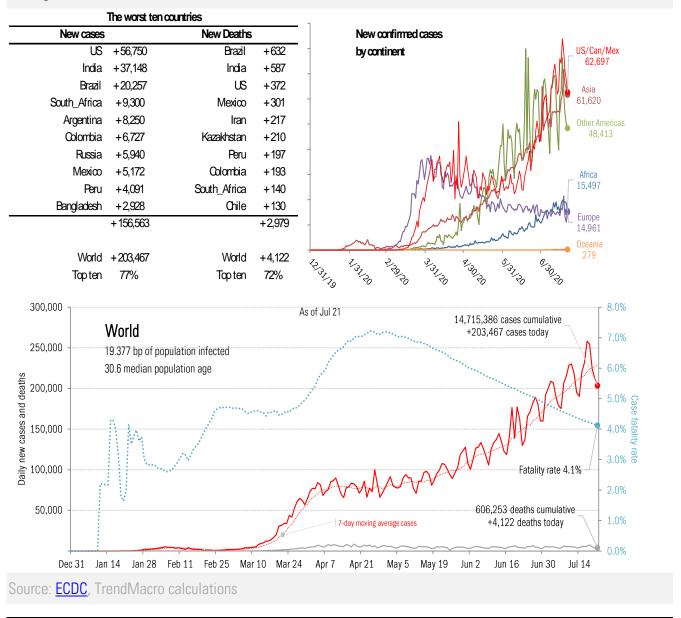


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

#### Data Insights: Covid-2019 Monitor

Tuesday, July 21, 2020

## The global scorecard



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## The US scorecard

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

New cases		New Deaths		New	in hospital	Qume o	ases	Curne d	eaths	Curre in hospital		
R.	+ 10,347	Æ	+92	А	L +586	NY	407,326	NY	25,056	NY	89,995	
ТХ	+7,404	TX	+62	F	L +296	CA	391,538	NJ	15,715	FL.	21,605	
CA	+6,846	LA	+29	А	Z +66	R.	360,394	MA	8,433	NJ	21,058	
LA	+3,186	AZ	+23	V	A +62	TX	332,434	CA	7,694	GA	15,047	
GA	+2,452	ан	+ 15	0		NJ	176,963	L	7,494	MD	11,897	
AL	+1,880	СТ	+10	М		IL	163,923	PA	7,018	MA	11,722	
TN	+1,639	CA	+9	a		GA	145,575	MI	6,373	VA	11,265	
AZ	+1,559	NJ	+9	M		AZ	145,183	Æ	5,183	СТ	10,654	
SC	+1,459	SC	+9	1		MA	113,789	CT	4,406	CH	9,610	
AR	+1,394	KS	+8	K	-	PA	101,738	TX	4,020	AL	8,368	
	+38,166		+266		+1,322		2,338,863		91,392		211,221	
All states	+57,948	All states	+365	All state	s +1,652	All states	3,813,916	All states	133,283	All states	279,030	
Topten	66%	Topten	73%	Topte		Topten	61%	Topten	69%	Topten	76%	
lop ton	0070	iopiai	10/0	iop to	0070	iop to i	0170	lopion	6070	iop ton	10/0	
<b>5</b>	L-11		<b></b>		Five most impro			· (		Martana		
	aily cases		rewer	new deaths	01	rewer	new hospitaliza			Most recoverie		
CA	-2,483				-81		FL -4			NC	+11,583	
FL CO	-2,131				-31		WA -19			TX	+4,935	
SC	-915				-27		AR -17			MS	+4,383	
AZ	-800				-11		00 -12			TN	+ 1,655	
GA	-799			MA	-10		GA -12	2		AR	+1,105	
90,000 <sub>T</sub>											г 9.0%	
	Unite	d States			Asic	f Jul 21						
80,000 -		bp of population inf	ferted		100	50121					- 8.0%	
		dian population age					3	,830,010 case	es cumulative	• <b>\</b>		
70,000 -	JU. 1 110	alan population age						+56,750 ca		$\overline{}$	- 7.0%	
60,000 -					/			·····			- 6.0%	
60,000 - 50,000 -		46,472,527 tes	ts cume						$\Lambda V$	- 5.0%		
50,000						N I	/ 7-	day moving average	cases	-X		
10.000				A.	1 mm				Λ	1 marsha	- 4.0%	
40,000 - 30,000 -		735,148 test	ts today	hand	mm					la de la companya	- 4.0%	
20.000				minit	A A				<b>∧[</b> ∕_		1	
30,000 -			•		- <i>IX</i> V	/HAN			/¥		- 3.0%	
		7.9% positiv	/e today 📊	$\sim$	- //	' 'NV'	VMAA	A A	$\Lambda P$			
20,000 -			Am	huhman	-A	l I	V. M	$\sqrt{m}$	V		- 2.0%	
				1	1/				Fatality	y rate 3.58% 🚽		
10,000 -				/	N/			leaths cumula	itive _		- 1.0%	
10,000					6		+370	deaths today		_	1	
10,000				- 1/		1 A	1312	ucatils totay			0.0%	

Source: States and test data Covid Tracking Project, US data ECDC, TrendMacro calculations

## Recommended reading

## How COVID-19 fatality reports are distorting the data on daily death rates

Daniel Payne *Just the News* July 20, 2020

### <u>Chinese companies are using a contentious labor</u> program for Uighurs to satisfy demand for P.P.E.

*New York Times* July 21, 2020

#### <u>China is using a visit by the World Health Organization</u> to extol its response to the pandemic.

*New York Times* July 21, 2020

## This Hospital Cost \$52 Million. It Treated 79 Virus Patients.

Brian M. Rosenthal *New York Times* July 21, 2020

#### **Treatment Protocol**

*Frontline COVID-19 Critical Care Alliance* July 14, 2020

#### <u>Canales clarifies reports about local infant COVID</u> <u>numbers</u>

Tim Griffin *KRIS News* July 18, 2020

# Biden has fought a pandemic before. It did not go smoothly.

Natasha Korecki *Politico* May 4, 2020

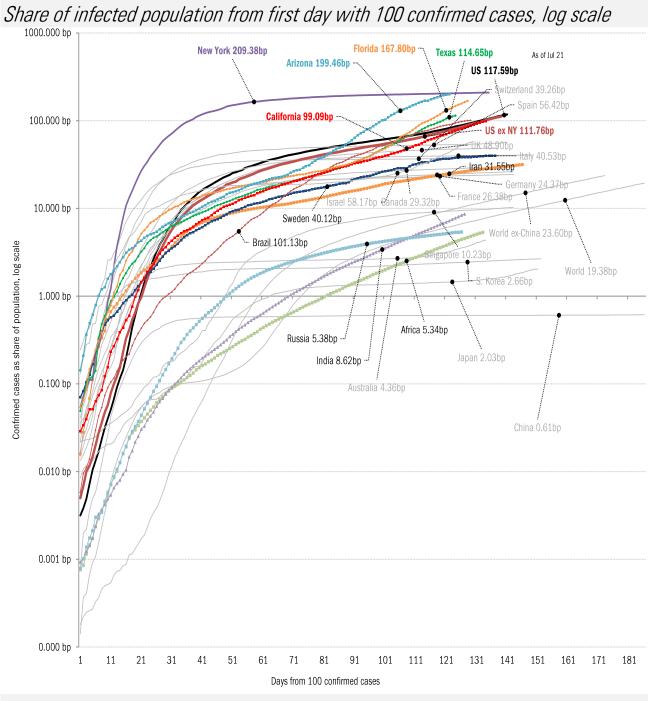
## Obama admin shut down H1N1 testing, complicating

Biden's attacks on Trump's coronavirus screening Gregg Re *Fox News* July 9, 2020 The people with hidden immunity against Covid-19 Zaria Gorvett *BBC* July 19, 2020

# COVID TESTING HODTERS

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

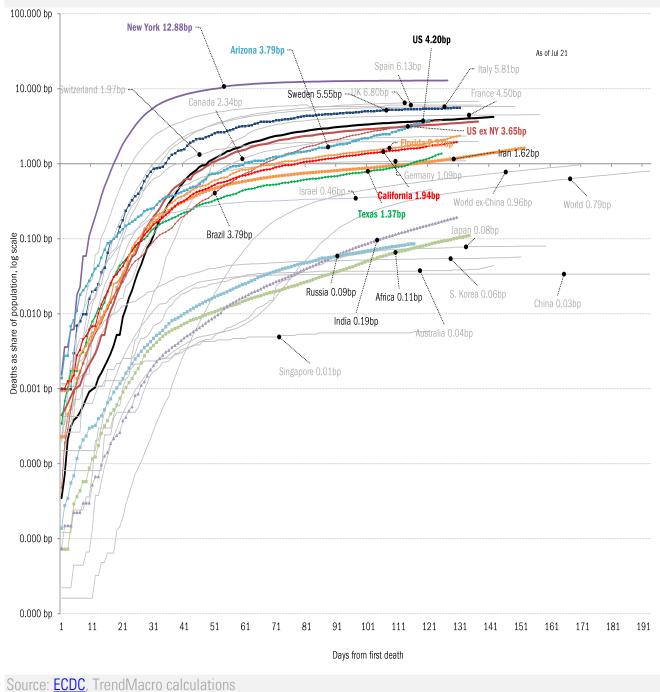
## Meme of the day



The coronavirus <u>case</u> accelerometer... tracking the world's infection curves

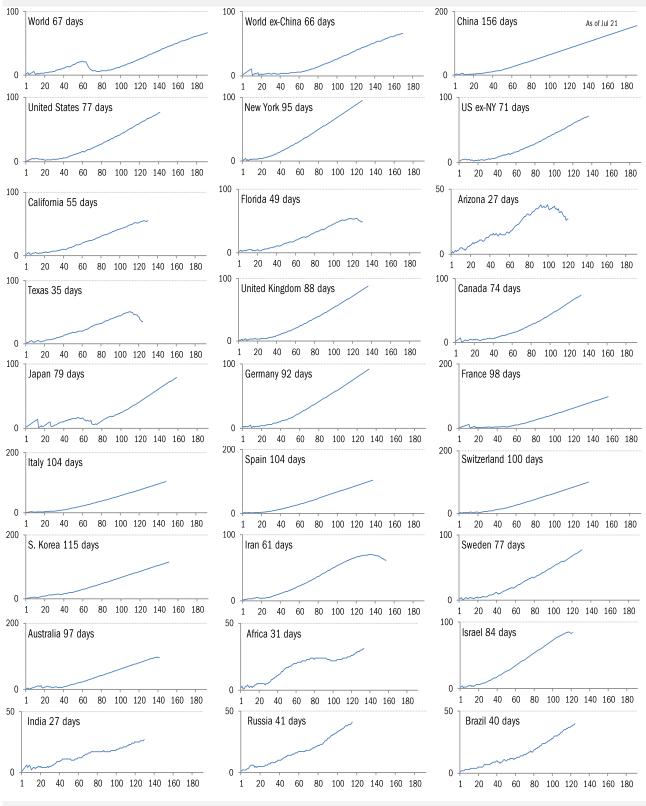
Source: ECDC, TrendMacro calculations

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



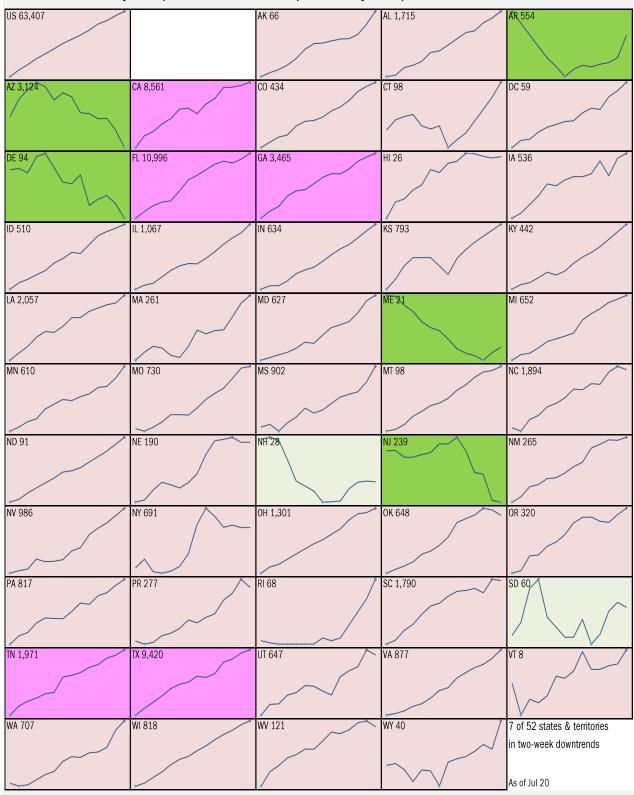
## Our most reliable evidence of slowing exponential growth of Covid-2019

Vertical: number of days it takes to double deaths Horizontal: days from first death



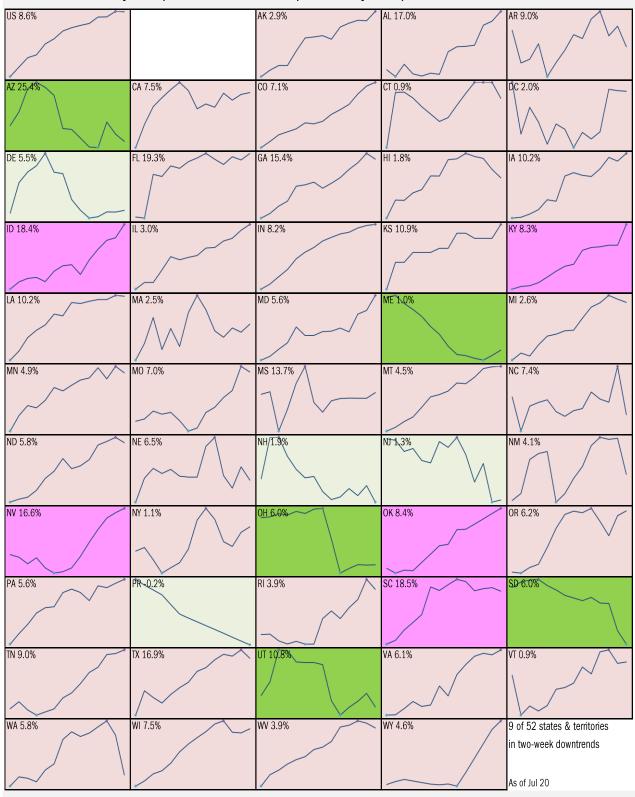
Source: **ECDC**, TrendMacro calculations

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



Source: Covid Tracking Project, TrendMacro calculations

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

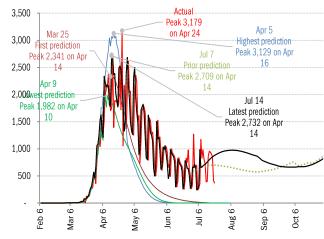


Source: Covid Tracking Project, TrendMacro calculations

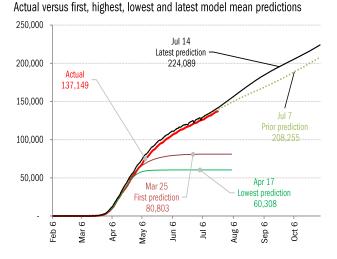
## Reality-checking the models: actuals versus IHME predictions

#### New daily fatalities

Actual versus first, highest, lowest and latest model mean predictions



#### **Cumulative fatalities**

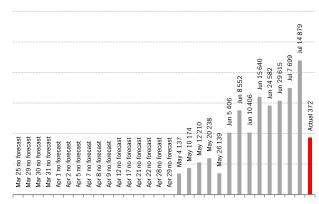


#### Healthcare system stress, peak estimated at each model revision

#### 27,839 27,226 32,125 32,518 32,518 73,943 232,298 224,321 220,643 260,342 260,342 262,092 Hospital beds ICU beds Ventilators 54,083 34,034 40,156 40,156 40,646 19,481 40 823 Jun 8 Jun 15 ] Mar 27 Mar 30 Apr 1 Apr 12 Apr 28 May 12 May 26 Jun 15 ] Jun 29 \_ Mar 27 Mar 30 Apr 5 Apr 12 Apr 28 May 12 May 26 Jun 15 . Jun 29 ] Jul 14 Mar 27 Apr 12 Apr 28 \_ May 12 ] May 26 Jun 29 ] Jul 14 Apr 5 Apr 8 Apr 21 May 4 Jun 8 Apr 1 Apr 8 Apr 21 May 4 Jun 8 Mar 30 Apr 5 Apr 21 May 4 Apr 8 Apr 1

Source: ECDC, IHME, TrendMacro calculations

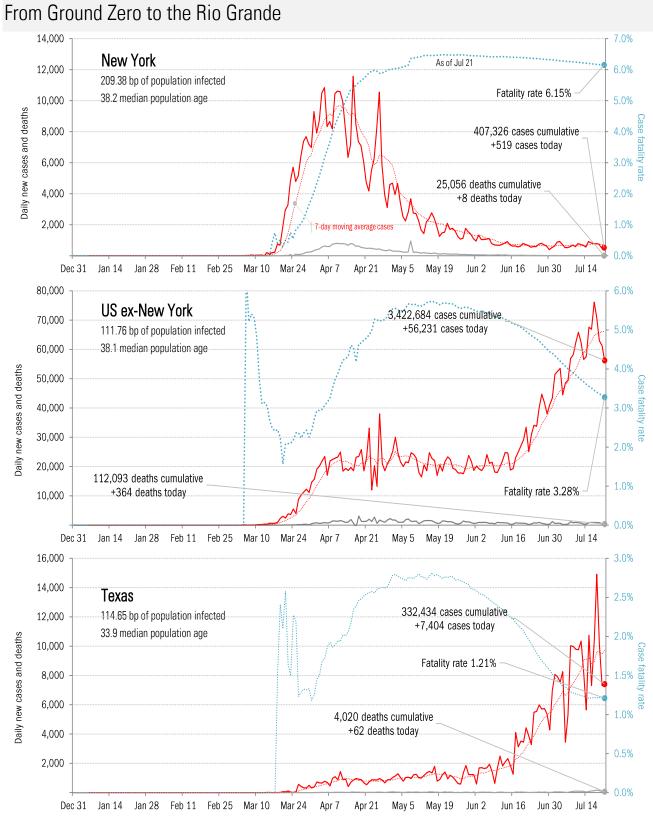
For this day, versus all model mean predictions



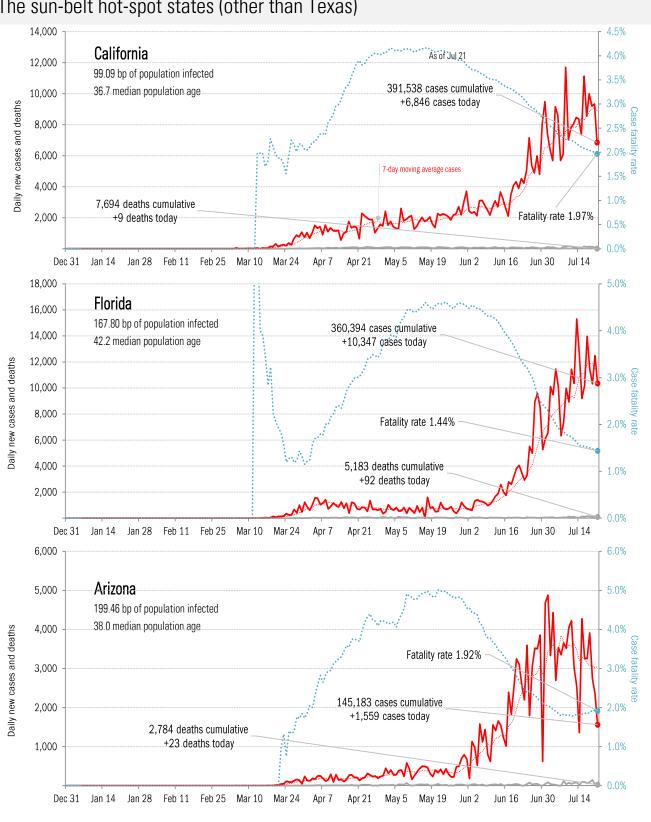
For this day, versus all model mean predictions

	<u></u>											May 4 133,064	May 10 135,697	May 12 144,927	May 20 140,769	May 26 130,486	447'001 0 IIII	Juli 8 138,052	Juri 10 133,890	060,041 C1 IIUU	JUII 24 13/,043	000 001 27 Inf	JUI / 133,369	C00,141 41 IUU	Actual 13/,149
Mar 25 81,114 Mar 29 82,141 Mar 30 83,967	Mar 31 93,765 Arr 1 03 765	Apr 2 93,531	Apr 5 81,766	Apr 7 60,415	Apr 8 60,415 Anr 9 61 545	Apr 12 68,841	Apr 17 60,308	Apr 21 65,976	Apr 22 67,641	Apr 28 72,860	Apr 29 72,433														
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As of Jul 21

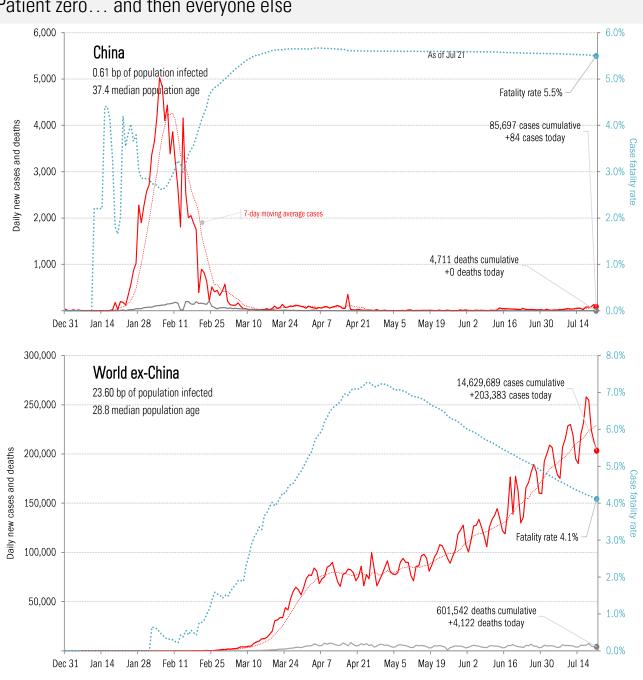


Source: ECDC, TrendMacro calculations



The sun-belt hot-spot states (other than Texas)

Source: ECDC, TrendMacro calculations



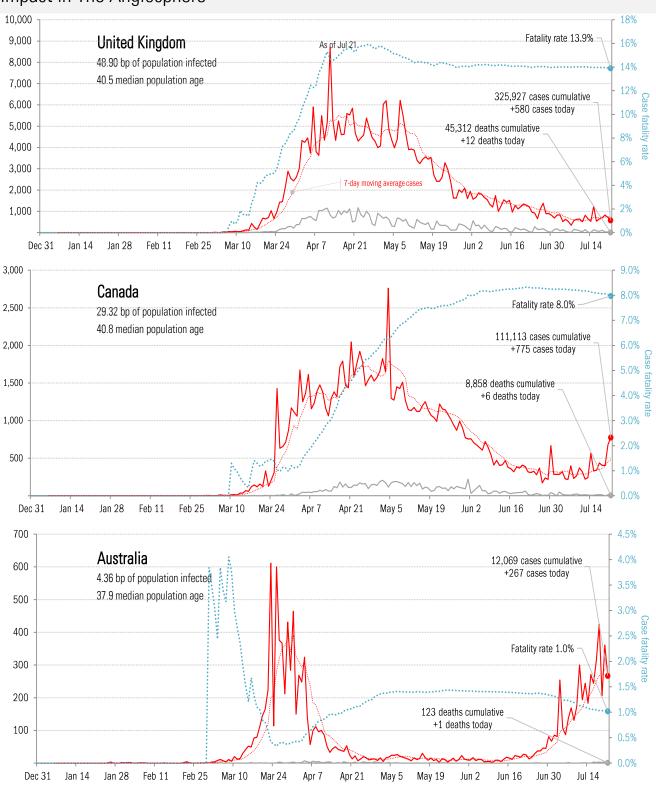
Patient zero... and then everyone else

Source: ECDC, TrendMacro calculations

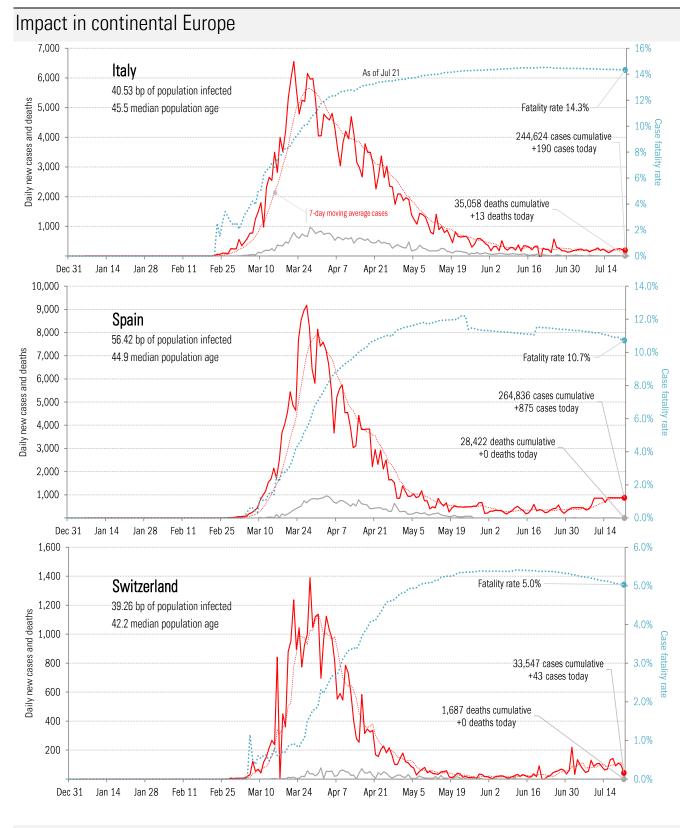
#### Impact in the largest economies 800 6.0% Japan As of Jul 21 700 5.0% 2.03 bp of population infected Fatality rate 3.9% 47.3 median population age 25,096 cases cumulative +454 cases today 3.0% 7-day moving average cases rate 2.0% 985 deaths cumulative +0 deaths today 1.0% 100 0.0% Jan 14 Jan 28 Dec 31 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Apr 21 May 5 May 19 Jun 2 Jun 16 Jun 30 Jul 14 7,000 5.0% Germany 4.5% 6,000 24.37 bp of population infected 4.0% Fatality rate 4.5% Daily new cases and deaths 3,000 2,000 2,000 45.9 median population age 3.5% 3.0% 202,345 cases cumulative +522 cases today 2.5% 2.0% គ្ន 1.5% 9,090 deaths cumulative +4 deaths today 1.0% 1,000 0.5% 0.0% Feb 25 Mar 10 Mar 24 Apr 21 Dec 31 Jan 14 Jan 28 Feb 11 Apr 7 May 5 May 19 Jun 2 Jun 16 Jun 30 Jul 14 8,000 20% France 18% 7,000 26.38 bp of population infected Fatality rate 17.1% 16% 6,000 41.2 median population age Daily new cases and deaths 14% 5,000 12% 4,000 176,754 cases cumulative 10% +836 cases today 8% 3,000 6% 2,000 30,177 deaths cumulative 4% +25 cases today 1,000 2% 0% Apr 21 Dec 31 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Jul 14 Jan 14 Apr 7 May 5 May 19 Jun 2 Jun 16 Jun 30

Source: ECDC, TrendMacro calculations

## Impact in The Anglosphere

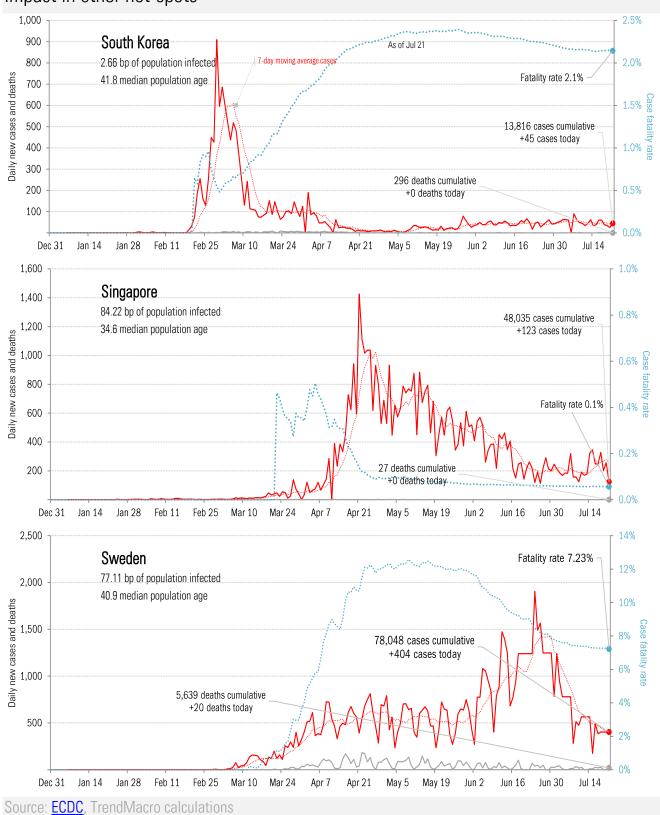


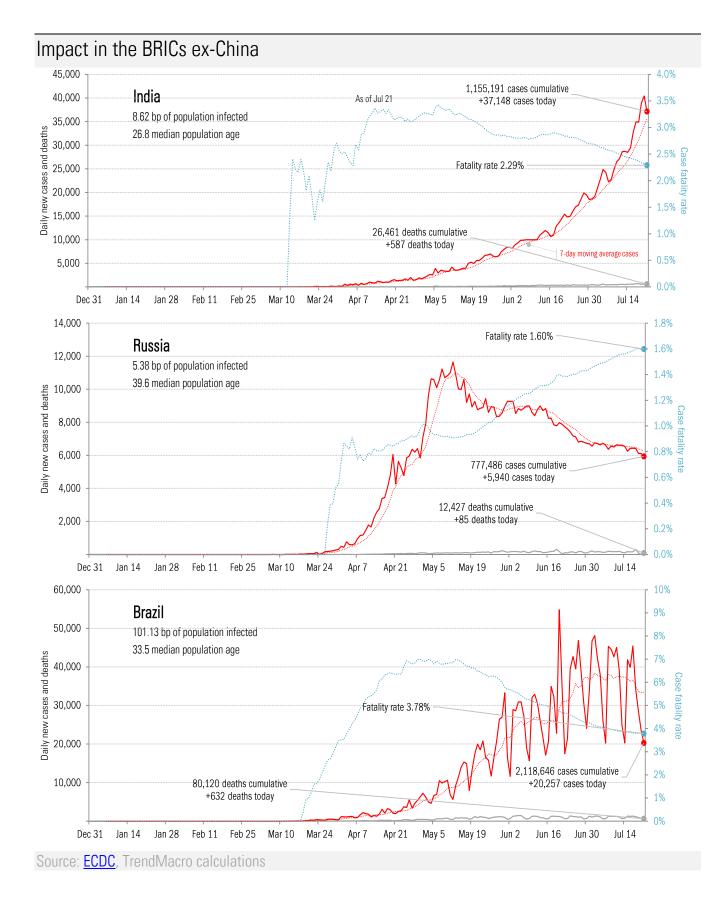
Source: <u>ECDC</u>, TrendMacro calculations

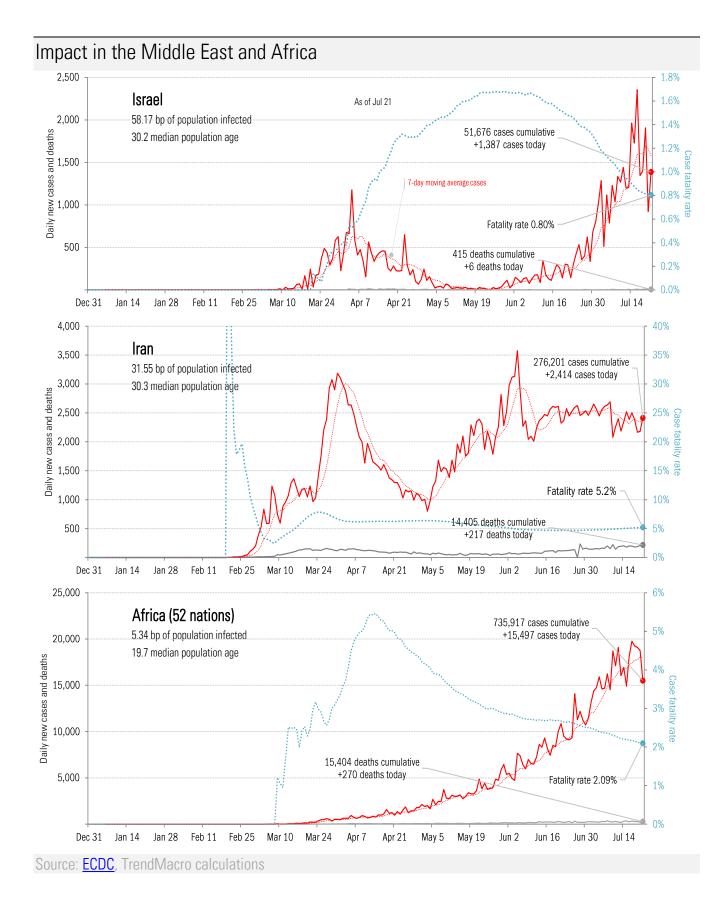


Source: ECDC, TrendMacro calculations

## Impact in other hot-spots







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