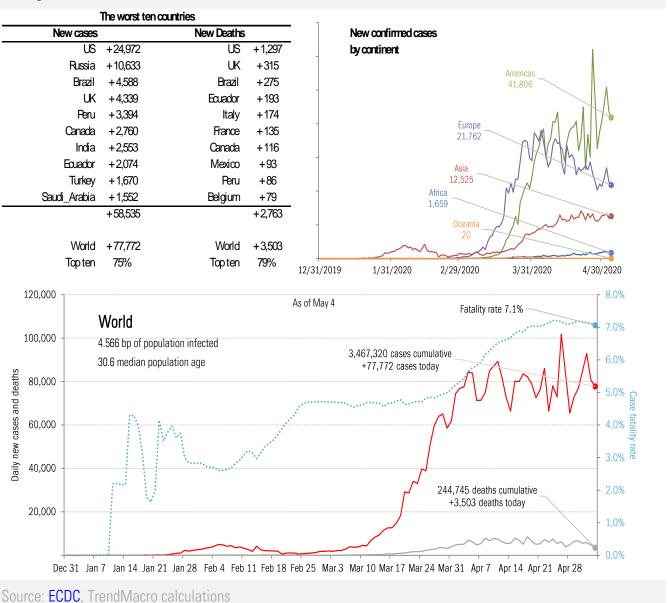


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

#### Data Insights: Covid-2019 Monitor

Monday, May 4, 2020

### The global scorecard



#### For more information contact us:

Donald Luskin: 312 273 6766 don@trendmacro.com

Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Copyright 2020 Trend Macrolytics LLC. All rights reserved. This document is not to be forwarded to individuals or organizations not authorized by Trend Macrolytics LLC to receive it. For information purposes only; not to be deemed to be recommendations for buying or selling specific securities or to constitute personalized investment advice. Derived from sources deemed to be reliable, but no warranty is made as to accuracy.

# The US scorecard

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

New cases				Nev	New in hospital Ourne of				Cume in hospital		
NY	+3,438	NY	+280	NY		NY	316,415	NY	19,189	NY	68,736
NJ	+3,027	MA	+ 158	FL	+299	NJ	126,744	NJ	7,871	CT	7,758
IL	+2,994	NJ	+ 129	VA	+172	MA	68,087	M	4,049	MA	6,507
MA	+1,824	СТ	+97	M	) +141	IL	61,499	MA	4,004	FL	6,244
CA	+ 1,419	IL	+59	MA	A + 129	CA	53,616	IL	2,618	GA	5,393
TX	+1,026	CA	+44	OH	+57	PA	49,267	PA	2,444	MD	5,051
MD	+989	VA	+44	CO	+46	M	43,754	CT	2,436	VA	3,910
PA	+962	MD	+30	M	<b>v +4</b> 0	R.	36,078	CA	2,215	OH	3,769
VA	+940	MI	+29	RI	+36	TX	31,548	LA	1,969	CO	2,793
IN	+638	PA	+26	MS	+33	LA	29,340	Æ	1,403	WI	1,608
	+17,257		+896		+1,799		816,348		48,198		111,769
All states	+26,287	All states	+1,158	All stat	es +1,936	All states	1,152,006	All states	61,868	All states	125,796
Top ten	66%	Topten	77%	Top to	en 93%	Topten	71%	Top ten	78%	Top ten	89%
					Five most impro	n al IC atata					
Fewer daily cases		Fewer new deaths				Fewer new hospitalizations			Most recoveries		
NY	-1,225			MI	-125		AZ ·	-127		NY	+ 1,410
GA	-740			NJ	-75		GA ·	-112		CR	+860
NC	-431			R.	-59			-80		TX	+653
PA	-372			CA	-54			-51		MN	+618
CA	-336			L	-43			-51		VA	+ 185
U.	-000			IL.	-10			-01		٧٨	+ 100
60,000 <sub>T</sub>											г 9.0%
	Unito	d States			A	Mar. 4					
					AS OI	f May 4					- 8.0%
50,000 -		bp of population infe				Fatality rate 5.65%					
50,000	38.1 me	dian population age									- 7.0%
											1.070
40,000 -											- 6.0%
40,000								cases cumulative			0.0%
40,000 -		7,056,178 tes	sts cume				+24,97	2 cases today	$\Lambda$	A Carton	E 000
									1 TH	ńλ II Λ	- 5.0%
30,000 -					M	$\sim$			XI	$M \times /$	
		238,253 tes	sts today		hand			- / V /	ÝV	$V   N   V \rangle$	4.0%
20,000 -											
20,000 -			4		1 ml			N			- 3.0%
		11.1% positi	ve today	N	r vy	5					
	65,383 deaths cur									hs cumulative	- 2.0%
							N-N	00		eaths today	
10,000 -							· · · · ·		,		
10,000 -											- 1.0%
10,000 -									. ^		- 1.0%

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

# Recommended reading

# <u>The data is in — stop the panic and end the total</u> <u>isolation</u>

Scott Atlas *The Hill* April 22, 2020

#### Why US outsourced bat virus research to Wuhan

Christina Lin *Asia Times* April 22, 2020

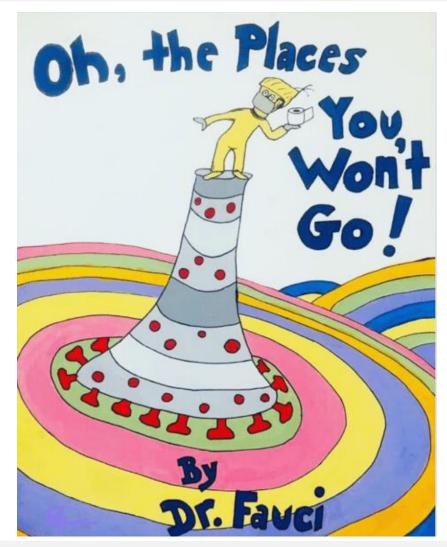
### What Would You Risk for a Faster Cure?

Mene Ukueberuwa *Wall Street Journal* May 1, 2020

#### The Covid-19 Riddle: Why Does the Virus Wallop Some Places and Spare Others?

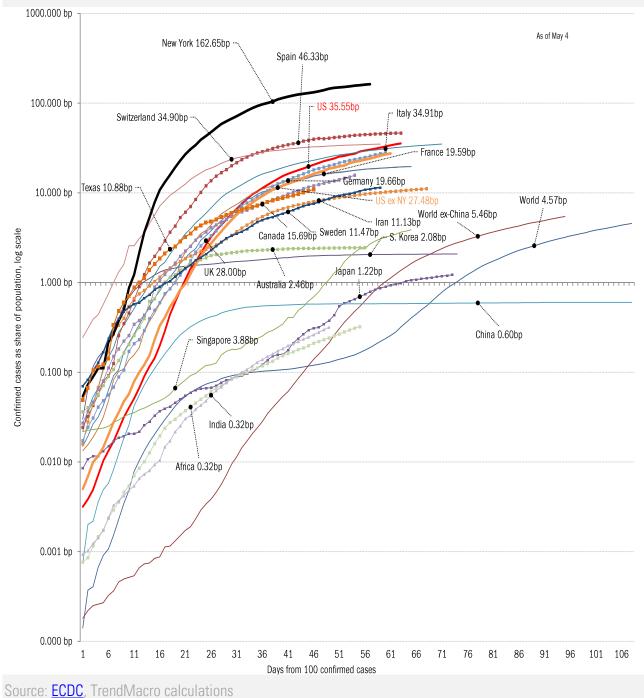
Hannah Beech, Alissa J. Rubin, Anatoly Kurmanaev and Ruth Maclean *New York Times* May 3, 2020

### Meme of the day

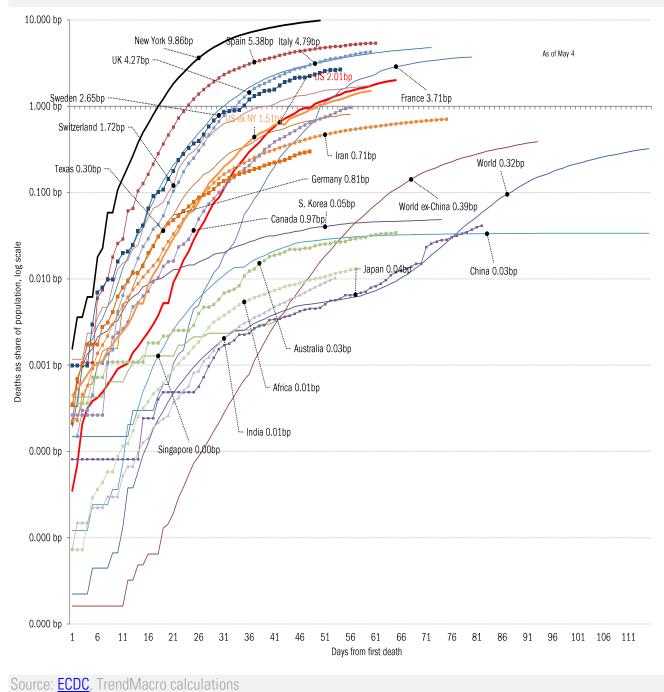


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

# 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*



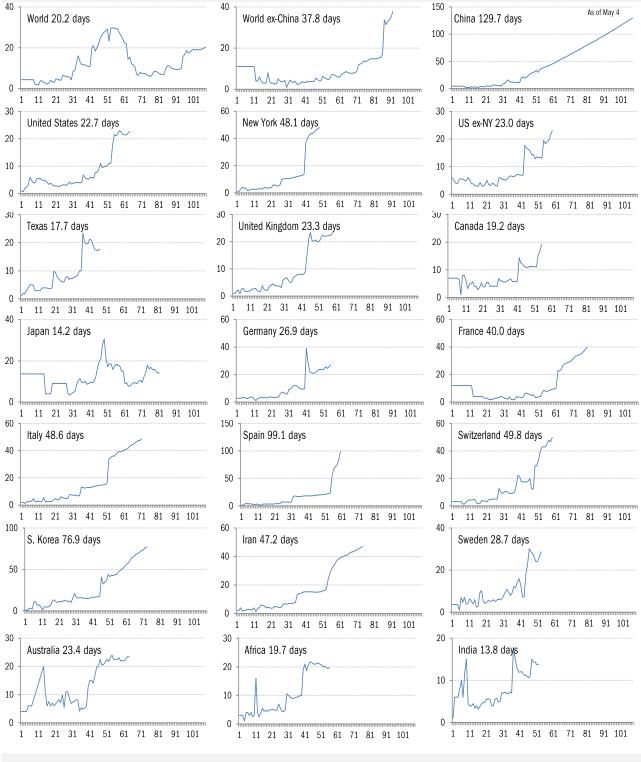
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality* 



5

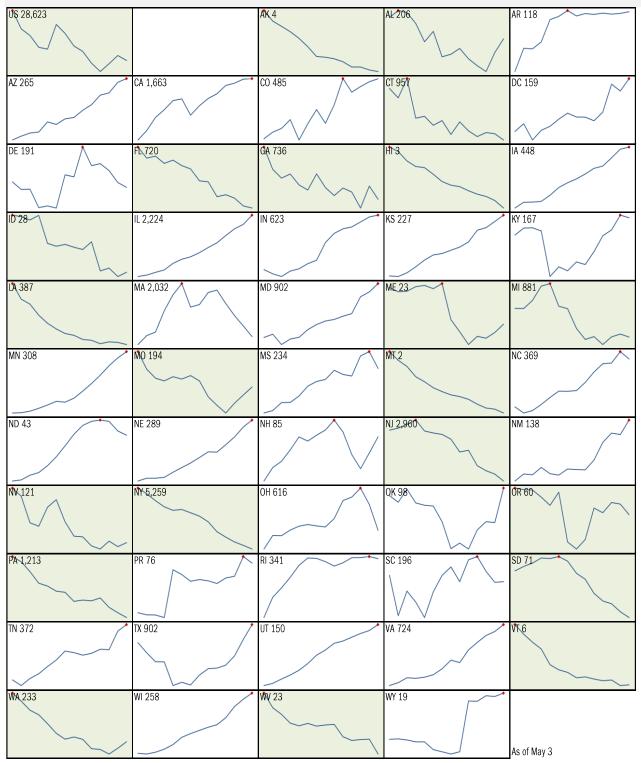
# Our most reliable evidence of slowing the Moore's law of Covid-2019 *Vertical: number of days it takes to double deaths Horizontal: days from first death* Progress means seeing the line move up and to the right...

Extrapolated between actual doubling points. The most anomalous extrapolations are smoothed.



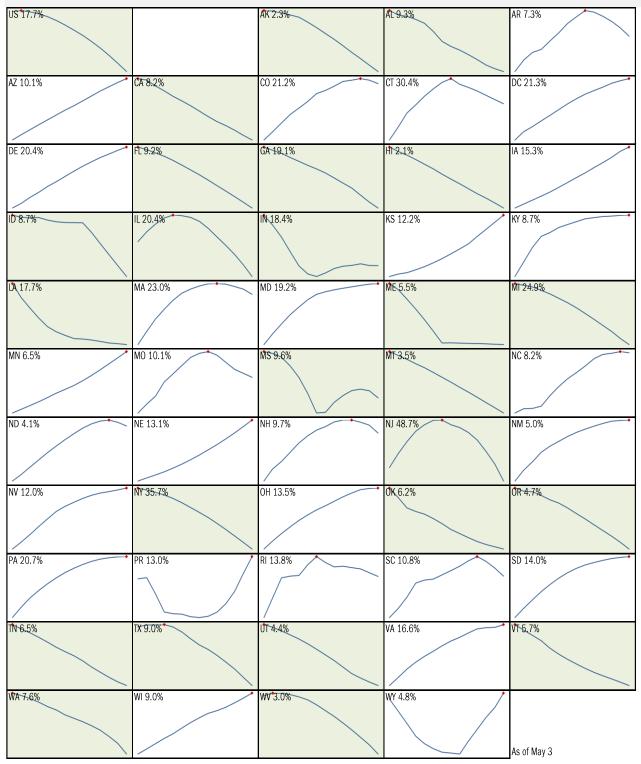
Source: ECDC, TrendMacro calculations

Requirement to Open Up America Again: 14-day "downward trajectory" in new cases 14-day moving average, last 14 days Most recent value displayed



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* 

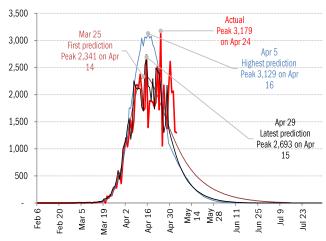


Source: Covid Tracking Project, TrendMacro calculations

# Reality-checking the models: actuals versus IHME predictions

#### New daily fatalities

Actual versus first, highest and latest model mean predictions



#### For this day, versus all model mean predictions

For this day, versus all model mean predictions

Apr 5 74,602

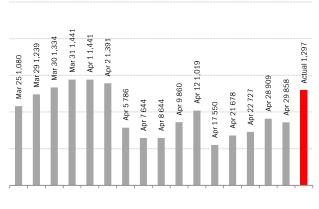
Apr 7 54,714 Apr 8 54,714 Apr 9 51,721

Mar 31 72,749

Mar 29 63,482 Mar 30 63,458

Mar 25 64,451

Apr 1 72,749 Apr 2 72,413



As of May 4

Actual 65,383

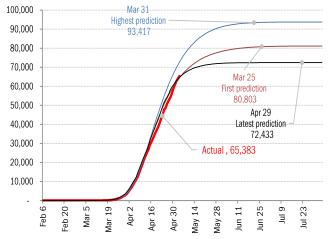
Apr 29 64,720

Apr 17 57,279 Apr 21 61,330 Apr 22 62,053 Apr 28 64,334

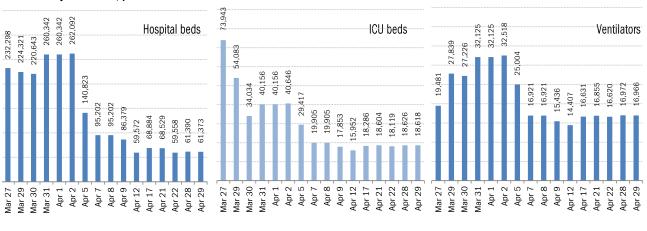
Apr 12 54,556

#### **Cumulative fatalities**

Actual versus first, highest and latest model mean predictions

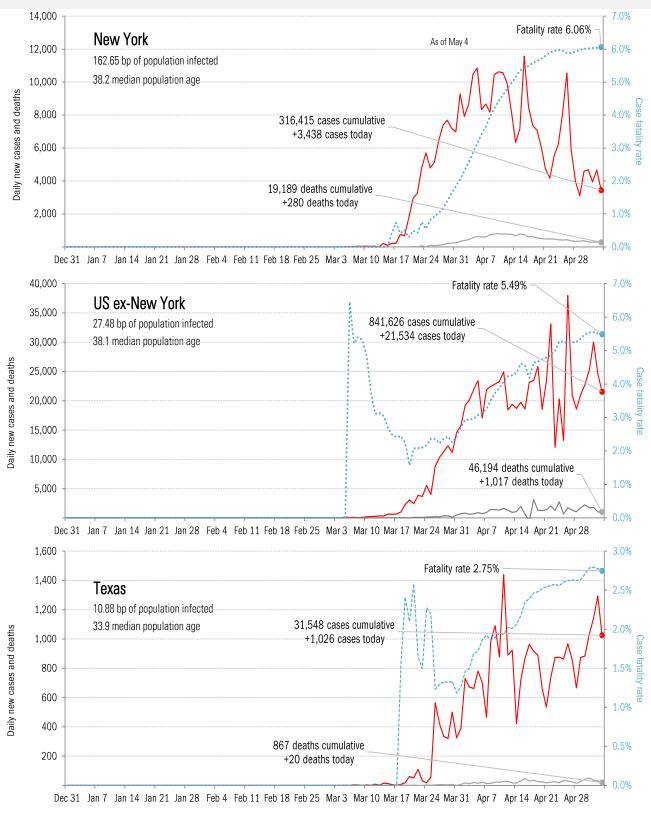


#### Healthcare system stress, peak estimated at each model revision



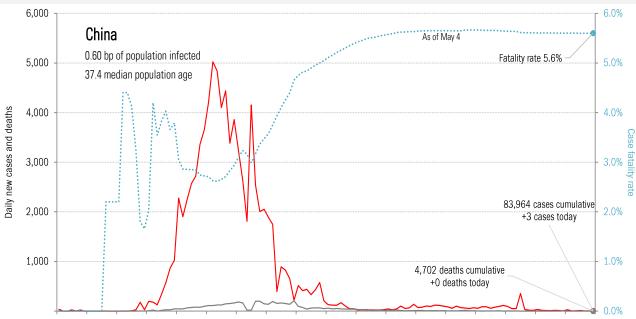
Source: ECDC, TrendMacro calculations

### From Ground Zero to the Rio Grande

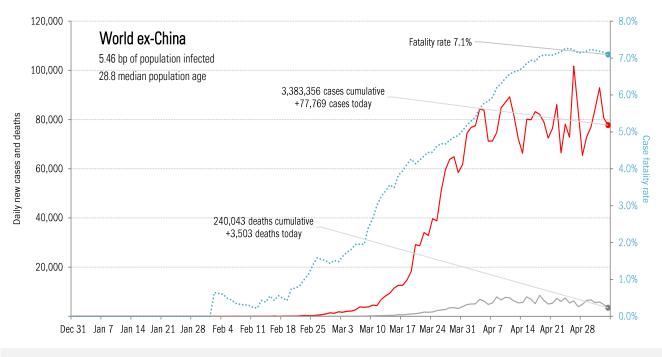


Source: ECDC, TrendMacro calculations

# Patient zero... and then everyone else

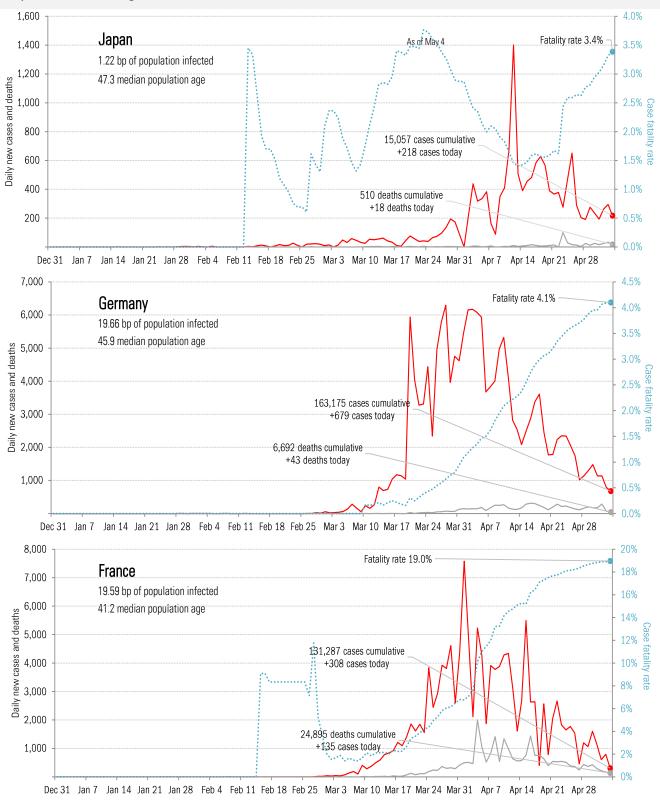


Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21 Apr 28



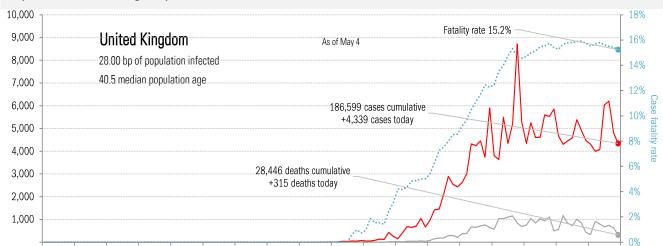
Source: ECDC, TrendMacro calculations

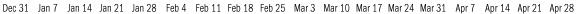
# Impact in the largest economies

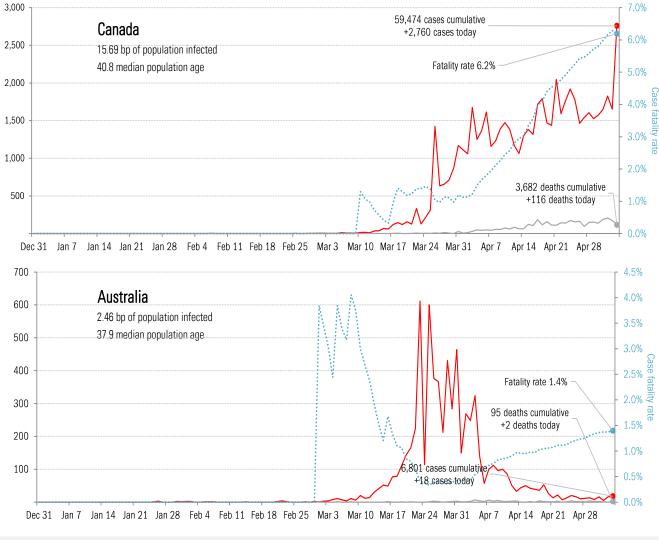


Source: ECDC, TrendMacro calculations

# Impact in The Anglosphere

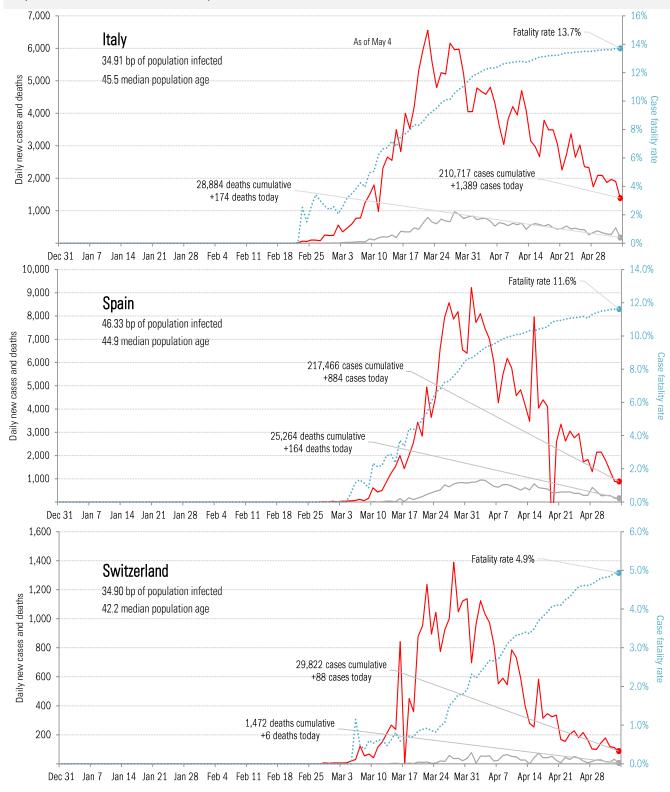






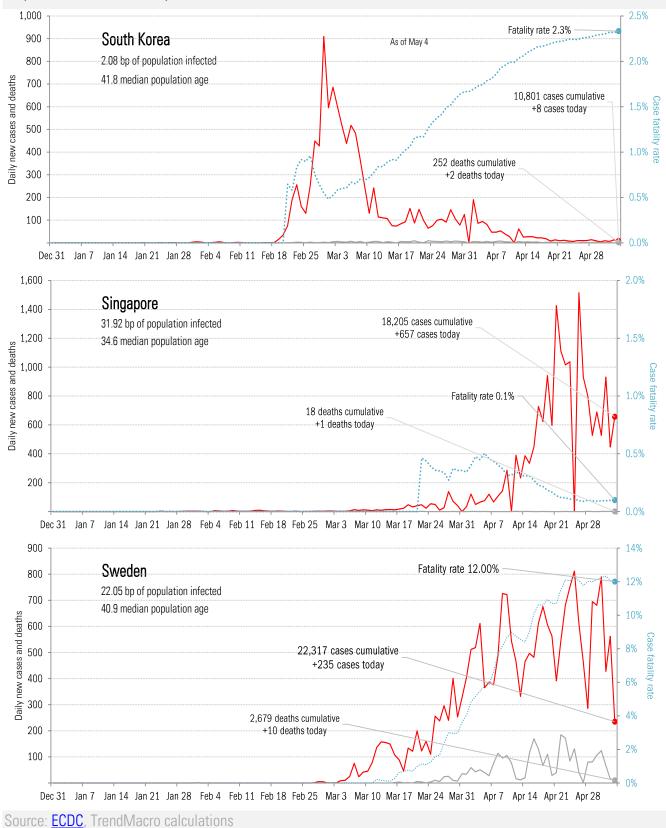


# Impact in continental Europe

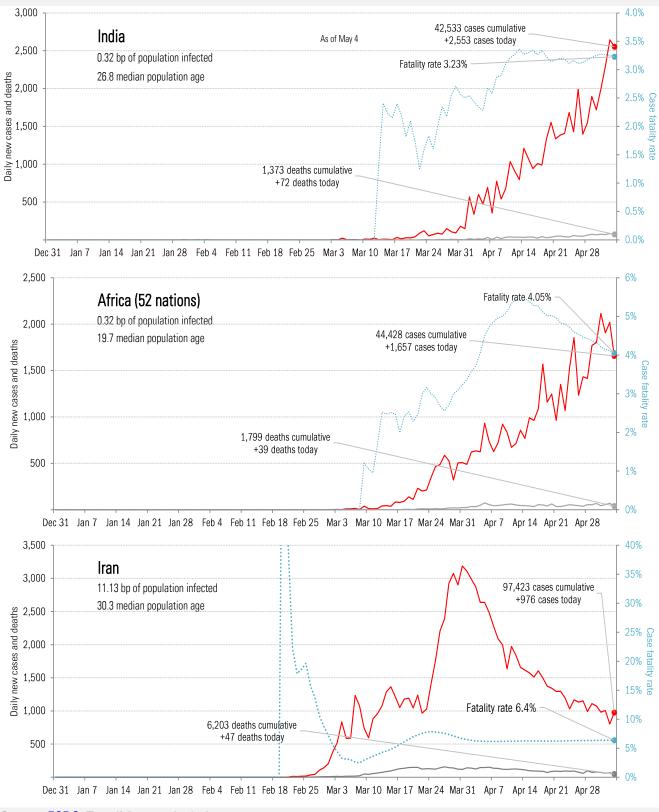


Source: ECDC, TrendMacro calculations

# Impact in other hot-spots



# Impact in the fragile emerging world



Source: ECDC, TrendMacro calculations