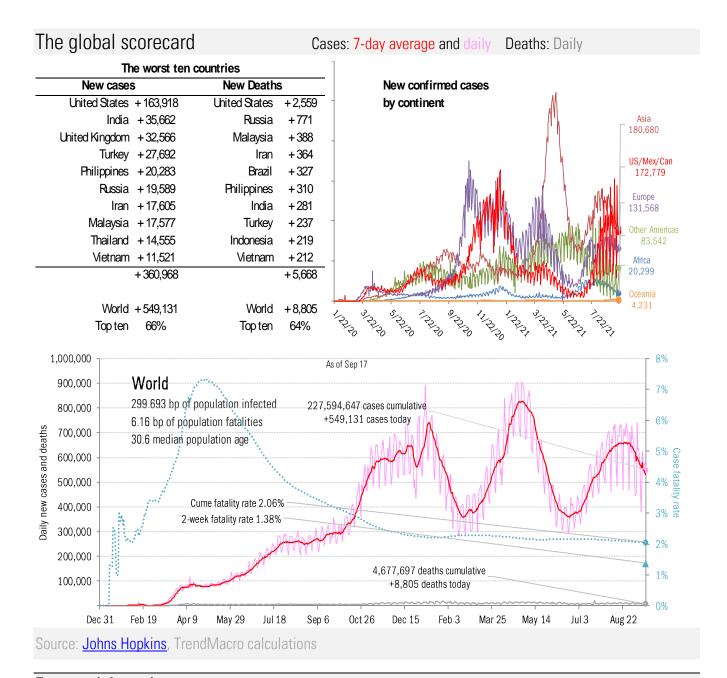


Data Insights: Covid-2019 Monitor

Saturday, September 18, 2021



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THE US SCUIECAIU Cases: 7-day average and daily Deaths: Dail	The US scorecard	Cases: 7-day average and daily Deaths: Daily	
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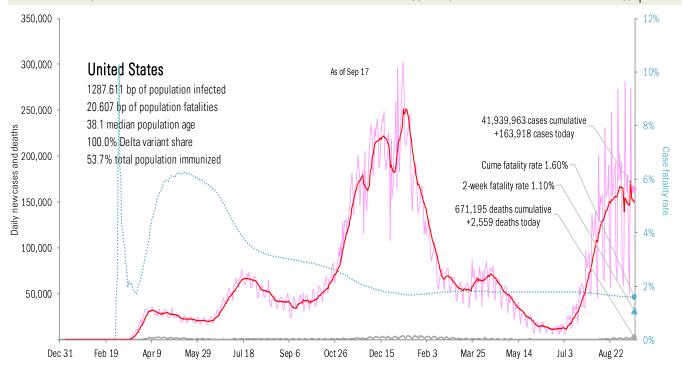
П	4		LIC	-4-4	
ıne	ten	worst	U2	states	

	The tell floor of duties																
Ī	New c	ases	New D	eaths	New in	hospital	Cume o	cases	Cume o	deaths	Cume i	in hospital	Hospit	al use	ICU	use	
	TX	+ 16,888	TX	+353	ОH	+32	CA	4,620,663	CA	67,781	TX	344,703	RI	90%	AL 1	100%	
	R.	+ 10,857	R.	+353	AR	+28	TX	3,925,136	TX	61,558	FL.	298,801	GA	89%	GA	97%	
	CA	+9,816	СH	+206	WA	+21	R.	3,474,872	NY	54,846	CA	291,491	MA	86%	ID	93%	
	СH	+8,447	AL	+ 192	GA	+20	NY	2,362,682	FL.	49,800	NY	151,997	PA	85%	TX	93%	
	NC	+7,905	GA	+ 117	IA	+19	IL	1,590,342	PA	28,812	GA	146,581	MD	85%	AR	93%	
	MI	+6,686	CA	+113	ME	+15	GA	1,525,114	NJ	27,165	Э	105,361	SC	85%	ΚY	93%	
	TN	+6,446	NY	+ 104	MI	+15	PA	1,370,247	IL	26,979	KY	103,030	CT	84%	MS	91%	
	NY	+6,002	NC	+95	WV	+15	ОH	1,336,061	GA	24,577	PA	102,578	MO	84%	ОК	90%	
	GA	+5,592	SC	+82	MT	+12	NC	1,330,492	MI	21,997	IL	97,023	R.	83%	Æ	89%	
	PA	+5,198	MI	+77	∞	+10	TN	1,178,168	ан	21,471	MI	80,806	\mathbb{C}	83%	RI	88%	
Ī		+83,837		+1,692		+ 187	,	22,713,777		384,986		1,722,371					
	All states	+163,918		+2,559		-1053	All states 4	41,939,963		671,195		3,052,954	All states	70%		67%	
	Top ten	51%		66%		-18%	Top ten	54%		57%		56%	Median	79%		81%	

Some states not reporting

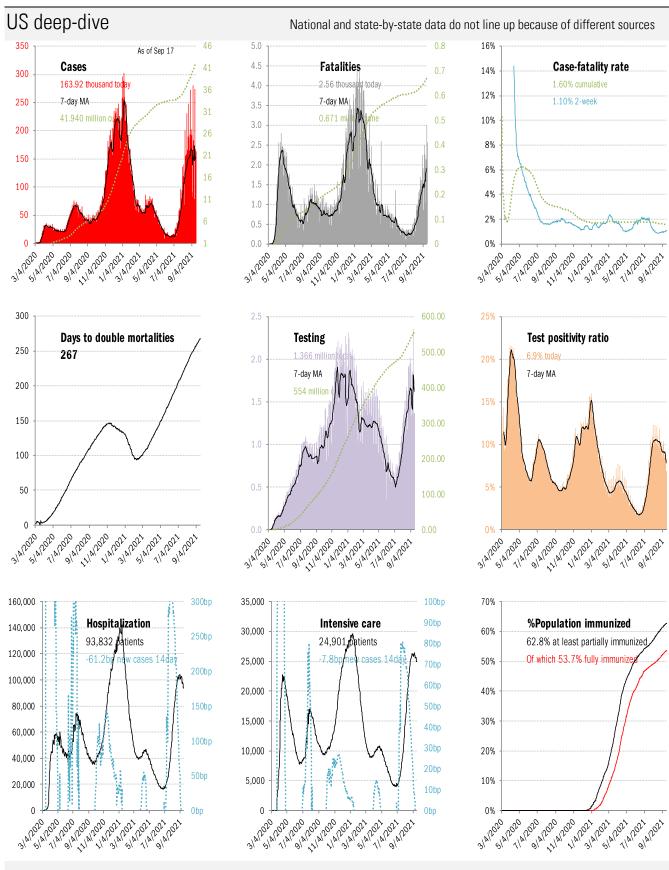
Five most improved US states

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Fewer daily cases	Fewer new deaths	Fewer new hospitalizations	Most pop immunuity growth		
CA -3,448	GA -80	KY -180	PR +90 bp		
AL -998	CA -73	AL -132	GA +40 bp		
TX -916	PA -28	TN -118	AL +30 bp		
NY -780	ID -27	NY -114	DE +30 bp		
IL -748	TX -22	SC -101	TX +30 bp		



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

Rolling out the vaccines in the US and the world Administered Cumulative **Immunity** Full Partial Today +0.983 million Doses 394,801,195 US 53.7% 62.8% % Pop % pop New immune today UK 65.0% 71.2% One dose **Immune** Total population 216,228,156 65% 185.124.081 55% +0.495 million France 63.7% 73.6% Age 12 to 17 13,301,812 56% 10,588,080 45% +0.068 million Spain 76.69 80.0% Age 18 to 64 73% 149,324,129 126,854,482 62% +0.368 million Germany 62.3% 66.4% Age 65 and over 86% 52,550,877 96% 46,823,550 +0.057 million Italy 65.3% 73.1% J&J Every American >18 immune in Australia 36.0% 57.3% 4% 68.9% Israel 63.4% days 69.1% 75.2% Canada State Moderna 65.6% by Dec 20, 2021 Japan 53.3% 39% Pfizer At least partial immunity 67.2% of population >18 immunized Africa 3.8% 6.0% 57% Middle as % population 14.3% previously tested positive 13.7% 42.1% India **81.5%** vs 60% adult herd immunity Full immunity Brazil 36.5% 67.8% Worst as % population 70.0% China 75.8% As of Sep 17 Global data differs from sources, timing AK WI 56.3% ME 48.8% 60.1% 73.1% 55.4% 67.3% VT WA ID MT ND MN ΜI NY IL NH 70.2% 53.8% 50.0% 62.9% 67.5% 56.1% 69.7% 77.1% 68.6% 62.1% 47.6% 43.1% 57.3% 52.5% 51.4% 62.3% 68.8% 60.9% OR NV WY SD IN ОН PΑ IA NJ MΑ 65.8% 59.7% 47.4% 58.1% 57.4% 51.4% 53.5% 71.2% 71.6% 76.5% 47.5% 56.8% 63.2% 59.6% 49.6% 50.6% 53.1% 49.4% 67.0% CA UT CO NE M0 ΚY W۷ ۷A MD CT RI 70.5% 57.9% 64.7% 58.7% 54.0% 59.4% 47.7% 67.0% 69.7% 73.8% 75.1% 57.6% 49.2% 58.4% 53.7% 46.8% 50.7% 59.0% 63.1% 67.6% 66.7% ΑZ NM KS AR TN NC SC DC DE 58.4% 71.6% 58.9% 54.9% 51.7% 58.1% 54.0% 69.4% 65.4% 50.1% 61.9% 50.0% 44.0% 45.6% 59.0% 56.8% 44.3% 48.4% 0K LA MS ΑL GA 55.5% 50.9% 49.1% 51.7% 53.8% Ш 46.2% 44.0% 43.9% TX FL PR 58.9% 65.9% 56.8% 49.8% 55.7% The demographics of US vaccination 60% 70% 90% 56.4% of females immunized 55.1% of whites immunized 0.3% of age <12 immunized 80% 60% 52.3% of males 50% 43.9% of African Americans 41.3% 12-15 70% 49.7% 16-17 52.8% of Hispanics 50% 40% 60% 50.3% 18-2 60.6% of Asians 40% 50% 54.5% 257 30% 63.5% 40 40% 30% 72.0% **50**-64 30% 20% 20% 84.8% 65-74 20% 10% 10% 10% 2/14/2021 3/14/2021 1/14/2021 3/14/2021 3/14/2021 5/14/202 1/14/2021 3/14/2021 9/14/2021 2/14/2023 Source: CDC, CDC, Our World in Data, TrendMacro calculations



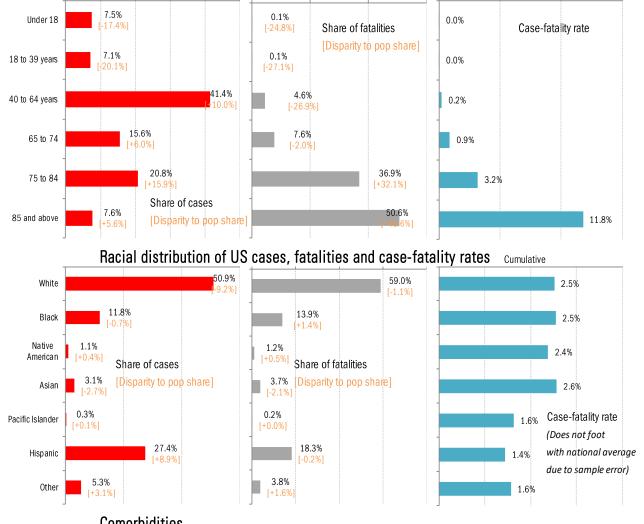
Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



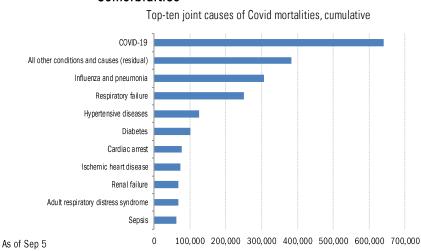
Age distribution of US cases, fatalities and case-fatality rates

Updates weekly on Sundays

Cumulative



Comorbidities



For over 5% of these deaths, COVID-19 was the only cause mentioned on the death certificate. For deaths with conditions or causes in addition to COVID-19, on average, there were 4.0 additional conditions or causes per death.

Source: Distributions CDC, Comorbidities CDC, TrendMacro calculations

Recommended reading

F.D.A. Advisory Panel Recommends Pfizer Boosters for Older People and Others at High Risk

Sharon LaFraniere and Noah Weiland *New York Times* September 17, 2021

An F.D.A. panel recommended against approving a Pfizer-BioNTech booster for people 16 and older.

Noah Weiland and Sharon LaFraniere *New York Times* September 17, 2021

Comparative Effectiveness of Moderna, Pfizer-BioNTech, and Janssen (Johnson & Johnson) Vaccines in Preventing COVID-19 Hospitalizations Among Adults Without Immunocompromising Conditions — United States, March—August 2021

Wesley H. Self et al. *CDC*September 17, 2021

Biden plans a coronavirus summit next week, aiming to create a 'bigger tent' to fight the pandemic.

Sheryl Gay Stolberg and Lara Jake New York Times September 17, 2021

<u>Here's where – and why – San Francisco Marathon</u> <u>runners will need to wear masks</u>

Marcus White KCBS September 17, 2021

Why the Empire State Building, and New York, May Never Be the Same

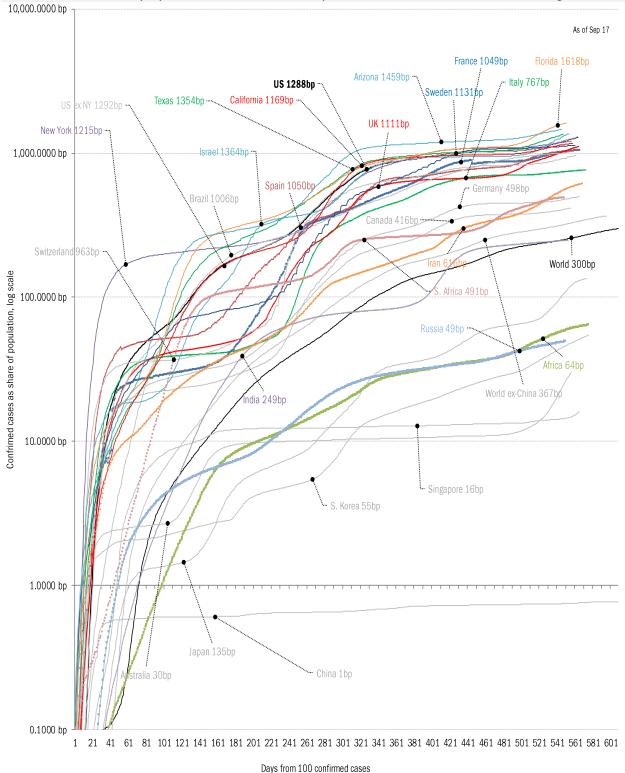
Keith Collins et al. *New York Times* September 15, 2021

Meme of the day

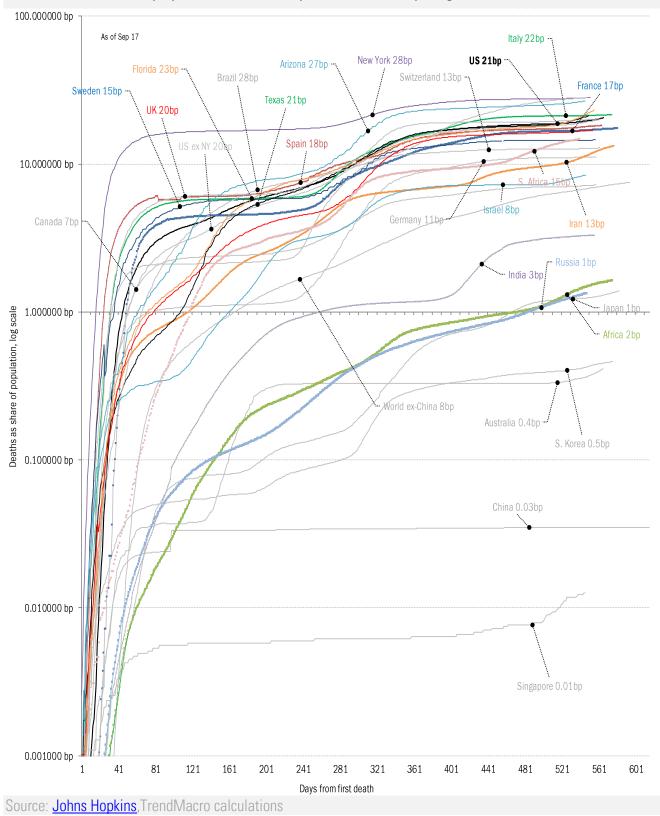


Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP

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



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



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

Vertical: days to double deaths Horizontal: days from first death

Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread

