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Data Insights: Covid-2019 Monitor

Tuesday, October 13, 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 The ten worst US states New Deaths New cases New in hospital Cume cases Cume deaths Cume in hospital CA +3,449 Æ +47 NJ +492 CA 850,028 NY 25,587 TΧ 3,870 3,070 ΤN +2,965 PA +18 ТΧ +248 ТΧ 795,126 CA 16,572 CA IL +2.742 AR +17 Æ +83 Æ 736.024 TX 16.558 Æ 2.206 ТΧ +2,648 LA W +78 475,315 NJ 16,175 IL 1,764 +14 NY KS +2,055 GA NC 332,311 RL. GA 1,666 +13 +63 GA 15,599 W +2,016 IL +13 СН +62 IL 324,930 MA 9,617 MO 1,313 MI +1,932 MA +13 NY NC 232,747 IL 9,243 IN 1,238 +58 IN +1,574 NY +13 GA +47 ΑZ 226,050 PA 8,368 NC 1,109 AL Æ +1,533IA +12 +44 ΤN 217,682 GA 7,429 VA 965 ND +12 AR +42 7,225 W 950 СН +1,430NJ 214,097 MI +22,344 +172 +1,217 4,404,310 132,373 18,151 All states +43.043All states +284All states +1.028All states 7.770.673 All states 206.881 All states 35.056 Top ten 52% Top ten 61% Top ten 118% Top ten 57% Top ten 64% Top ten 52% Five most improved US states Fewer daily cases Fewer new deaths Fewer new hospitalizations Most recoveries Æ -4,037 Æ -133 ΤN -147 AR +6 -1,121 CA -56 KS -114 KS LA +3 W -697 ТΧ -30 CA -52 AL +1 GA IN IA -612 -10 -46 AK +0 WA -475 MN -7 υT -43 AS +0 90,000 8.0% 80,000 **United States** As of Oct 13 7.0% 7,804,197 cases cumulative 239.599 bp of population infected +41,653 cases today 70,000 6.594 bp of population fatalities 6.0% 38.1 median population age Daily new cases and deaths 20,000 40,000 30,000 5.0% Case fatality rate 214,049,155 tests cume 3.0% 1,819,573 tests today 2.0% Cume fatality rate 2.76% 20,000 7-day moving averagecases 4.6% positive today 2-week fatality rate 1.75% 1.0% 215,085 deaths cumulative 10,000 +314 deaths today 0.0%

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

Apr 14

May 5

Mar 24

Mar 3

Dec 31

Jan 21

Feb 11

May 26

Jun 16

Jul 7

Jul 28

Aug 18

Sep 8

Sep 29

Recommended reading

<u>COVID-19 can survive on money, phone for weeks —</u> <u>but experts say there's 'limited' evidence virus spreads</u> <u>this way</u>

Korin Miller *Yahoo Life* October 12, 2020

It's past time for schools to reopen

Helaine Olen *Washington Post* Ocotber 8, 2020

Lab Coat Tyranny

Christopher F. Rufo *City Journal* October 9, 2020

A call for diagnostic tests to report viral load

Robert F. Service et al. *Science* October 2, 2020

Meme of day

WHO warns against COVID-19 lockdowns due to economic damage

Jackie Salo *New York Post* October 11, 2020

Ballot Deadlines and the Supreme Court

New York Times October 11, 2020

The Supreme Court and the Election Returns David B. Rivkin Jr. and Lee A. Casey

Wall Street Journal October 11, 2020



Man Slowly Eats Bag Of Cheetos All Day So He Won't Have To Wear A Mask

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



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: days to double deaths Horizontal: days from first death Flat indicates exponential spread Declining indicates supra-exponential spread Rising indicates sub-exponential spread



Source: <u>ECDC</u>, 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



n predictions	For this day, versus all model mean predictions	S					
7.7		1/193,/0/	Jul 14 210.264				
		n					
Oct 9			ļ				
Latest prediction 394,693	no foreast on foreast on foreast on foreast of foreast of foreast of foreast of foreast of foreast of foreast on foreast						
	Mar 25 Mar 20 Mar 30 Mar 30 Mar 30 Mar 30 Mar 20 Mar 20 May 41 May 22 May 22 Jun 5 May 22 Jun 20 Jun 20 Jun 24 Jun 20 Jun 24 Jun 24 Jun 24 Jun 24 Jun 24 Jun 24 Jun 20 Jun 24 Jun 20 Jun 24 Jun 20 Jun 24 Jun 20 Jun 24 Jun 20 Jun						

Healthcare system stress, peak and ultimate estimated at each model revision



Source: ECDC, IHME, TrendMacro calculations

For this day, versus all model mean predictions



nc

	7 193 707	hil 14 210.264	Jul 22 208,645	Jul 30 215,855	Aug 6 228,661	Aug 21 230,987	Aug 27 231,623	Sep 3 225,720	Sep 11 224,990	Sep 18 212,732	Sep 24 21/,220	0ct 2 216,033	0ct 9 214,446
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9 in forecast 10 forecast	A no forecast												



From Ground Zero to the Rio Grande

Source: ECDC, TrendMacro calculations



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





Patient zero... and then everyone else

Source: ECDC, TrendMacro calculations



Source: ECDC, TrendMacro calculations







Source: ECDC, TrendMacro calculations

Impact in other hot-spots



Source: ECDC, TrendMacro calculations

Impact in the BRICs ex-China 120,000 4.0% India As of Oct 13 3.5% 100,000 53.53 bp of population infected Daily new cases and deaths 90,000 40,000 40,000 3.0% 7,175,880 cases cumulative 0.80 bp of population fatalities +55,342 cases today 26.8 median population age 2.5% G Cume fatality rate 1.51% 2.0% 1.5% 7-day moving average cases 2-week fatality rate 1.11% 1.0% 20,000 108,233 deaths cumulative 0.5% +706 deaths today 0.0% Dec 31 Jan 21 Feb 11 Mar 24 Apr 14 May 5 May 26 Jun 16 Jul 7 Jul 28 Sep 8 Sep 29 Mar 3 Aug 18 16,000 3.0% 1,312,310 cases cumulative Russia 14,000 +13,592 cases today 2.5% 9.08 bp of population infected Daily new cases and deaths 10,000 8,000 6,000 4,000 0.16 bp of population fatalities 2-week fatality rate 2.56% 39.6 median population age 2.0% Case Cume fatality rate 1.73% 1.5% 1.0% 4,000 22,722 deaths cumulative 0.5% +125 deaths today 2,000 0.0% Mar 24 Dec 31 Jan 21 Feb 11 Mar 3 Apr 14 May 5 May 26 Jun 16 Jul 7 Jul 28 Aug 18 Sep 8 Sep 29 80,000 8% Brazil Cume fatality rate 2.95% 70,000 7% 243.60 bp of population infected 60,000 50,000 40,000 30,000 20,000 60,000 6% 7.18 bp of population fatalities 33.5 median population age 5% Case fatality rate 2-week fatality rate 2.16% 4% 5,103,408 cases cumulative 3% +8,426 cases today 2% 150,689 deaths cumulative +201 deaths today 10,000 1% 0% Jan 21 Dec 31 Feb 11 Mar 3 Mar 24 May 5 May 26 Jun 16 Jul 28 Aug 18 Sep 8 Sep 29 Apr14 Jul 7 Source: ECDC, TrendMacro calculations



Impact in the Middle East and Africa