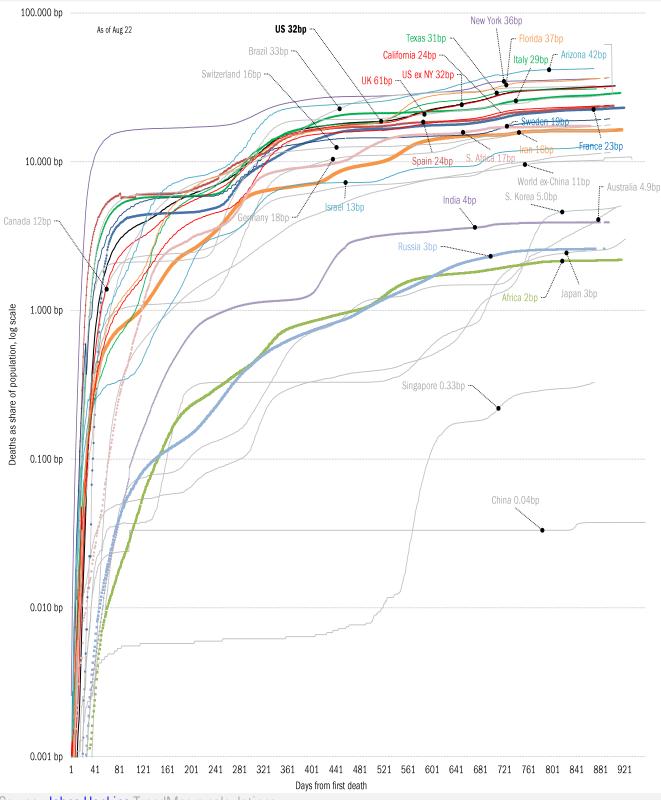


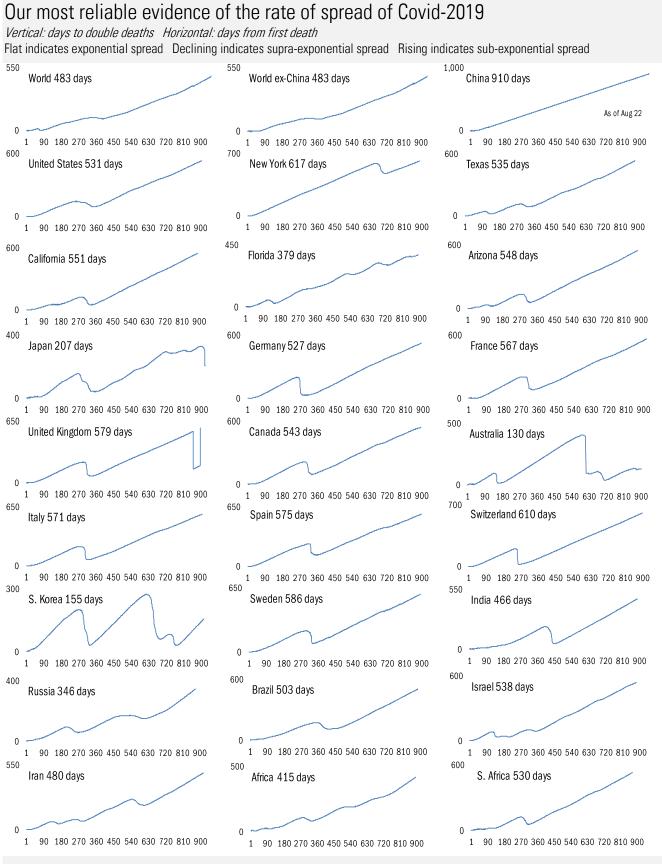
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

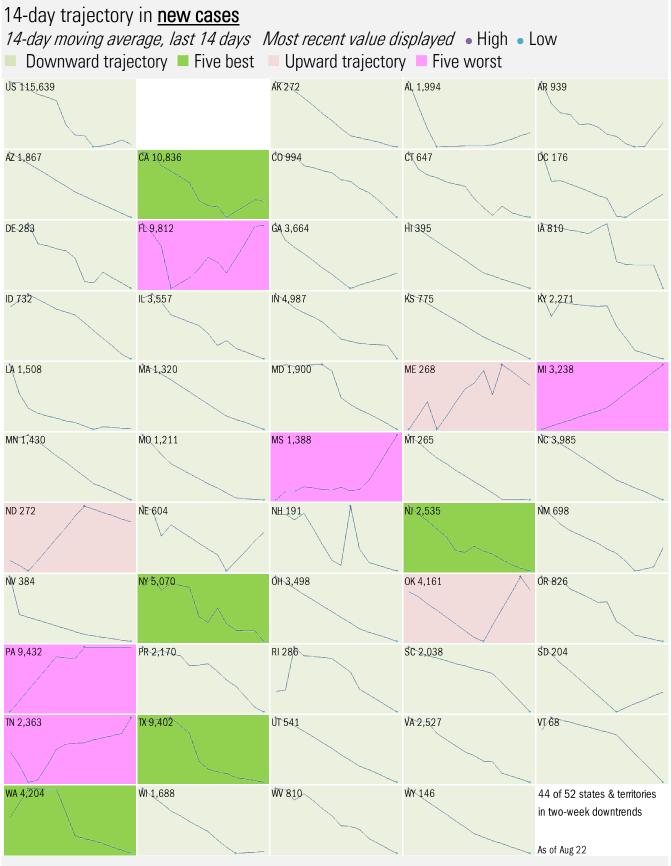
The global coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

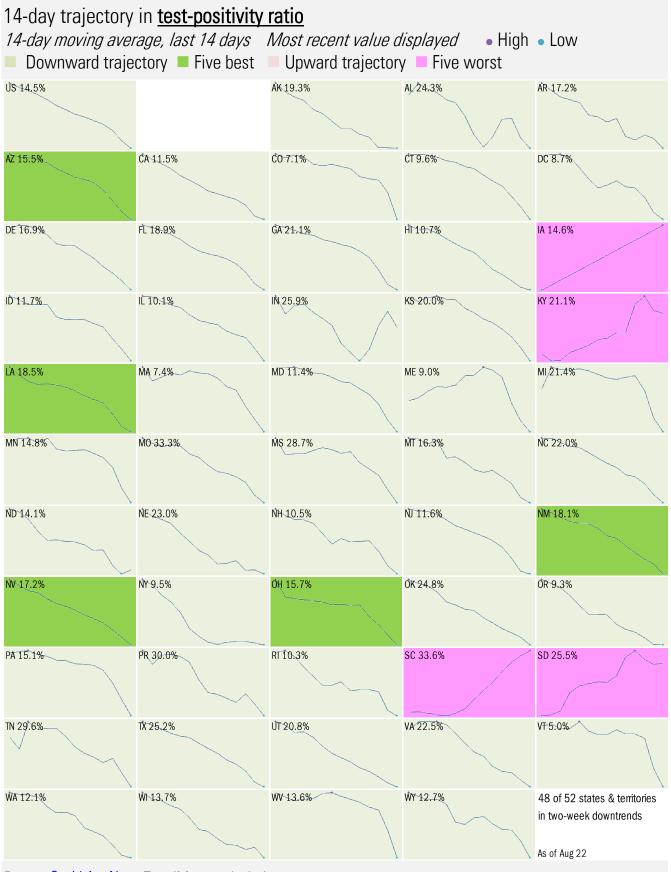


The global coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*





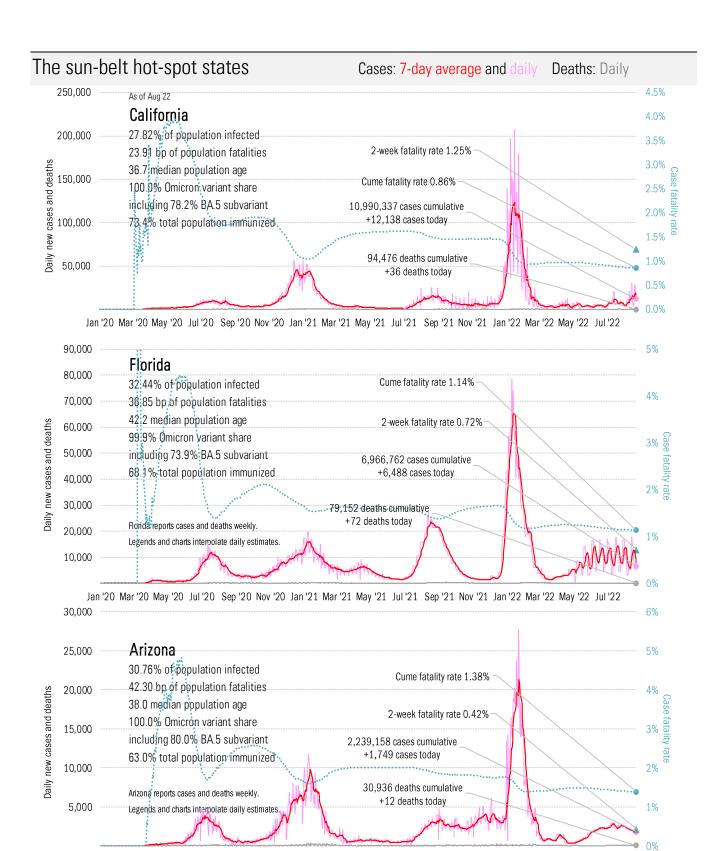




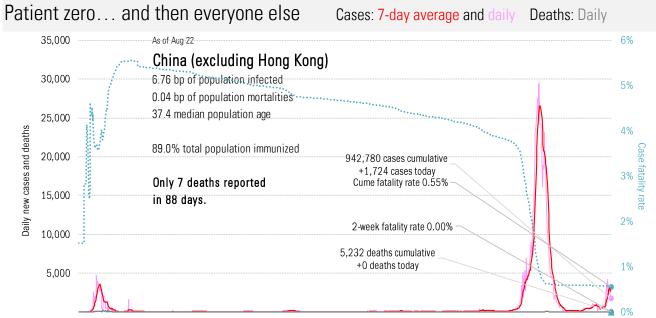
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande Cases: 7-day average and daily Deaths: Daily 140,000 9% As of Aug 22 New York 8% 120.000 30.57% of population infected Cume fatality rate 1.19% 7% 36.44 bp of population fatalities 100,000 100,000 Baily new cases and deaths 80,000 40,000 40,000 20,000 6% 38.2 median population age 2-week fatality rate 0.56% 99.9% Omicron variant share including 77.1% BA.5 subvariant 5,947,458 cases cumulative 78.3% total population immunized +6,108 cases today 3% 70,882 deaths cumulative 2% +32 deaths today 20,000 1% 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 1,400,000 6% US ex-New York 1,200,000 5% 28.63% of population infected Cume fatality rate 1.12% 32.11 bp of population fatalities 1,000,000 38.1 median population age 4% Daily new cases and deaths 2-week fatality rate 0.42% 800,000 87,674,095 cases cumulative 3% +84,673 cases today 600,000 983,364 deaths cumulative 2% +333 deaths today 400,000 1% 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 '22 100,000 5% 90,000 4% Texas Cume fatality rate 1.16% 80,000 4% 26.82% of population infected 70,000 31.05 bp of population fatalities 2-week fatality rate 0.42% 3% Daily new cases and deaths 60,000 33.9 median population age 3% 7,777,905 cases cumulative 100.0% Omicron variant share 50,000 +6,519 cases today including 74.7% BA.5 subvariant. 2% 40,000 61.6% total population immunized 90,037 deaths cumulative 2% 30,000 +47 deaths today 1% 20,000 1% 10,000

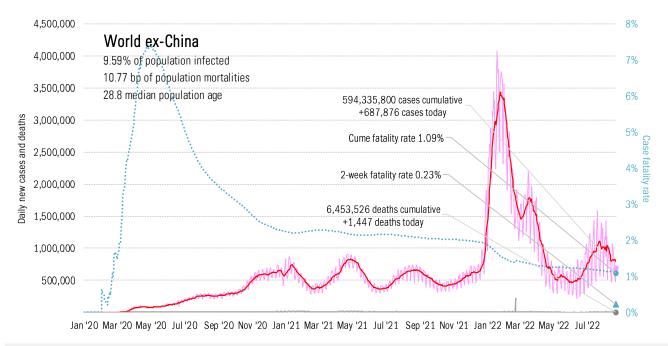


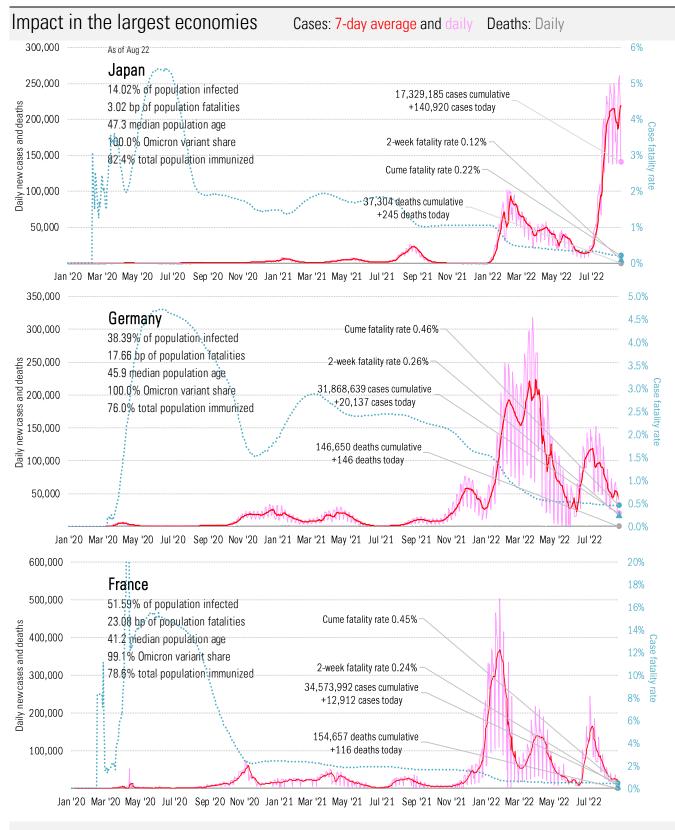


Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22 Jul '22

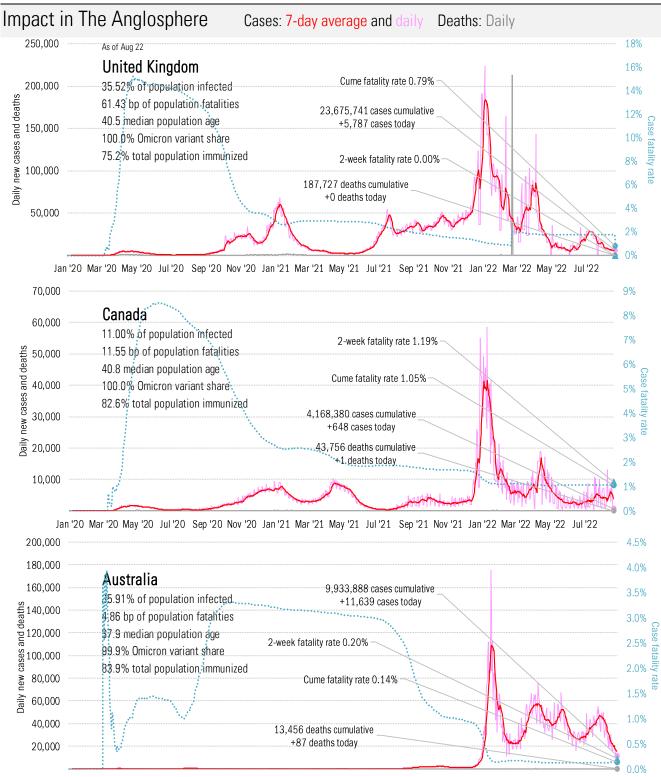


Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22 Jul '22

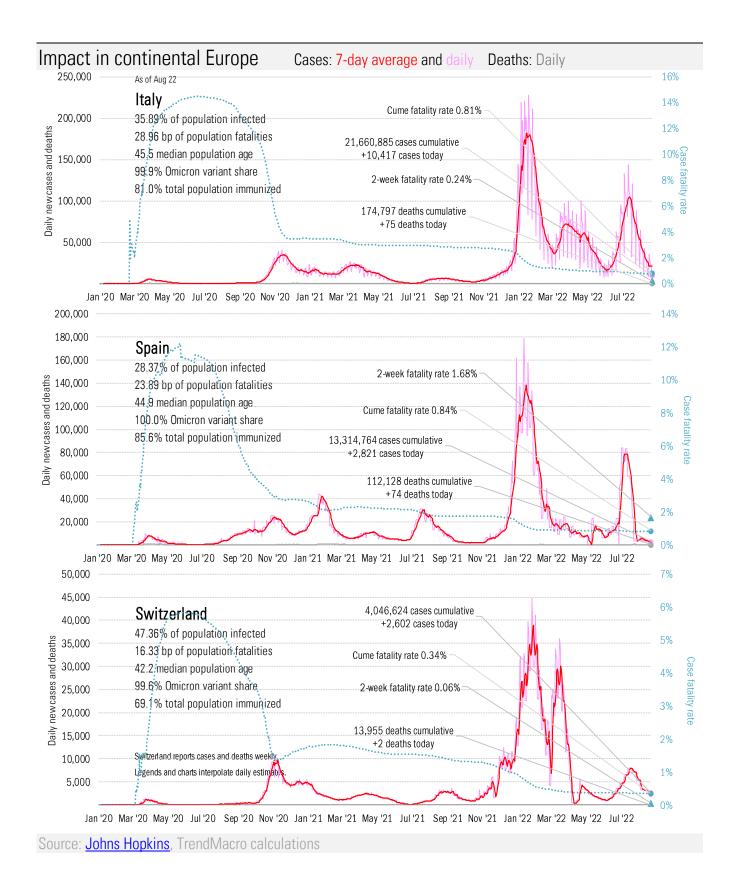


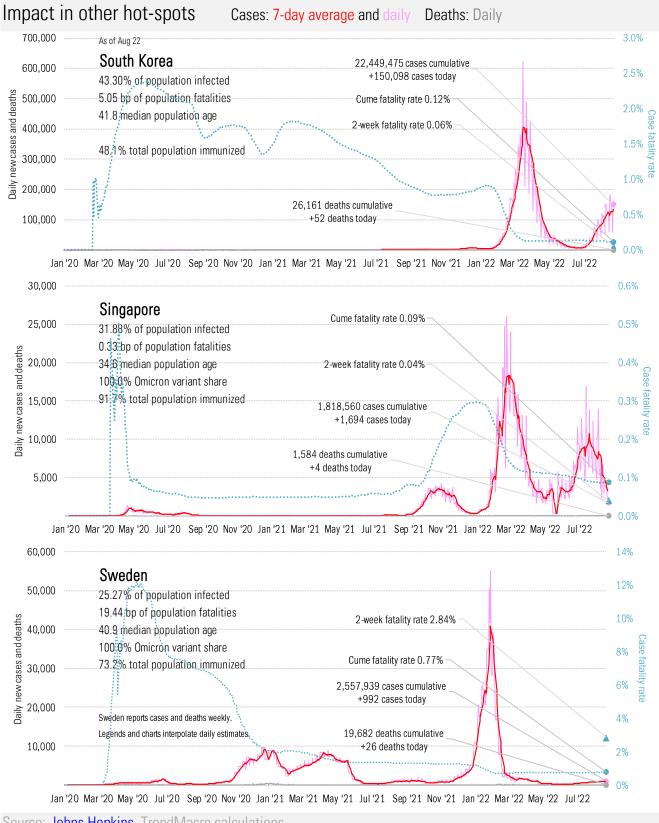


Source: Johns Hopkins, TrendMacro calculations

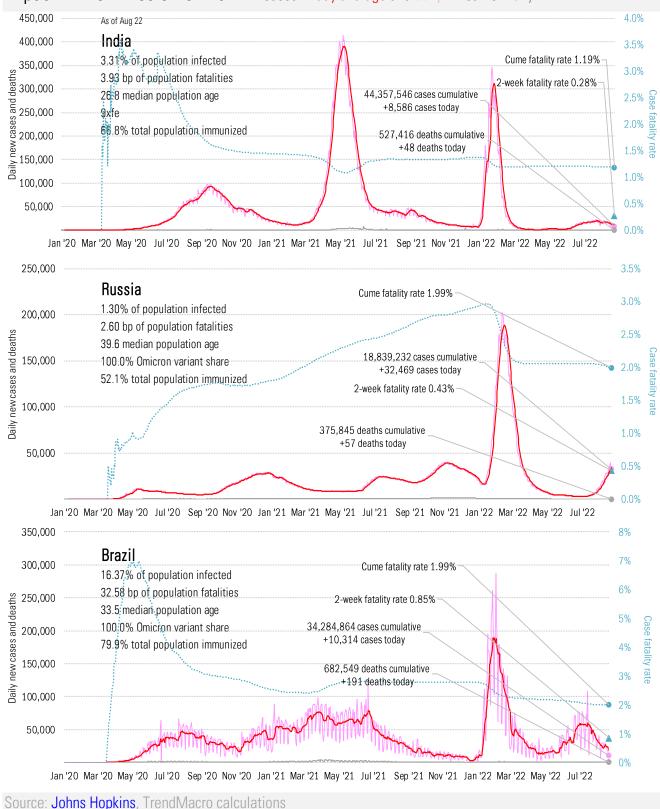


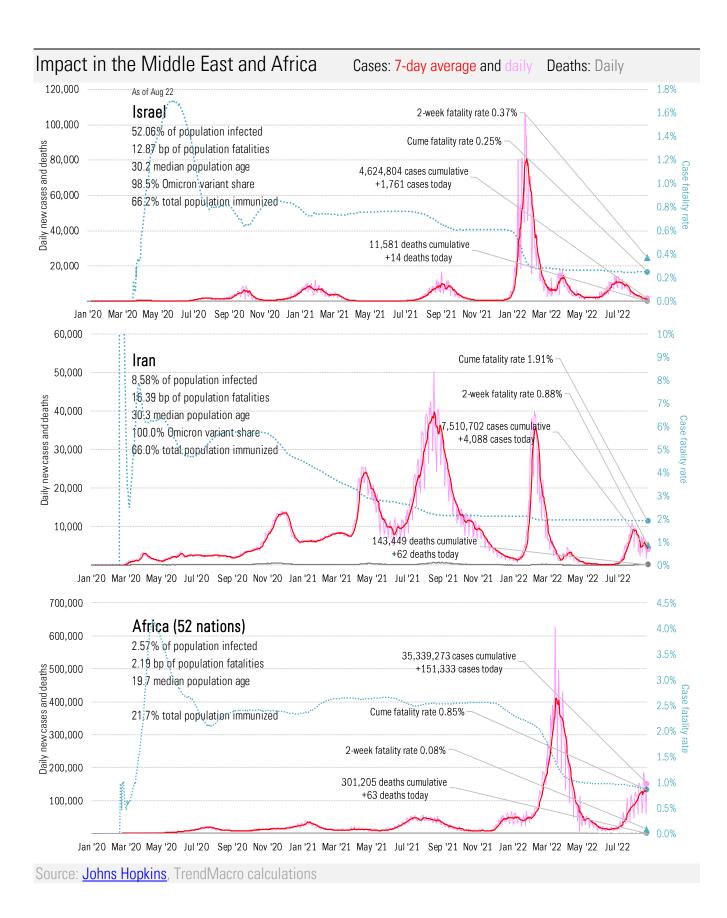
Jan '20 Mar '20 May '20 Jul '20 Sep '20 Nov '20 Jan '21 Mar '21 May '21 Jul '21 Sep '21 Nov '21 Jan '22 Mar '22 May '22 Jul '22

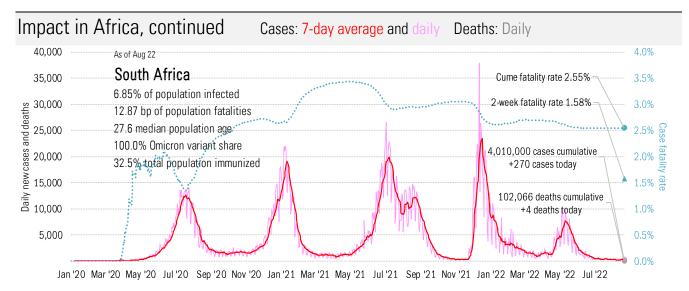




Impact in the BRICs ex-China Cases: 7-day average and daily Deaths: Daily







Source: Johns Hopkins, TrendMacro calculations