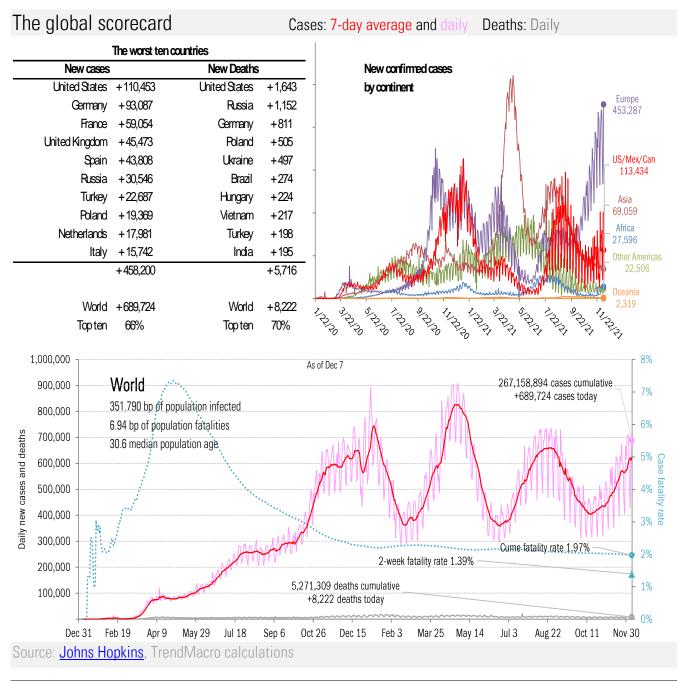


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

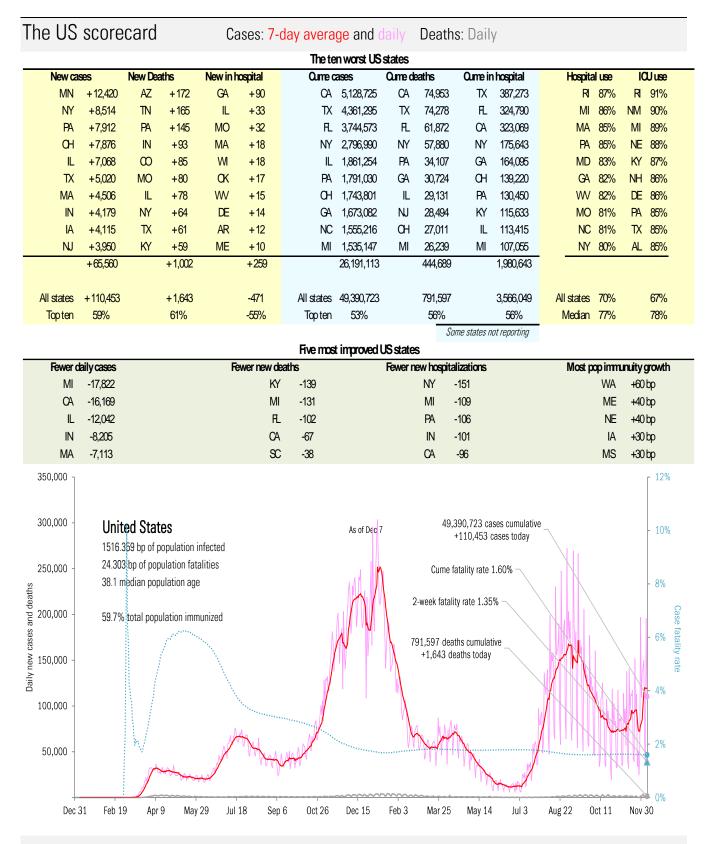
Wednesday, December 8, 2021



For more information contact us:

Donald Luskin: 214 550 2121 <u>don@trendmacro.com</u> Thomas Demas: 704 552 3625 <u>tdemas@trendmacro.com</u>

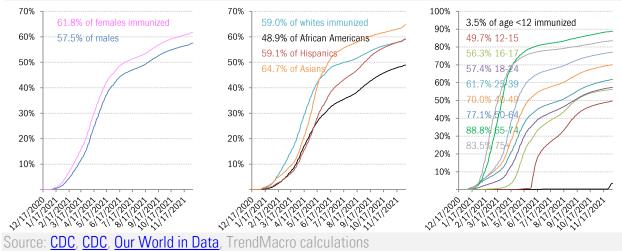
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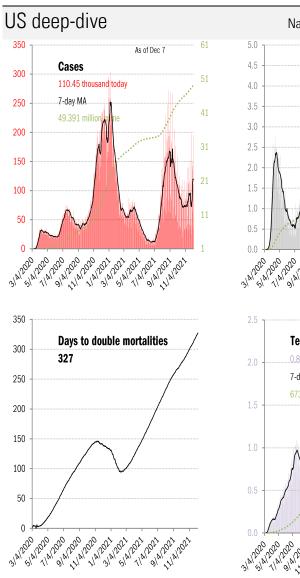


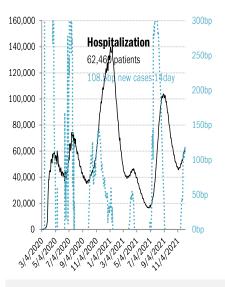
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

Rolling	out th	e vacc	ines in	the US	S and t	he wor	ld					
Administered Cumulativ		Ilative					To		Immunity	Full	Partia	
Doses 486,004,082							+1.547	million	US	59.7%	71.2%	
Boosters		48,663,767						+0.828	million	UK	68.3%	75.0%
		One dose				nune	% рор	New immune today		France	70.4%	77.2%
Total population		24	242,247,770		72% 2		61%	+0.375 million		Spain	80.6%	82.3%
Age 12 to 17		14,790,668	62% 81%		12,402,412	52%	+0.017	million	Germany	68.6%	71.6%	
Age 18 to 64			164,227,297			40,789,081	69%	+0.114 million		Italy	73.2%	78.7%
Age 65 and over		57,307,635		100%	100% 49,08					Australia	74.1%	78.1%
1%1						Every Am	erican >18	3 immuniz	ed in	Israel	62.3%	68.7%
4%		-		64 days					Canada	76.5%	81.4%	
		¢+/	ato				3)		77.6%	79.3%	
Moderna			State			by Feb 8,				Africa	7.7%	11.7%
58%		At least partial immunity as % population		Middle 17.4%		73.4% of population >18 immunized			India	34.9%	57.8%	
							reviously tested positive			Brazil	64.4%	77.0%
		Full immunity		More		90.7%	vs 60% ad	lult herd im	munity	China	76.9%	84.8%
AK		as % population		Worst					Global data diffe		s, timing	
63.6%				WI		As of Dec 7			ME			
55.0%						66.4%					83.0%	
						60.3%					73.3%	
Ī	WA	ID	MT	ND	MN	IL	MI		NY	VT	NH	
	73.6%	51.2%	60.5%	58.7%	69.7%	70.0%	61.8%		79.5%	86.6%	89.8%	
	66.1%	45.5%	52.5%	49.4%	63.5%	62.5%	55.3%		69.2%	74.2%	65.2%	
	OR	NV	WY	SD	IA	IN	OH	PA	NJ	MA		
	72.1%	67.2%	54.4%	68.2%	63.2%	56.3%	59.0%	82.9%	80.3%	87.0%		
	64.8%	55.1%	46.2%	55.5%	57.5%	51.0%	53.7%	59.4%	68.7%	72.3%		
	CA	UT	CO	NE	MO	KY	WV	VA	MD	СТ	RI	
	79.8%	65.3%	72.3%	64.8%	60.5%	60.9%	69.4%	76.5%	77.8%	85.1%	84.6%	
	64.1%	56.2%	64.3%	58.3%	51.7%	52.9%	49.2%	66.1%	68.6%	72.9%	73.9%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		
		65.1%	77.7%	67.0%	61.1%	57.4%	71.8%	61.0%	83.2%	73.5%		
		55.4%	64.3%	55.3%	49.8%	50.0%	55.0%	52.0%	65.4%	61.9%		
				OK	LA	MS	AL	GA				
				63.7%	56.1%	54.5%	57.2%	59.6%				
HI				52.1%	49.2%	47.4%	46.6%	49.6%				
82.9%				TX					FL		PR	
61.8%				64.8%					72.5%		85.8%	
				55.4%					62.0%	I	74.7%	

The demographics of US vaccination



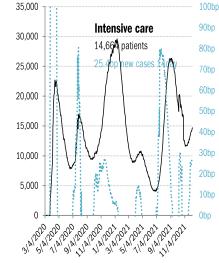


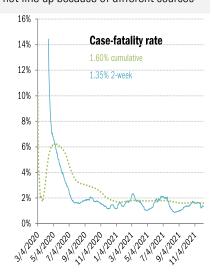


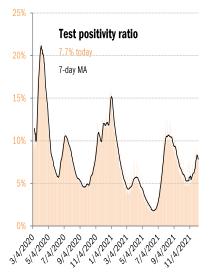


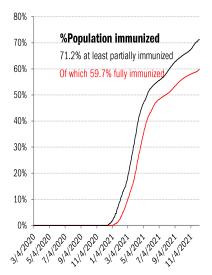




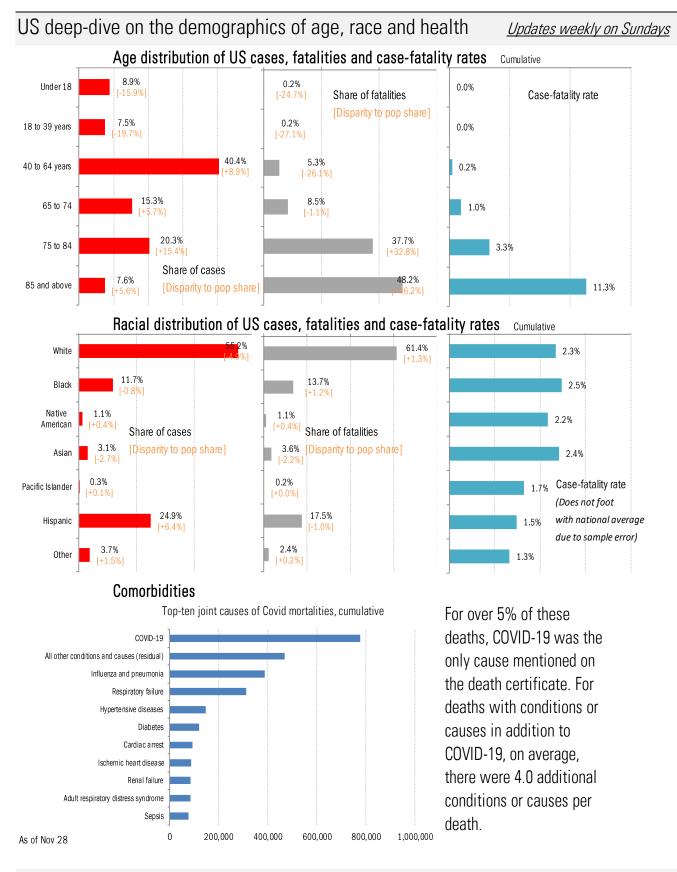








National and state-by-state data do not line up because of different sources



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

Recommended reading

Omicron Threat May Be Countered With Extra Dose of

<u>Vaccine</u>

Jason Gale and Naomi Kresge *Bloomberg* December 8, 2021

<u>Pfizer says booster dose of vaccine protects against</u> <u>omicron variant</u> Berkeley Lovelace Jr.

NBC December 8, 2021

<u>Biden Finds a Culprit for America's Crime Wave:</u> <u>Covid-19</u>

Gerard Baker *Wall Street Journal* December 7, 2021

De Blasio's Vaccine Mandate Looks Unlawful

Eugene Kontorovich *New York Times* December 7, 2021

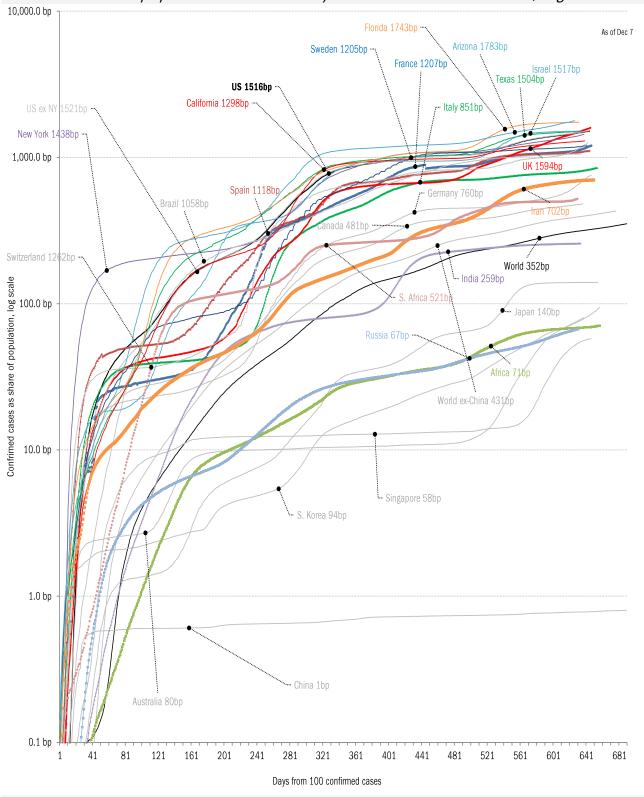
Meme of the day

Robots Read News: An Occasional Web Comic by Scott Adams

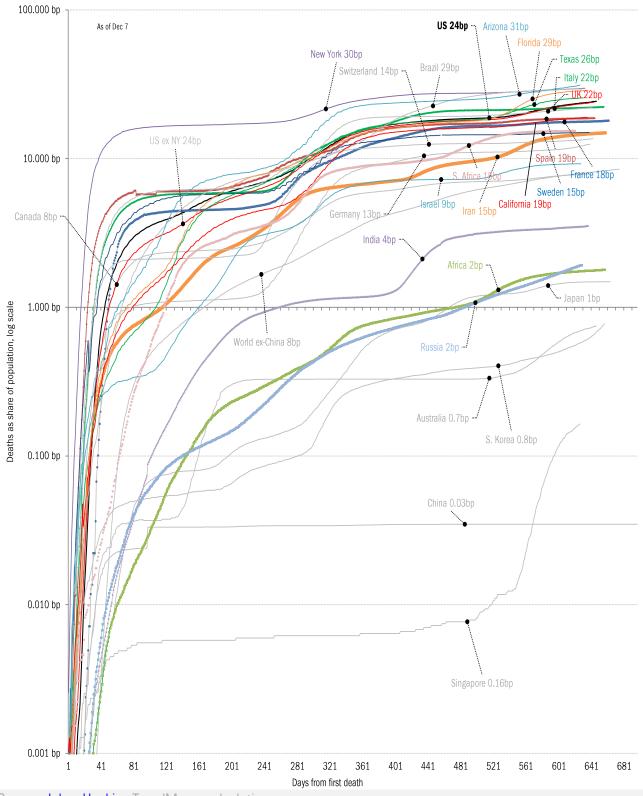


@ScottAdamsSays

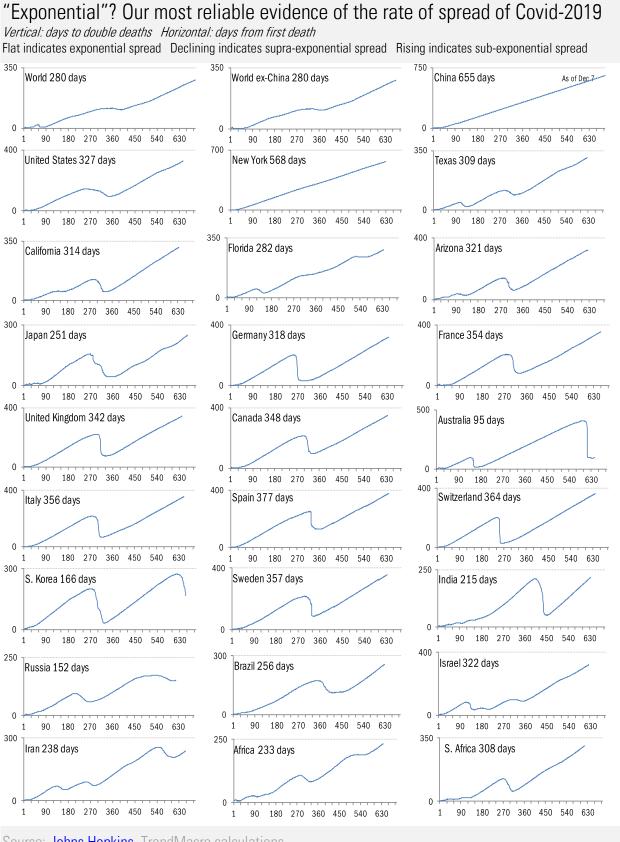
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP



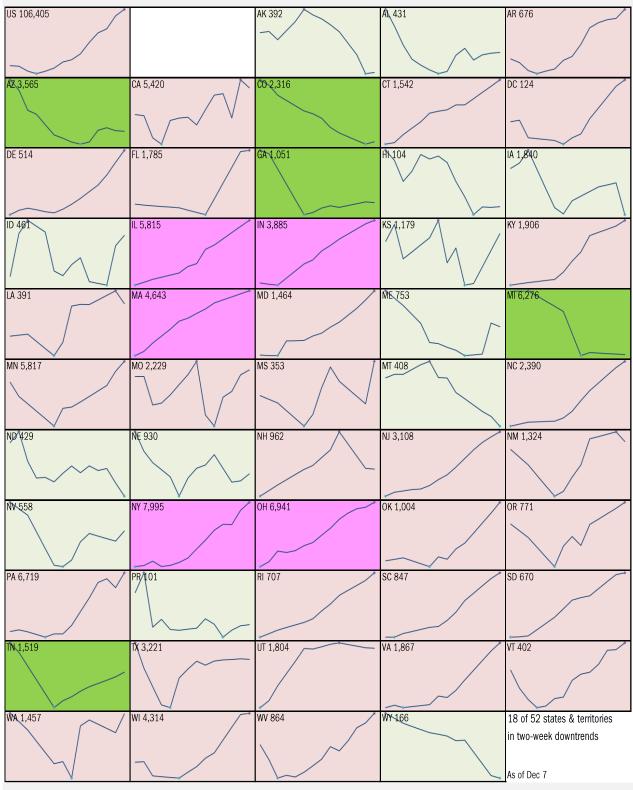
The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*



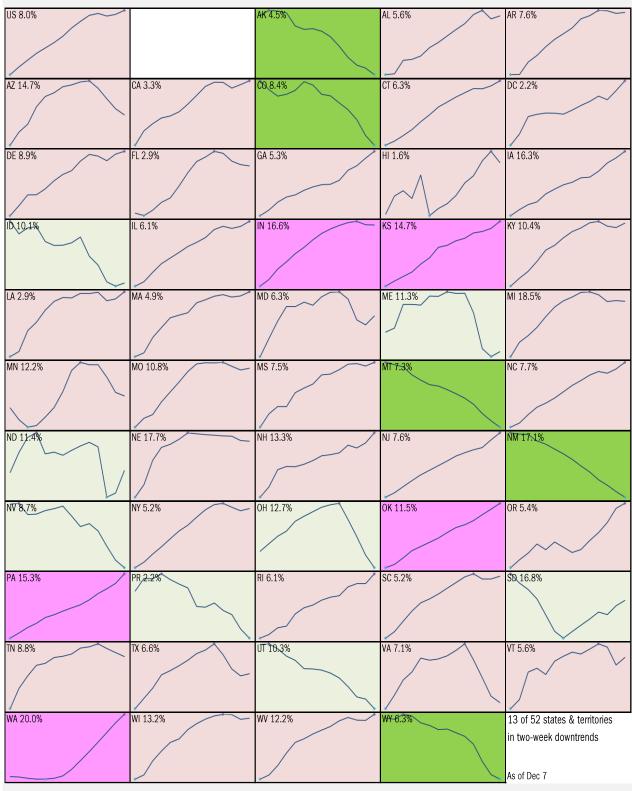
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*



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



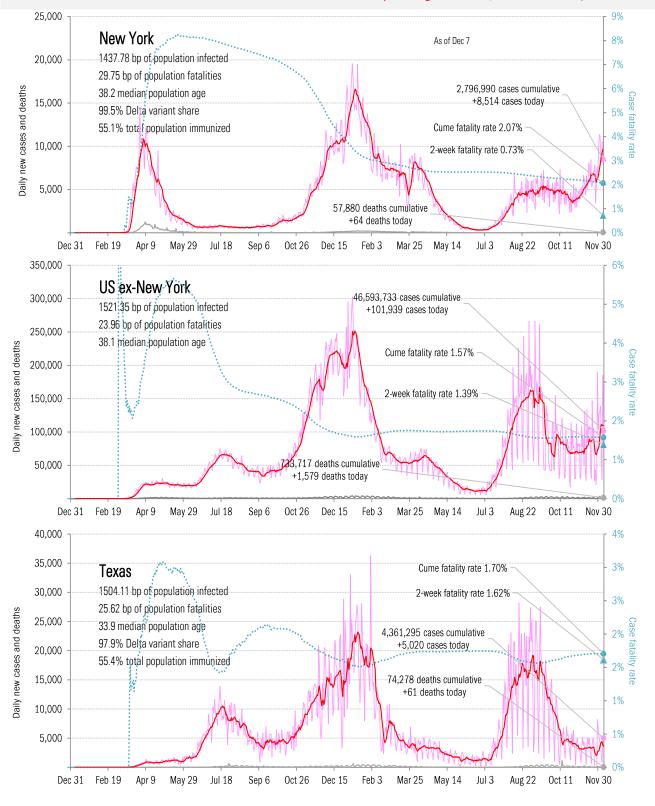
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



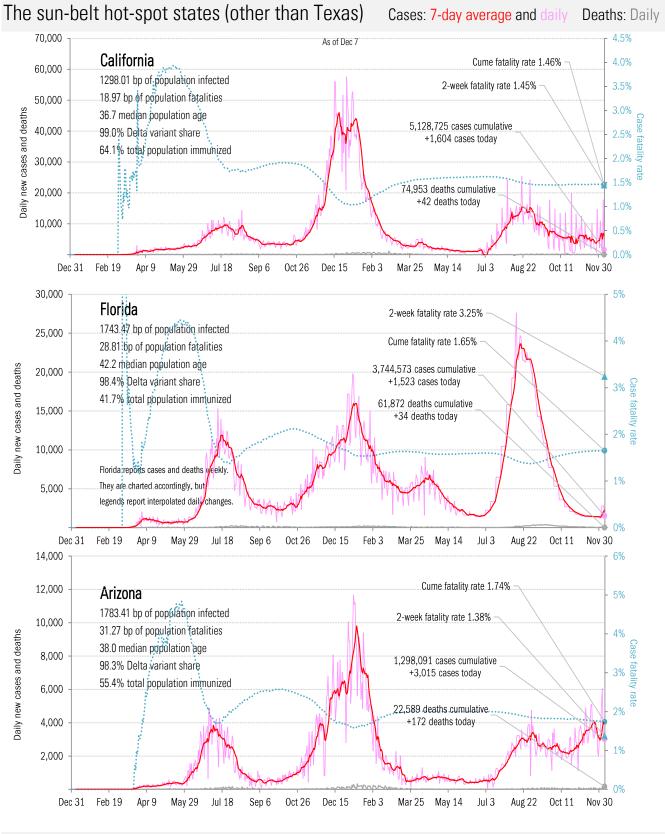
Source: Covid Act Now, TrendMacro calculations

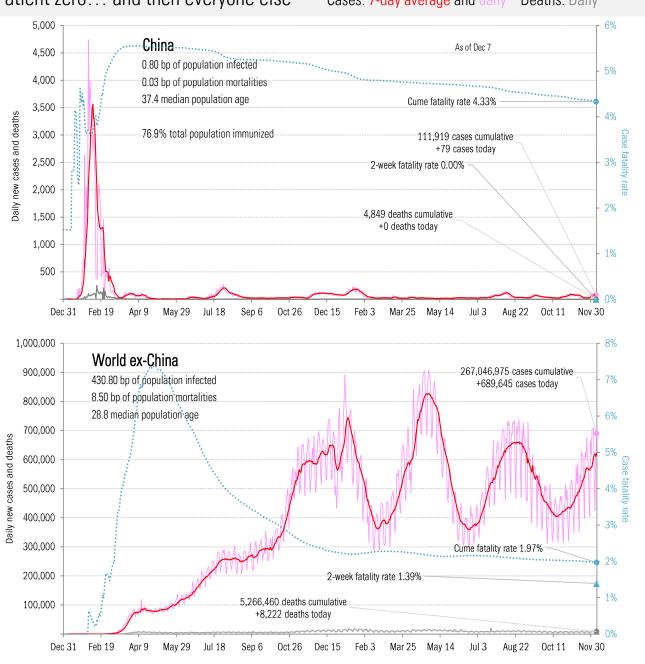
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



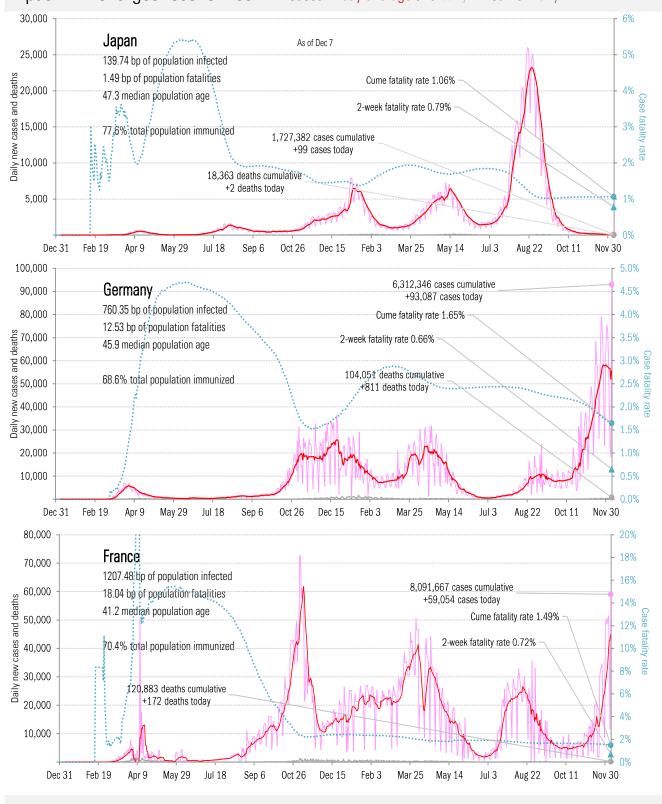


Patient zero... and then everyone else

Cases: 7-day average and daily Deaths: Daily

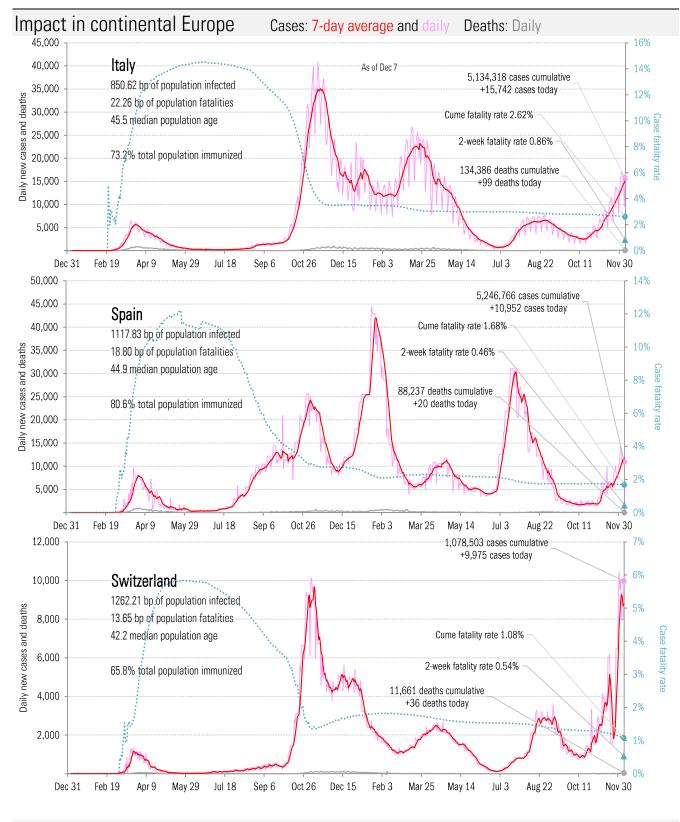
Source: Johns Hopkins, TrendMacro calculations

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

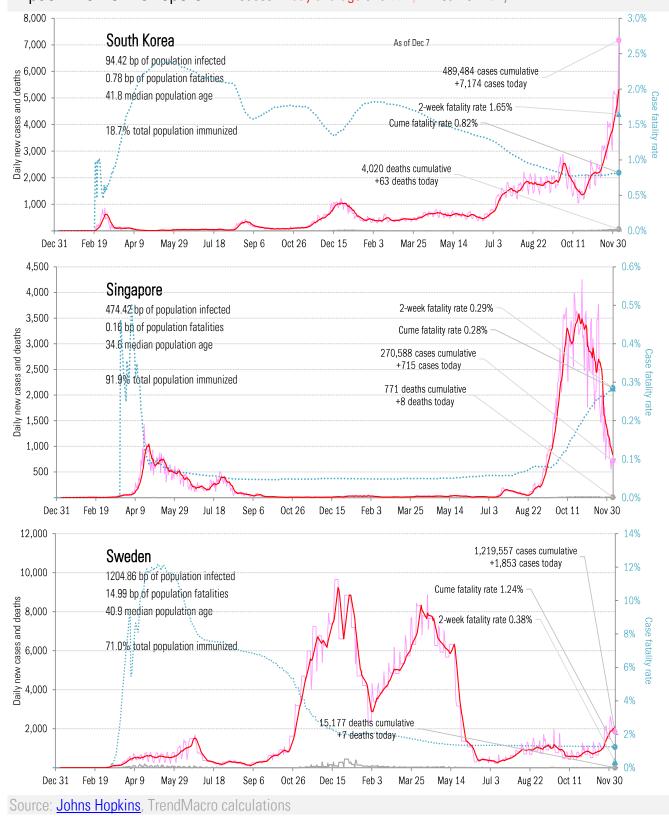


Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily 80,000 18% United Kingdom 16% 70,000 As of Dec 7 1593.55 bp of population infected strap pure set 60,000 50,000 \$80 Met 20,000 30,000 14% 21.95 bp of population fatalities 10,620,535 cases cumulative 12% +45,473 cases today 40.5 median population age 10% fatality Cume fatality rate 1.38% 68.3% total population immunized 8% rate 6% 2-week fatality rate 0.30% Alia 20,000 4% 146,281 deaths cumulative 10,000 2% 180 deaths today 0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30 12,000 9.0% Canada 8.0% 1,823,674 cases cumulative 10,000 481.25 bp of population infected +2,981 cases today 7.0% 7.88 bp of population fatalities Daily new cases and deaths Cume fatality rate 1.64% 8,000 6.0% 40.8 median population age 5.0% 2-week fatality rate 0.78% 6,000 76.5% total population immunized 4.0% 4,000 3.0% 2.0% 2,000 29,880 deaths cumulative 1.0% +26 deaths today 0.0% Aug 22 Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30 3,000 4.5% Australia 4.0% 2,500 80 34 bp of population infected 3.5% 222.260 cases cumulative 0.35 bp of population fatalities +1,705 cases today Daily new cases and deaths 2,000 3.0% 329 median population age 2.5% Cume fatality rate 0.93% 1,500 74.1% total population immunized 2.0% 2-week fatality rate 0.55% 1,000 1.5% 1.0% 500 2,072 deaths cumulative 0.5% +7 deaths today 0.0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30



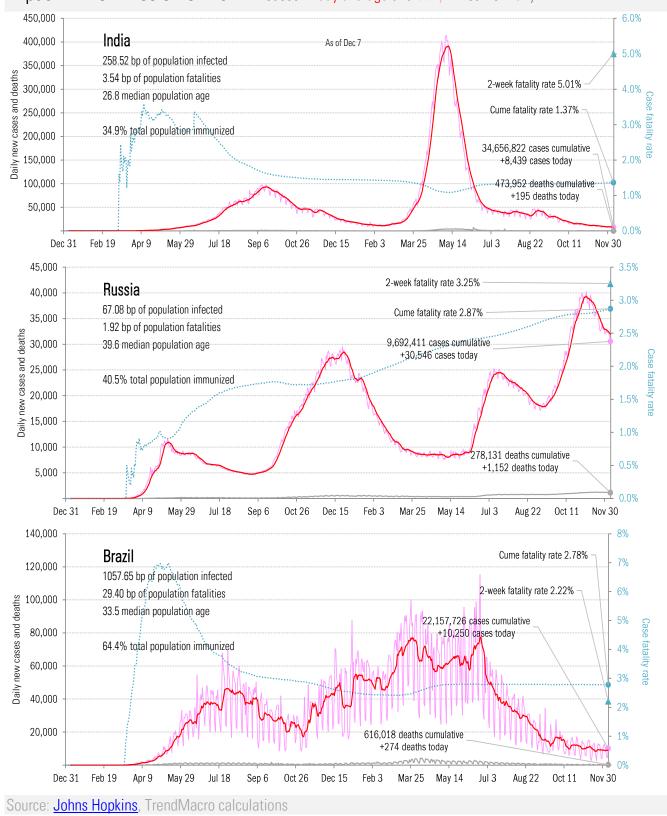


Impact in other hot-spots Cases: 7-day average and daily Deaths: Daily



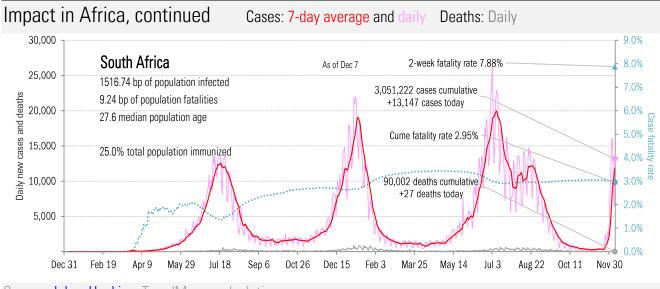
Impact in the BRICs ex-China c

Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa Cases: 7-day average and daily Deaths: Daily 18,000 2% Israel 16,000 2% As of Dec 7 1516.74 bp of population infected Cume fatality rate 0.61% 14,000 1% Daily new cases and deaths 9.24 bp of population fatalities 2-week fatality rate 0.48% 12,000 1% 30.2 median population age 1,347,474 cases cumulative 10,000 1% +804 cases today 62.3% total population immunized 8,000 1% 6,000 1% 8,210 deaths cumulative 4,000 0% +1 deaths today 2,000 0% 0% Feb 19 Dec 15 Dec 31 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30 60,000 10% Iran 9% 50,000 701.61 bp of population infected Cume fatality rate 2.12% 8% 14.89 bp of population fatalities 2-week fatality rate 1.41% Daily new cases and deaths 7% 40,000 30.3 median population age 6% 6,141,335 cases cumulative +3,514 cases today 56.6% total population immunized 30,000 5% rate 4% 130,356 deaths cumulative 20,000 +79 deaths today 3% 2% 10,000 1% 0% Dec 31 Aug 22 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30 60,000 5% Africa (52 nations) 4% 50,000 70.86 bp of population infected 2-week fatality rate 2.64% 4% 1.79 bp of population fatalities Daily new cases and deaths Cume fatality rate 2.52% 40,000 19.7 median population age 3% 3% e fatality 7.7% total population immunized 30,000 2% 9,758,079 cases cumulative rate +27,596 cases today 20,000 1% 10,000 246,207 deaths cumulative 1% +197 deaths today 0% Sep 6 Dec 31 Feb 19 Apr 9 May 29 Jul 18 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30





Source: Johns Hopkins, TrendMacro calculations