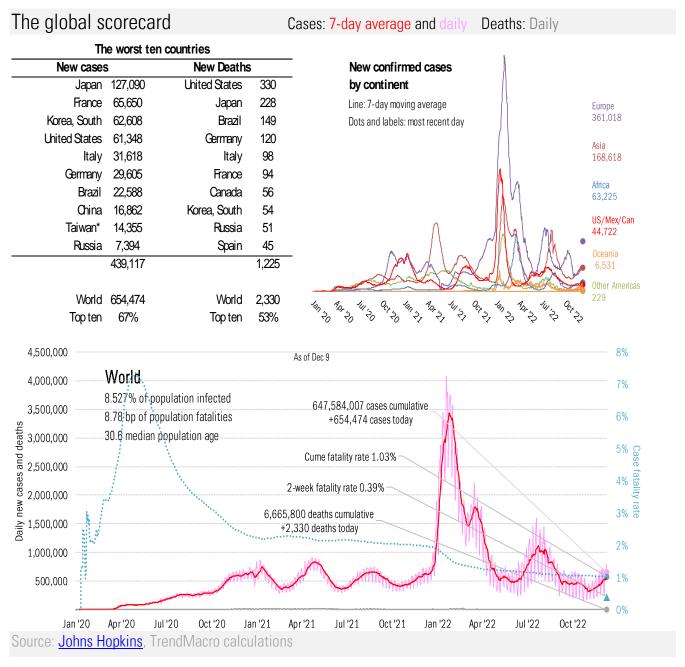


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Saturday, December 10, 2022



For more information contact us:

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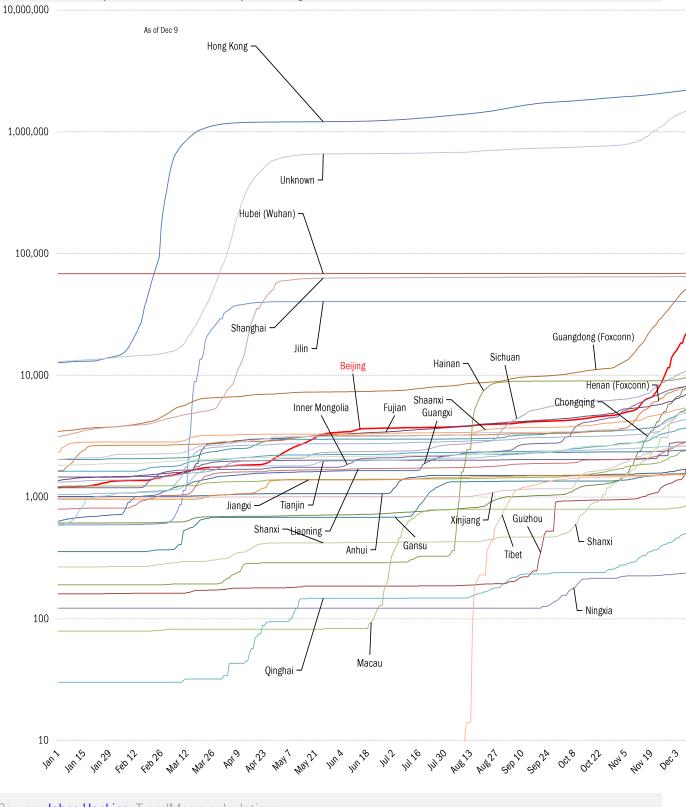
The US scorecard

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 IC		ICU use
NY	7,310	MI	35	TX	406	CA	11,623,042	CA	97,834	TX	559,426	R	92%	NH 91%
CA	6,472	NY	31	NY	485	TX	8,135,739	ΤX	91,514	CA	526,606	MA	88%	TX 90%
R.	4,419	NC	23	GA	146	R.	7,270,410	R.	83,201	FL	506,640	WA	88%	MA 88%
IL	3,467	NJ	22	MA	147	NY	6,440,834	NY	74,283	NY	324,935) 87%	NM 88%
NJ	2,941	PA	20	CT	88	IL	3,906,801	PA	48,527	GA	231,137	N	87%	AL 87%
TX	2,309	WA	18	M	147	PA	3,374,733	GA	41,172	Ю	230,199	MN	87%	OK 86%
СН	2,294	CA	17	IN	132	NC	3,286,948	СН	40,644	PA	215,908		86%	RI 85%
AZ	2,283	VA	17	AL	78	СН	3,259,911	IL	40,406	IL	198,515	Œ	R 86%	NC 85%
VA	1,877	R	15	KY	73	GA	2,953,341	M	40,327	MI	171,635	G4	85%	OR 85%
PA	1,870	IL	12	VA	95		2,950,361	NJ	35,235	NJ	148,663	0	84%	W 85%
	35,243		210		1,797	;	53,202,120		593,143		3,113,664			
All states	61,348		330		5,192	All states	100,732,4	93	1,109,497	·	5,657,083	All states		67%
Top ten	57%		64%		35%	Top ten	53%		55%		55%	Mediar	81%	80%
										me states n	ot reporting			
Five most improved US states Fewer daily cases Fewer new deaths Fewer new hospitalizations														
	-	ies		Fe		•				-	ions			
CA	-10,013				CA	-118				-232				
NY	-970				ND	-25				-108				
W	-248				GA	-15				-77				
ω	-199				W	-13				-75				
MO	-69				MA	-12			PA	-62				
1,600,000														12%
	As of I	Dec 9												
1,400,000														
	United States											10%		
4 000 000	30.93	3% of pop	ulation in	fected										
1,200,000		6 bp of po				2-w	eek fatality ra	te 1.16%	6					
0		median po												8%
1,000,000		% Omicron		•		Cume fa	atality rate 1.1	0% —						
		% total po												Ca
5 800,000														6% a
5 000,000		1	$\sum_{i=1}^{n}$,493 cases cu		_					
800,000 800,000 600,000			\sim			+61	,348 cases to	day			$\langle \rangle$			ווע ומנפ
€ 600,000														
ב			\sim			4 400 407 4						$\langle \rangle$		4%
400,000			· · · · ·	Sec. 1		1,109,497 de	aths cumulati aths today	ve						
100,000					S. I.	000000	unio todaj					$\langle \rangle$	$\langle \rangle$	
		V.			A									2%
200,000						x		للمرا	<u>I</u> I	/ \		Hoursell 11 11 11		
			مراجع ر		/ ' ' '	In we	. U	NIII	Muh	ין ייץ			Hay.	
		<u> </u>		and the second s		<u>لم الملكمات.</u>	\sim		aduud.			hudeall		0%
Jan	'20 A	pr '20	Jul '20	Oct '20	Jan '21	Apr '21	Jul '21	Oc	t '21	Jan '22	Apr '22	Jul '22	Oct '22	
Source: <u>Johns Hopkins, Dept. of Health and Human Services, CDC</u> , TrendMacro calculations														
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TrendMacro Data Insights: Covid-2019 Monitor

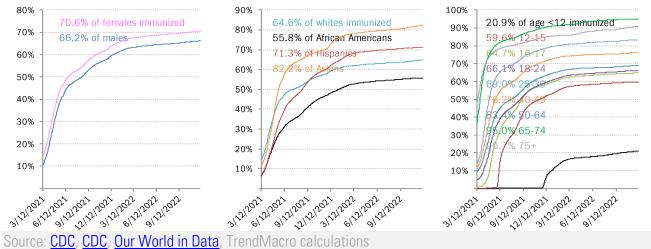
China provincial coronavirus <u>case</u> accelerometer... tracking the "zero Covid" curves *Cumulative reported cases this year, log scale: flat line indicates "zero Covid"*



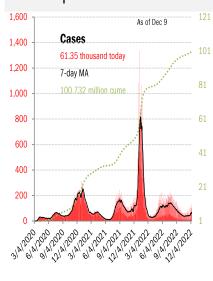
Source: Johns Hopkins, TrendMacro calculations

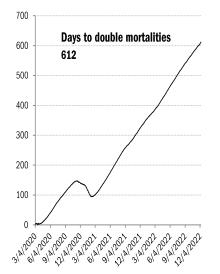
Rolling out the vaccines in the US and the world <u>Updates weekly on Friday</u>												
Administered Cumulative							То	day	Immunity	Full	Partial	
Doses	Doses		674,343,860				+0.193 million		US	68.9%	80.6%	
				Of which			boosters: +0.168 million			UK	75.2%	79.7%
		One dose		% Pop	Imm	nune	<u>% pop</u> 70%	New imm	une today	France	78.3%	80.5%
Total popu			6,021,875	83%	23	235,392,888		+0.017 million		Spain	85.5%	86.9%
Age 12 to			8,376,705	73%		15,735,507		+0.001 million +0.009 million		Germany	76.2%	77.8%
Age 18 to 64		183,614,597		90%		156,164,584		+0.009 million		Italy	81.3%	86.2%
Age 65 and over		60,829,321		100%	5	53,278,288		+0.004 million		Australia	82.7%	84.9%
Othe										Israel	65.2%	71.1%
3%		-								Canada	82.5%	89.6%
Moderna		Sta	ate	Best						Japan	83.1%	84.3%
38%										Africa	26.0%	32.0%
	Pfizer	At least part	,	Midd				India		67.1%	72.5%	
	59%		pulation	TVTTGG						Brazil	80.9%	87.4%
AK 72.6% 64.8%			munity	Wors	.+					China	89.3%	91.5%
		as % po								Global data diff		rces, timing
		"Immunity" = two doses				WI		As of Dec 9			ME	
						74.7%					95.0%	
						67.8%		-			82.8%	
	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	84.6%	63.6%	67.9%	68.9%	78.3%	78.8%	69.1%		93.8%	95.0%	87.2%	
	75.6%	56.2%	58.9%	58.3%	71.7%	70.9%	62.1%		80.2%	85.0%	71.3%	l
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		
	81.0%	78.3%	60.5%	83.1%	70.3%	64.0%	65.4%	89.8%	94.0%	95.0%		
	71.9%	63.1%	52.8%	65.8%	64.0%	57.5%	60.2%	72.7%	78.6%	83.6%	DI	1
	CA	UT	CO	NE	M0	KY	WV	VA	MD	СТ	RI	
	84.1%	74.8%	83.2%	73.0%	68.9%	68.5%	67.2%	90.3%	91.0%	95.0%	95.0%	
	74.2%	66.3%	73.1%	65.9%	58.7%	59.3%	59.5%	76.1%	79.2%	82.6%	87.1%	l
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		
		76.8%	93.4%	75.7%	69.5%	64.2%	91.1%	70.6%	95.0%	86.7%		
		65.6%	74.7%	64.8%	56.6%	56.1%	66.4%	59.6%	84.8%	72.0%		
				OK	LA	MS	AL	GA				
	1			74.2%	62.6%	61.4%	64.7%	67.9%				
HI				60.1%	54.8%	53.5%	52.9%	56.9%) г		1
90.9%				TX					FL		PR 95.0%	
81.1%				75.8%					82.0%			
				62.9%					69.1%	l l	86.7%	I

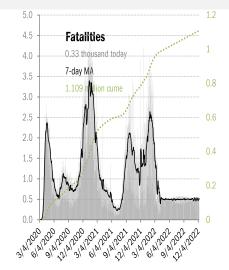
The demographics of US vaccination



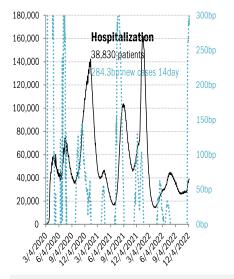
US deep-dive

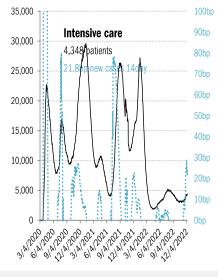


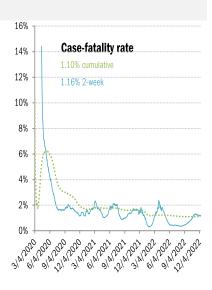


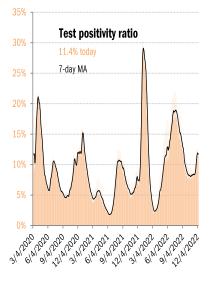


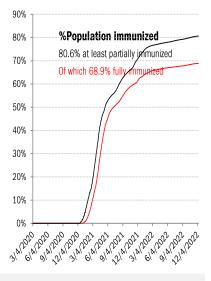




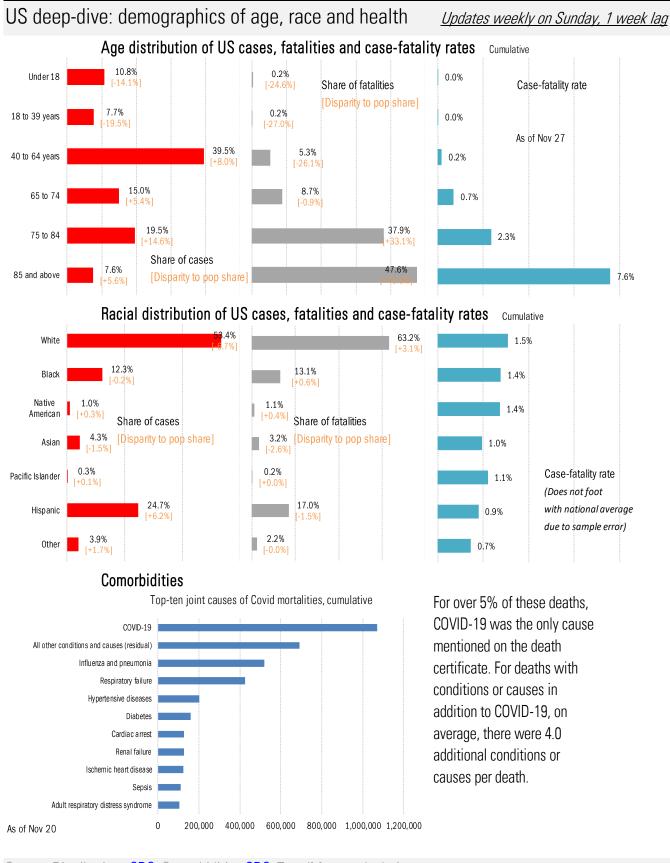








Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended Reading

It's Beginning to Look a Lot Like Another COVID Surge

Yasmin Tayag *The Atlantic* December 8, 2022

The Twitter Blacklisting of Jay Bhattacharya

Justin Hart *Wall Street Journal* December 9, 2022

Excess deaths in 2022

<u>'incredibly high' at 13 per cent</u> Frank Chung *News. Com.Au* December 8, 2022

Meme of the Day

<u>Chris Whitty warns Britain faces 'prolonged period'</u> of excess deaths NOT caused by Covid due to collateral effects of lockdown

Johm Ely *Mail Online* December 2, 2022

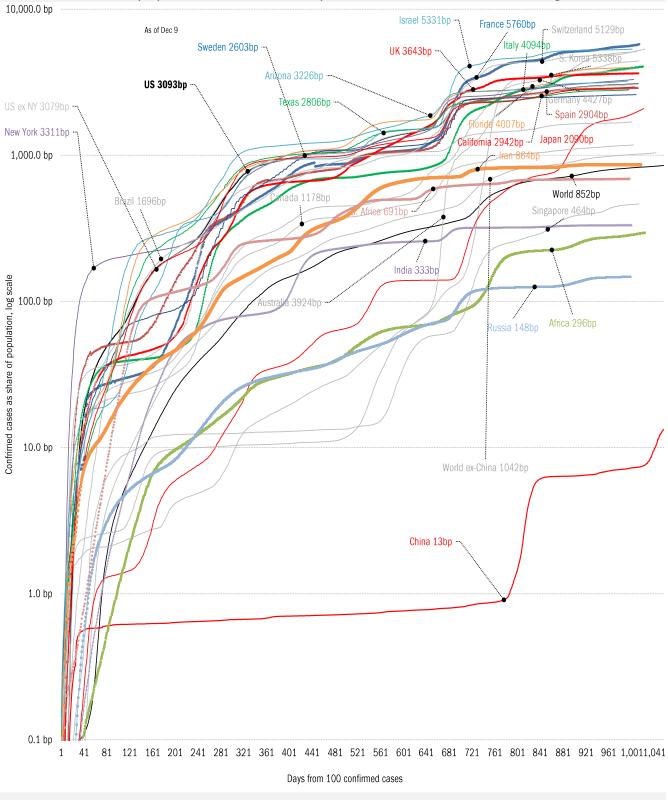
Post-Faucist America

K. Lloyd Billingsley *Independent Institute* December 6, 2022

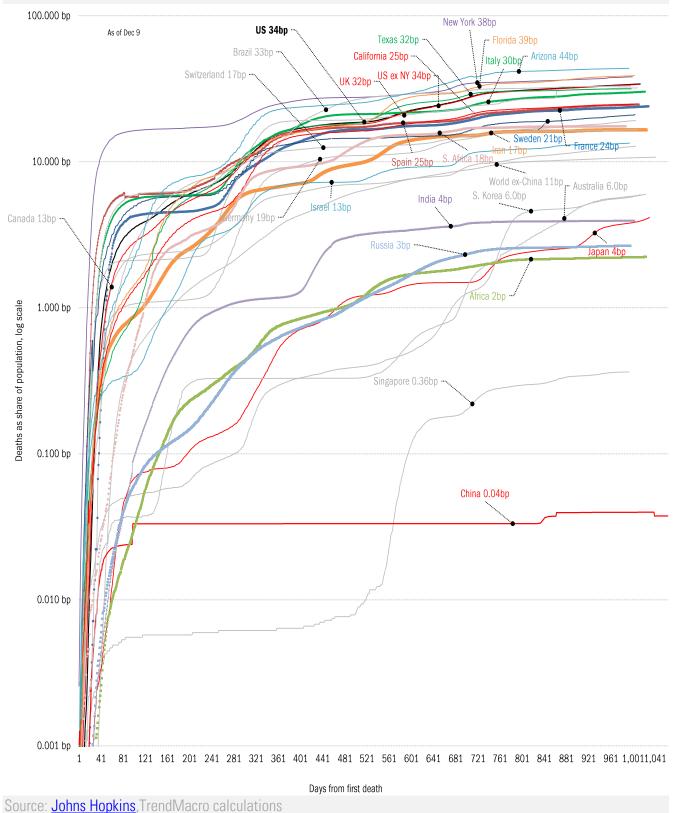


Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

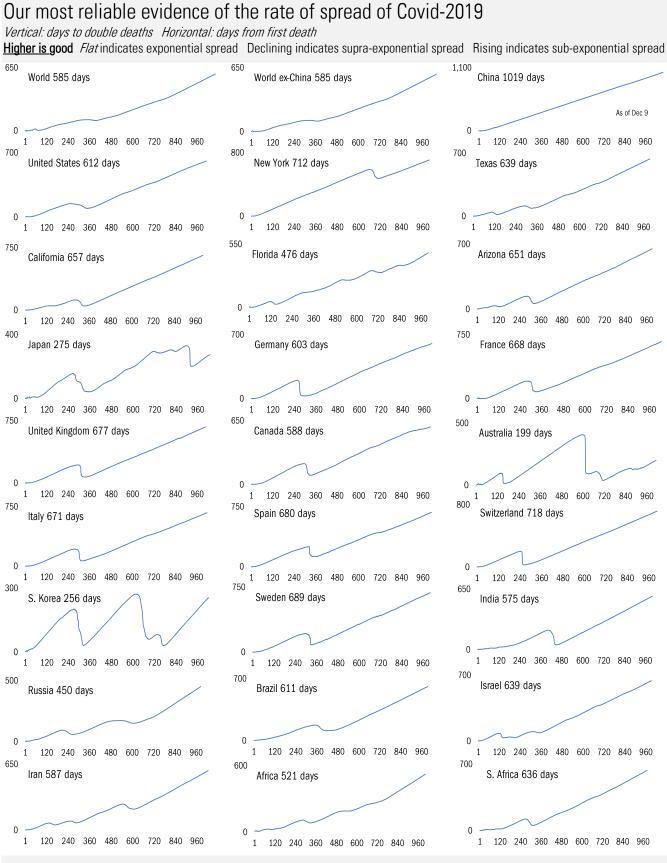
The global coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

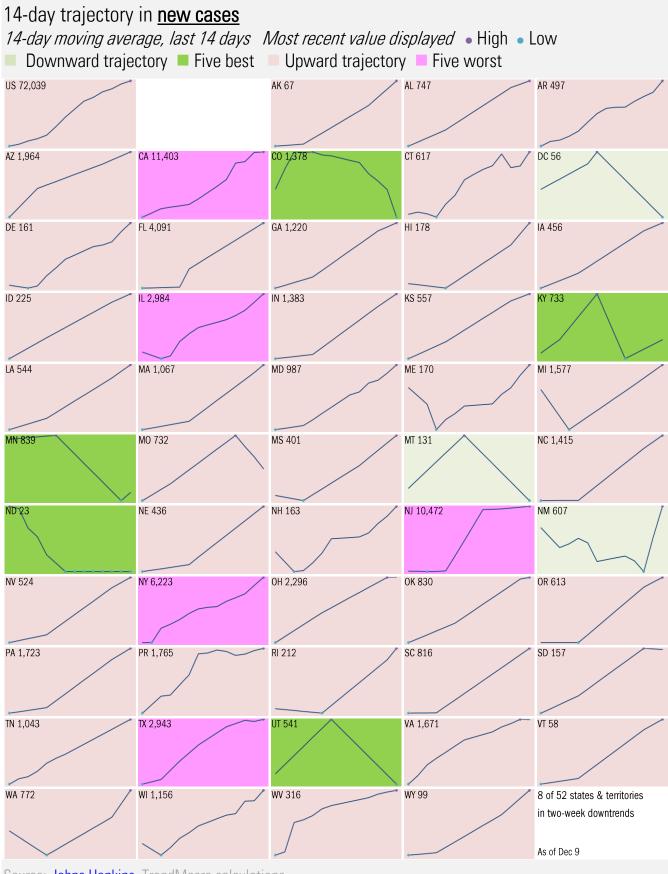


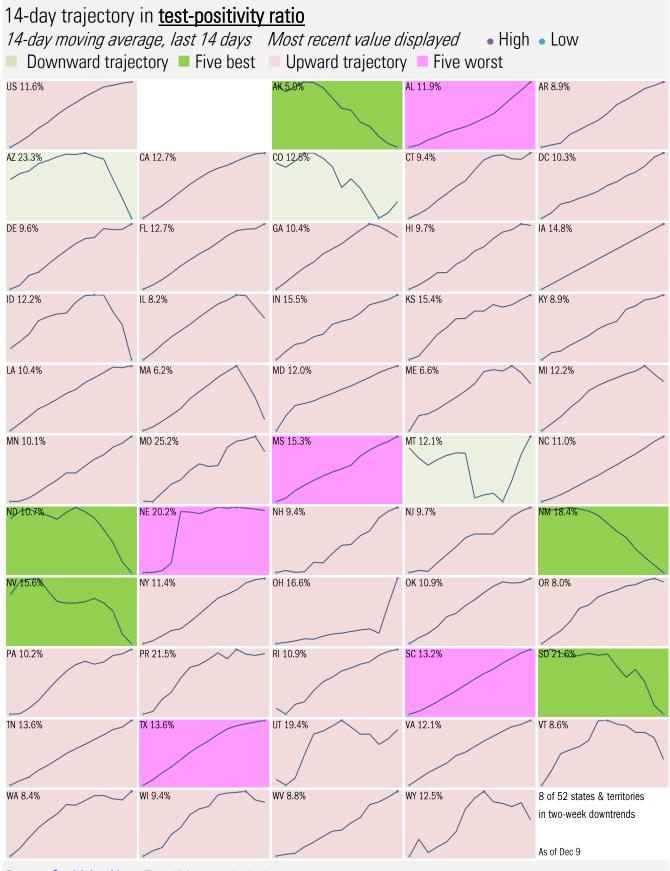
The global coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*



Source. Johns nopkins, rienuiviacio calculations



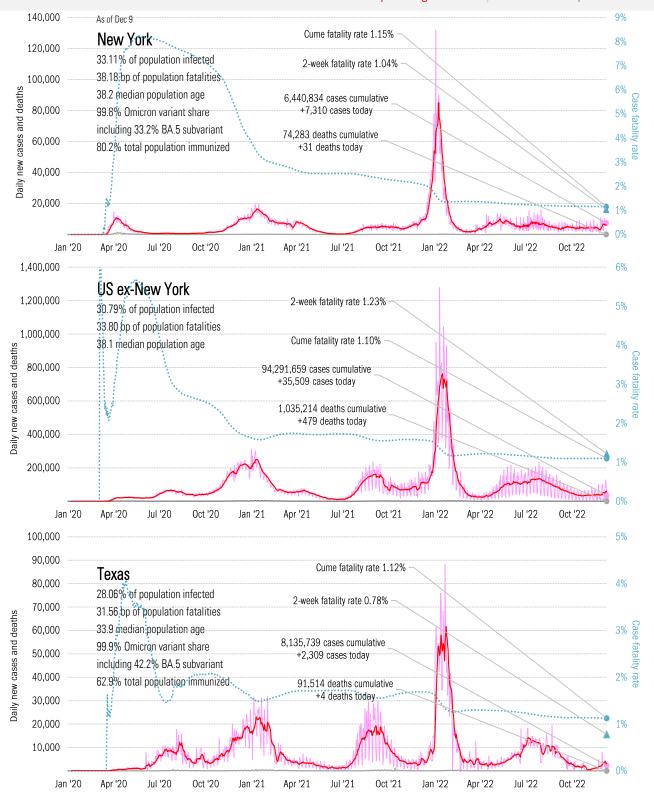




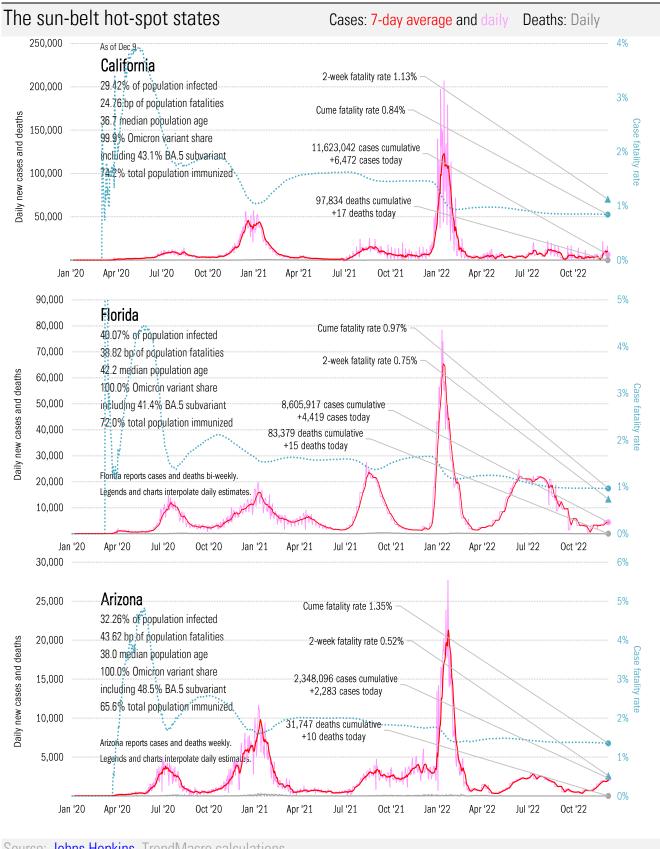
Source: Covid Act Now, TrendMacro calculations

From Ground Zero to the Rio Grande

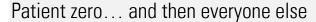
Cases: 7-day average and daily Deaths: Daily



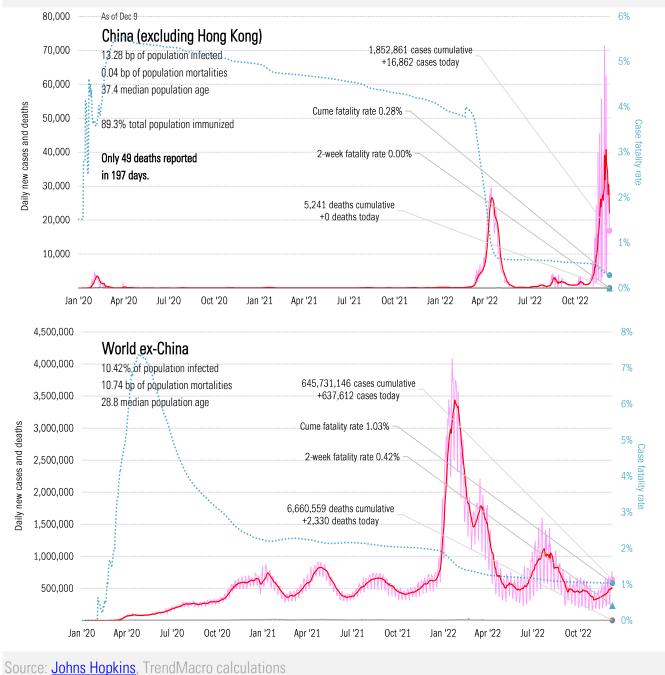
Source: Johns Hopkins, TrendMacro calculations



Source: Johns Hopkins, TrendMacro calculations

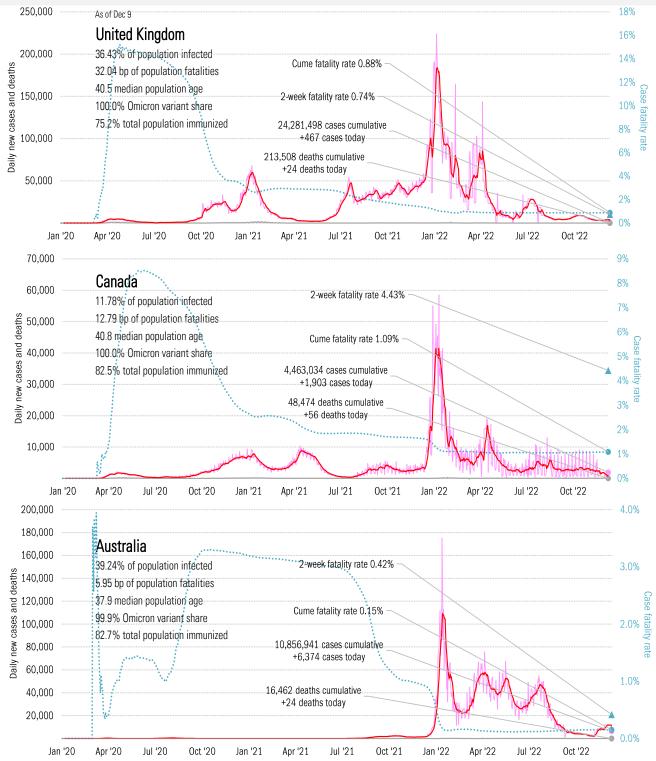


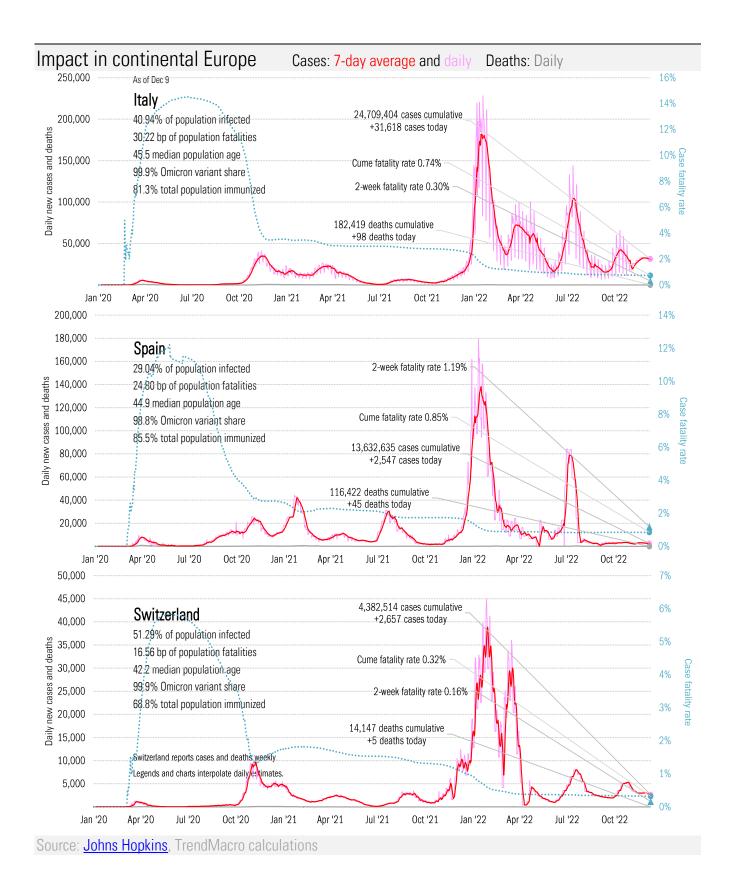
Cases: 7-day average and daily Deaths: Daily

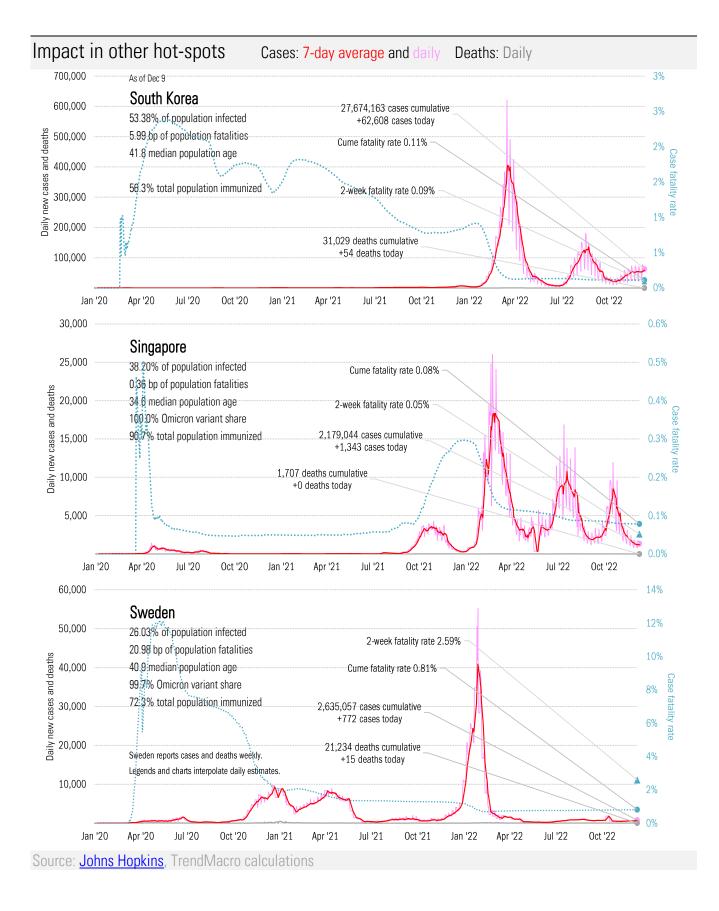


Impact in the largest economies Cases: 7-day average and daily Deaths: Daily 300,000 6% As of Dec 9 Japan..... 250,000 5% 20.90% of population infected 25,837,030 cases cumulative +127,090 cases today 4.15 bp of population fatalities Daily new cases and deaths 200,000 47.3 median population age 2-week fatality rate 0.24% 100.0% Omicron variant share 150,000 3% 83.1% total population immunized Cume fatality rate 0.20% 100,000 2% 51,298 deaths cumulative +228 deaths today 50,000 1% 0% Jan '20 Apr '20 Jul '20 Oct '20 Jan '21 Apr '21 Jul '21 Oct '21 Jan '22 Apr '22 Jul '22 Oct '22 350,000 5% Germany 36,755,666 cases cumulative 300,000 44.27% of population infected +29,605 cases today 4% 19.15 bp of population fatalities 250,000 200,000 150,000 100,000 Cume fatality rate 0.43% 45.9 median population age 3% Case 99.9% Omicron variant share e fatality rate 2% 2-week fatality rate 0.34% 76.2% total population immunized 158,971 deaths cumulative +120 deaths today 1% 50,000 0% Apr '21 Jul '20 Oct '20 Jan '21 Jul '21 Oct '21 Jan '22 Apr '22 Jul '22 Jan '20 Apr '20 Oct '22 600,000 20% France 18% 500,000 57,60% of population infected 16% 38,598,292 cases cumulative 23.97 bp of population fatalities +65,650 cases today Daily new cases and deaths 14% 400,000 41.2 median population age 12% 99 6% Omicron variant share Cume fatality rate 0.42% 78:3% total population immunized 300,000 10% 2-week fatality rate 0.14% 8% 200,000 6% 160,652 deaths cumulative +94 deaths today 4% 100,000 0% Jan '20 Apr '20 Jul '20 Oct '20 Jan '21 Apr '21 Jul '21 Oct '21 Jan '22 Apr '22 Jul '22 Oct '22



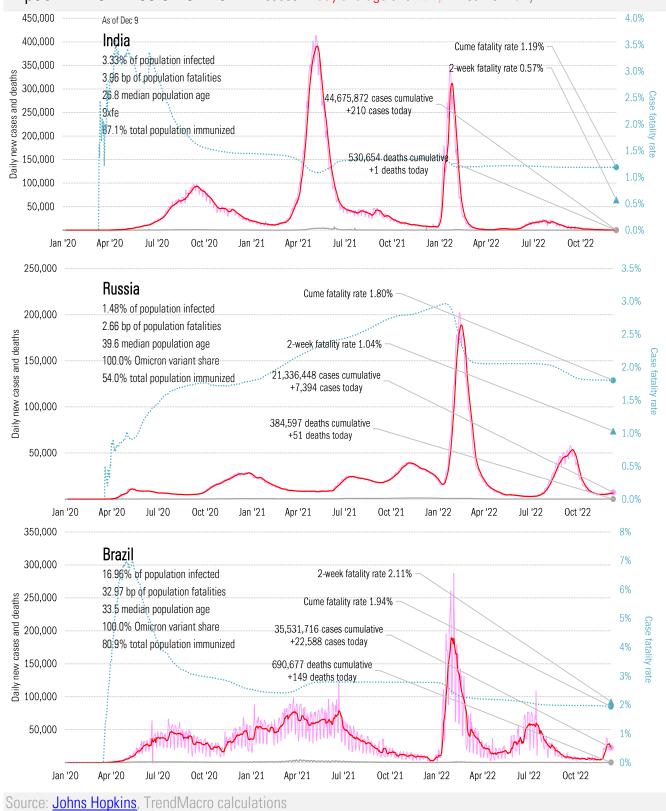


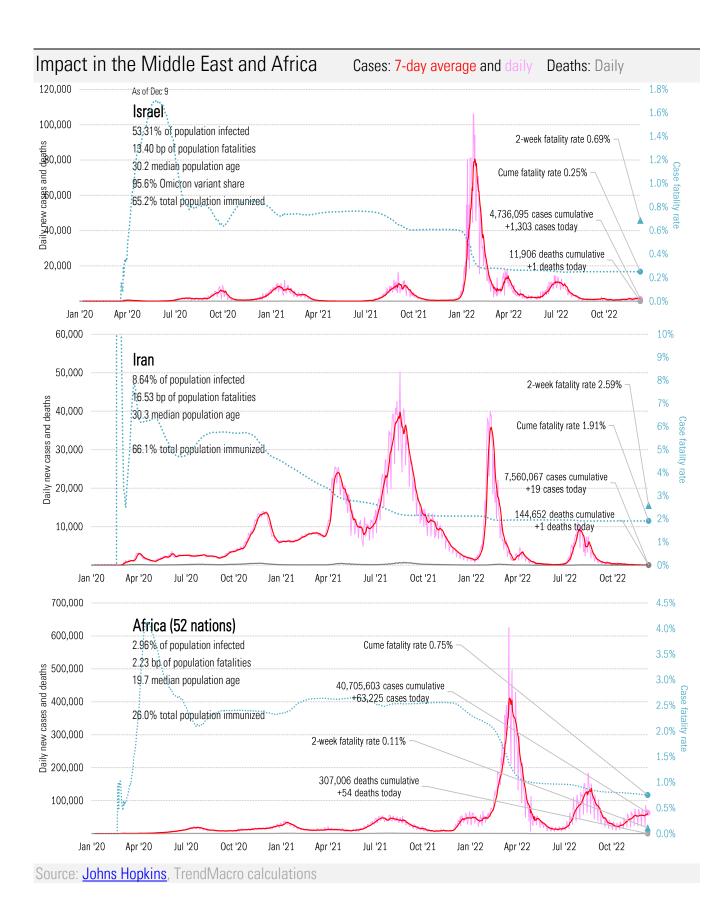




Impact in the BRICs ex-China Cases: 7-day average and daily

e and daily Deaths: Daily





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

