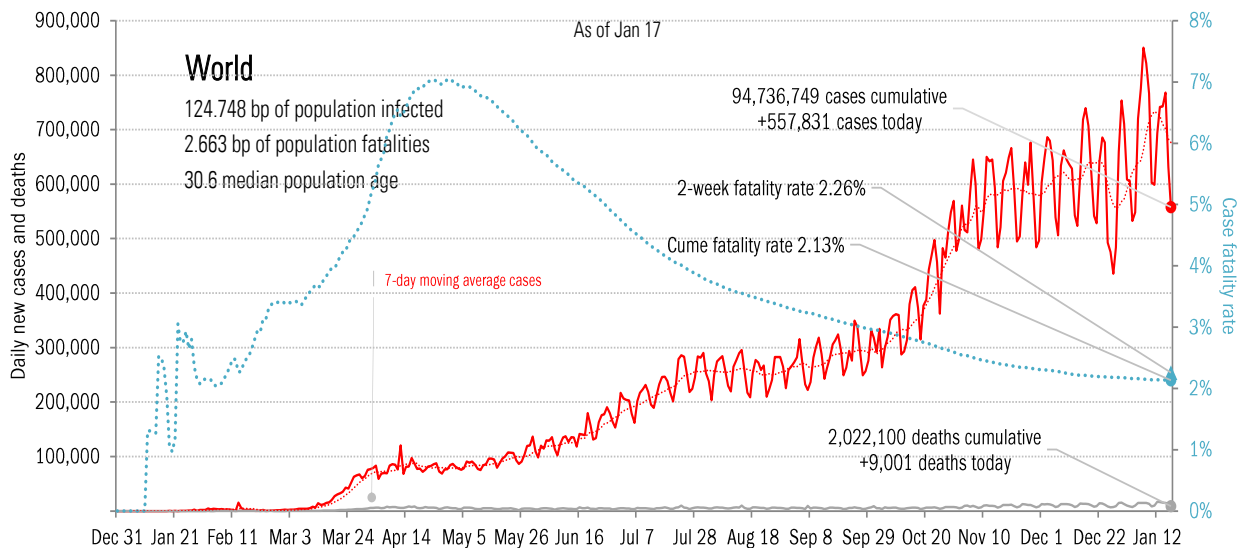
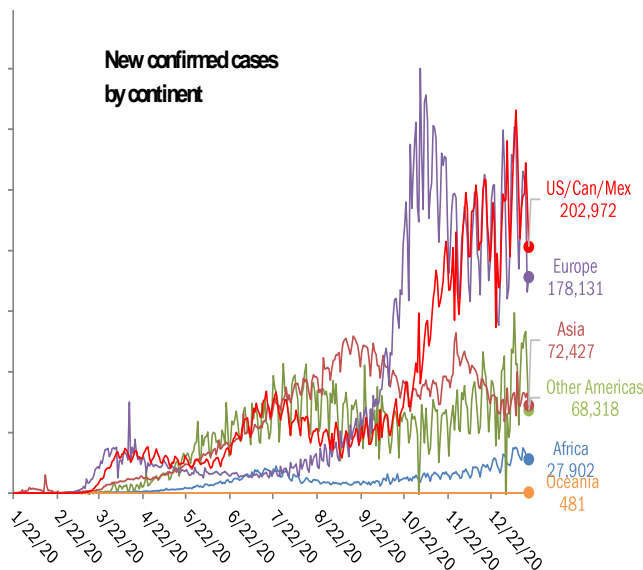


Data Insights: Covid-2019 Monitor

Monday, January 18, 2021

The global scorecard

| The worst ten countries | | | |
|-------------------------|----------|----------------|--------|
| New cases | | New Deaths | |
| United States | +185,518 | United States | +2,044 |
| United Kingdom | +38,670 | United Kingdom | +682 |
| France | +37,405 | Brazil | +551 |
| Brazil | +33,040 | Russia | +467 |
| Russia | +23,178 | Mexico | +463 |
| Colombia | +17,379 | Germany | +437 |
| India | +13,788 | Italy | +377 |
| Italy | +12,544 | Colombia | +375 |
| South Africa | +12,267 | France | +329 |
| Germany | +11,484 | South Africa | +254 |
| +385,273 | | +5,979 | |
| World | +557,831 | World | +9,001 |
| Top ten | 69% | Top ten | 66% |



Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

For more information contact us:

Donald Luskin: 312 273 6766 don@trendmacro.com
 Thomas Demas: 704 552 3625 tdemas@trendmacro.com

The US scorecard

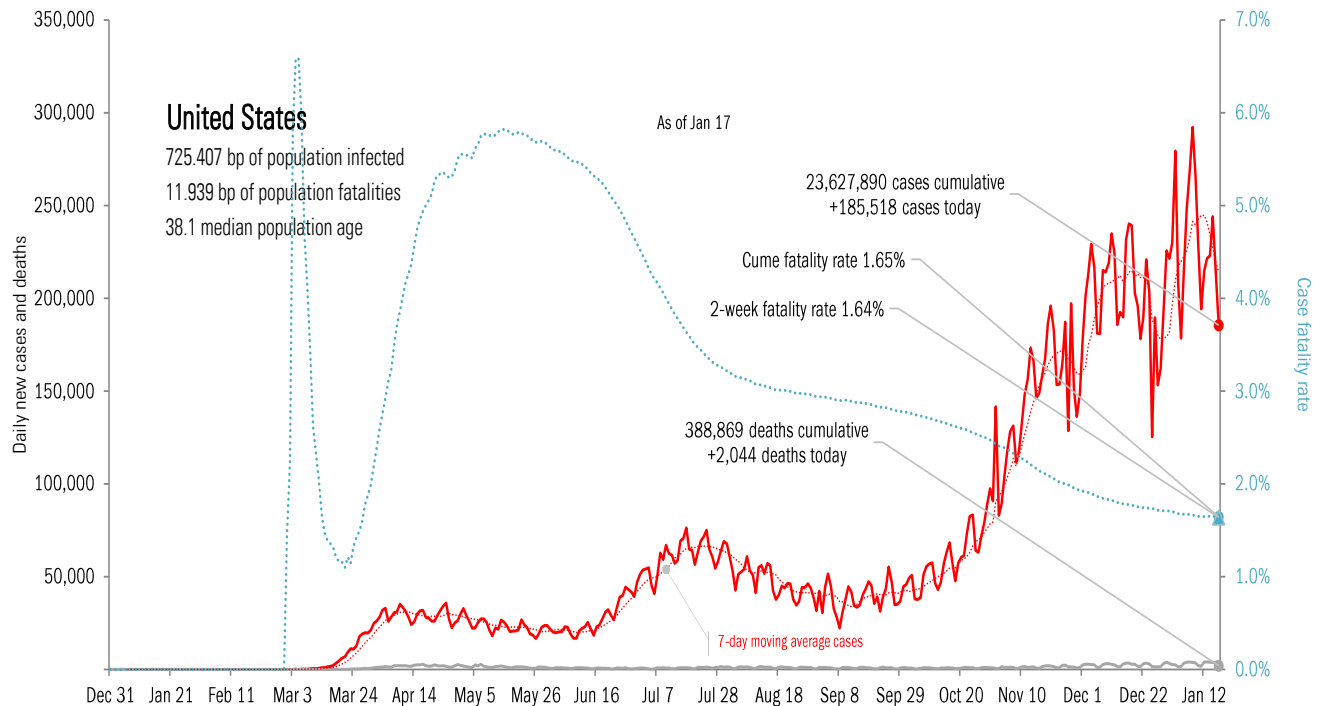
The ten worst US states

| New cases | | | New Deaths | | | New in hospital | | | Cum cases | | | Cum deaths | | | Cum in hospital | | | Hospital use | | ICU use | |
|------------|----------|--|------------|--------|--|-----------------|-------|--|------------|------------|--|------------|---------|--|-----------------|---------|--|--------------|-----|---------|-----|
| CA | +42,229 | | CA | +432 | | FL | +74 | | CA | 2,942,475 | | CA | 33,392 | | NY | 89,995 | | RI | 90% | AL | 96% |
| TX | +16,402 | | TX | +207 | | ME | +11 | | TX | 2,113,962 | | NY | 32,897 | | FL | 68,987 | | GA | 89% | GA | 94% |
| NY | +13,842 | | NY | +172 | | DE | +9 | | FL | 1,542,567 | | TX | 32,038 | | NJ | 54,487 | | SC | 88% | RI | 91% |
| FL | +10,737 | | FL | +135 | | DC | +7 | | NY | 1,233,390 | | FL | 24,515 | | AZ | 47,081 | | MD | 86% | OK | 91% |
| VA | +9,914 | | SC | +129 | | SD | +4 | | IL | 1,068,829 | | NJ | 20,439 | | GA | 46,619 | | DC | 84% | CA | 89% |
| AZ | +6,981 | | LA | +123 | | AK | +3 | | OH | 826,754 | | IL | 20,050 | | CH | 43,189 | | FL | 83% | NM | 89% |
| NC | +6,811 | | PA | +122 | | IL | +2 | | PA | 767,800 | | PA | 19,310 | | AL | 38,763 | | CA | 81% | TN | 89% |
| PA | +6,023 | | MA | +69 | | MD | +2 | | TN | 685,321 | | MI | 14,669 | | IN | 38,398 | | PA | 81% | TX | 88% |
| SC | +5,762 | | NC | +67 | | AS | +0 | | GA | 680,378 | | MA | 13,652 | | MD | 29,631 | | AZ | 81% | MS | 87% |
| GA | +5,384 | | CH | +65 | | CT | +0 | | NC | 674,637 | | GA | 12,296 | | MN | 23,367 | | MA | 81% | SC | 87% |
| +124,085 | | | +1,521 | | | +112 | | | 12,536,113 | | | 223,258 | | | 480,517 | | | | | | |
| All states | +185,518 | | | +2,044 | | | -1752 | | All states | 23,627,890 | | | 388,869 | | | 756,856 | | All states | 76% | | 80% |
| Top ten | 67% | | | 74% | | | -6% | | Top ten | 53% | | | 57% | | | 63% | | Median | 73% | | 78% |

Some states not reporting

Five most improved US states

| Fewer daily cases | | Fewer new deaths | | Fewer new hospitalizations | | Most recoveries | |
|-------------------|--------|------------------|------|----------------------------|------|-----------------|---------|
| TX | -8,255 | CA | -237 | NY | -197 | TX | +10,843 |
| MI | -2,211 | AZ | -190 | TX | -177 | CH | +6,033 |
| WA | -2,193 | TX | -174 | CA | -159 | TN | +5,200 |
| NY | -2,156 | GA | -148 | NJ | -134 | OK | +2,826 |
| CH | -1,818 | WI | -134 | LA | -71 | WI | +2,289 |

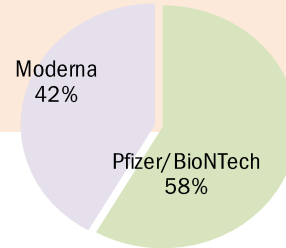


Source: [Covid Tracking Project](#), [Dept. of Health and Human Services](#), [CDC](#), TrendMacro calculations

Rolling out the vaccines in the US

| US overall | Over last day |
|---|-------------------|
| 31.16 million doses distributed | +0.53 million/day |
| 12.28 million doses administered | +1.13 million/day |
| 10.60 million persons with one or more shot | +0.91 million/day |
| 1.61 million persons with two or more shots | +0.27 million/day |
| 1.38 million shots in long-term care | +0.16 million/day |

39.4% of distributed doses administered
3.7% of US population vaccinated
3.2% of US population one shot
0.5% of US population two shots



| State | | |
|-------------------------------------|--------|--|
| Doses distributed as % population | Best | |
| One shot received as % population | Middle | |
| Two shots received as % distributed | Worst | |

| AK | ME | VT | NH | WI | NY | MA | RI | HI | TX | FL | PR |
|-------|-------|-------|------|------|------|------|----|-------|----|------|------|
| 20.6% | 10.2% | 11.9% | 9.4% | 7.5% | 9.7% | 9.7% | | 10.9% | | 9.6% | 9.7% |
| 5.4% | 3.8% | 4.5% | 4.2% | 2.6% | 3.5% | 3.2% | | 2.8% | | 3.6% | 2.7% |
| 1.3% | 0.6% | 0.7% | 0.4% | 0.3% | 0.4% | 0.5% | | 0.5% | | 0.3% | 0.5% |

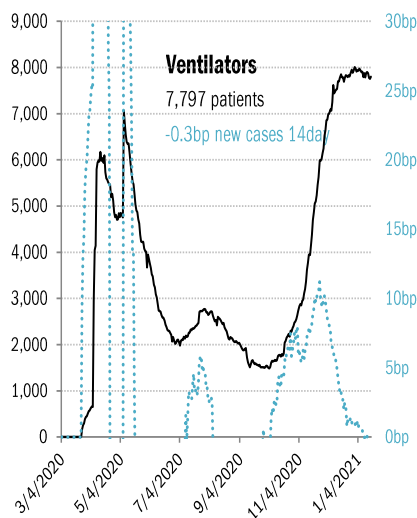
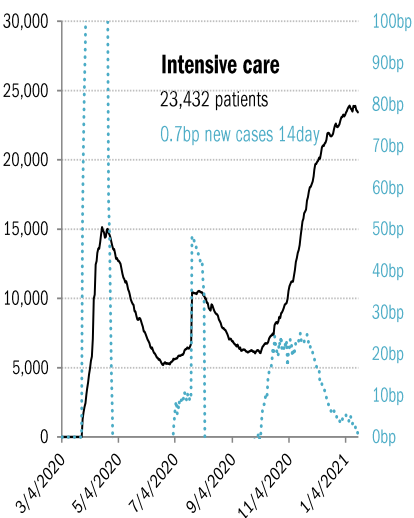
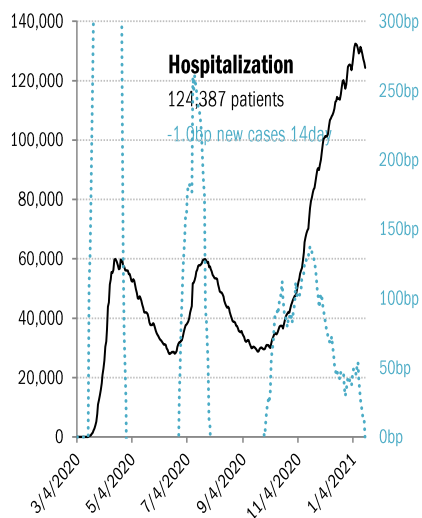
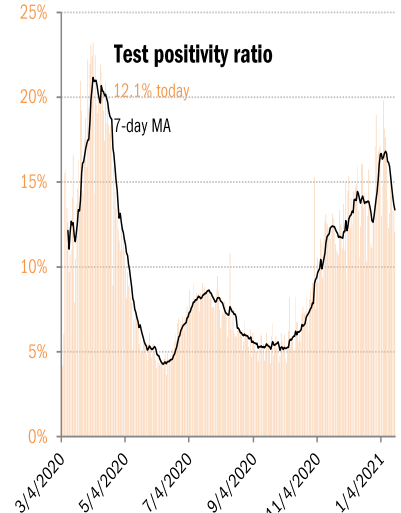
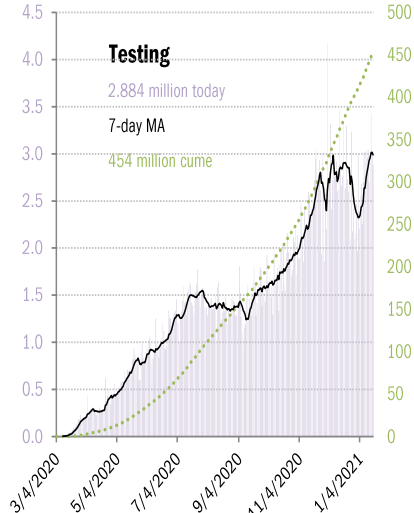
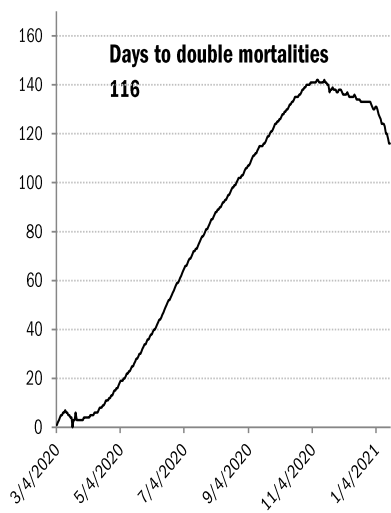
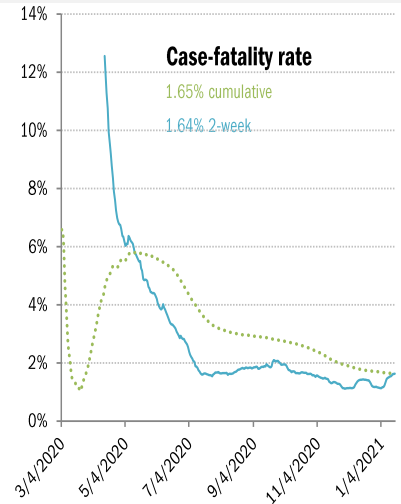
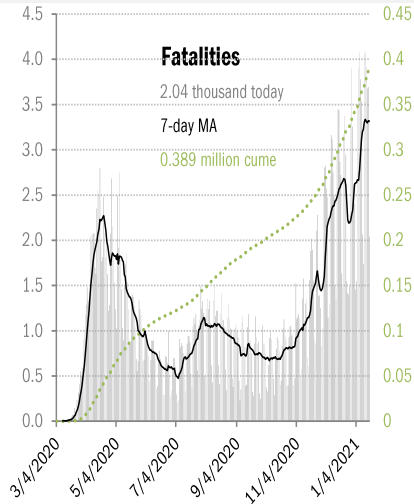
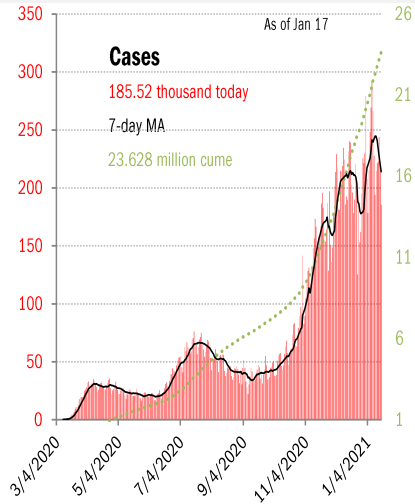
| WA | ID | MT | ND | MN | IL | MI | OR | NV | WY | SD | IA | IN | OH | PA | NJ | CT | CA | UT | CO | NE | MO | KY | WV | VA | MD | DE | AZ | NM | KS | AR | TN | NC | SC | DC | OK | LA | MS | AL | GA |
|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| 9.1% | 9.0% | 9.2% | 9.0% | 9.2% | 8.0% | 7.7% | 7.9% | 6.9% | 10.2% | 10.6% | 8.5% | 9.5% | 8.3% | 8.4% | 7.4% | 9.2% | 9.0% | 8.4% | 9.2% | 10.9% | 8.6% | 7.6% | 11.5% | 10.0% | 9.3% | 9.4% | 7.9% | 9.8% | 9.0% | 9.9% | 9.6% | 9.5% | 6.8% | 9.7% | 10.7% | 8.0% | 7.8% | 9.1% | 9.5% |
| 2.6% | 2.1% | 3.9% | 5.1% | 3.0% | 2.7% | 3.1% | 3.2% | 2.2% | 3.4% | 5.4% | 3.4% | 3.3% | 3.1% | 3.0% | 3.1% | 4.7% | 2.2% | 3.6% | 3.9% | 4.0% | 2.5% | 3.6% | 6.3% | 2.5% | 3.0% | 2.6% | 2.4% | 3.8% | 2.9% | 3.2% | 3.9% | 2.5% | 2.0% | 4.5% | 4.4% | 3.6% | 2.6% | 1.8% | 1.9% |
| 0.4% | 0.5% | 0.8% | 1.0% | 0.5% | 0.7% | 0.5% | 0.3% | 0.5% | 0.5% | 1.1% | 0.3% | 0.6% | 0.1% | 0.5% | 0.4% | 0.5% | 0.3% | 0.3% | 0.8% | 0.7% | 0.6% | 0.2% | 1.2% | 0.3% | 0.3% | 0.6% | 0.3% | 0.9% | 0.5% | 0.6% | 0.6% | 0.4% | 0.4% | 1.2% | 0.7% | 0.7% | 0.3% | 0.3% | 0.2% |

As of Jan 15

Source: [CDC](#), TrendMacro calculations

US deep-dive

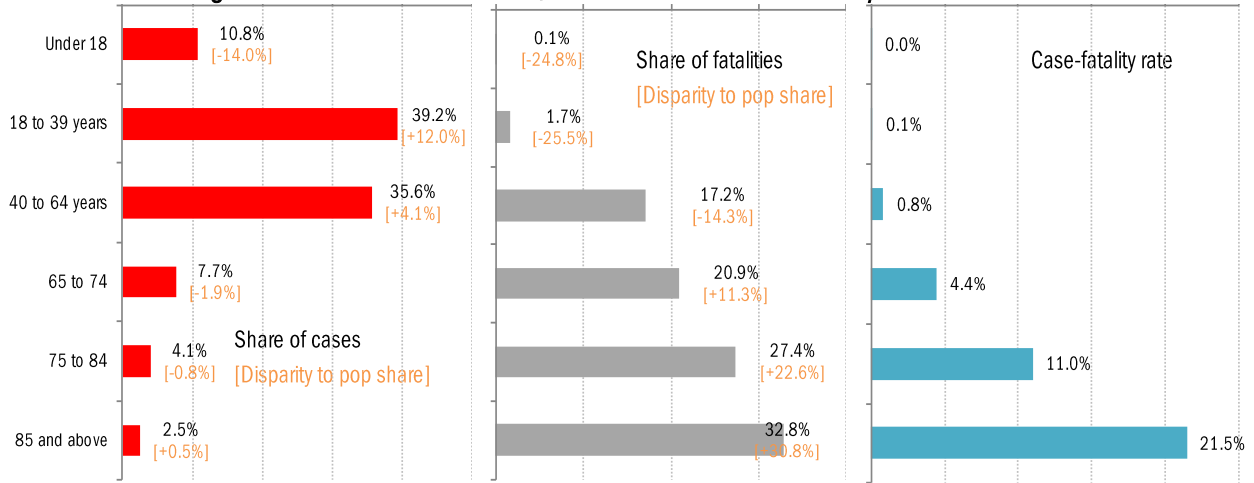
National and state-by-state data do not line up because of different sources



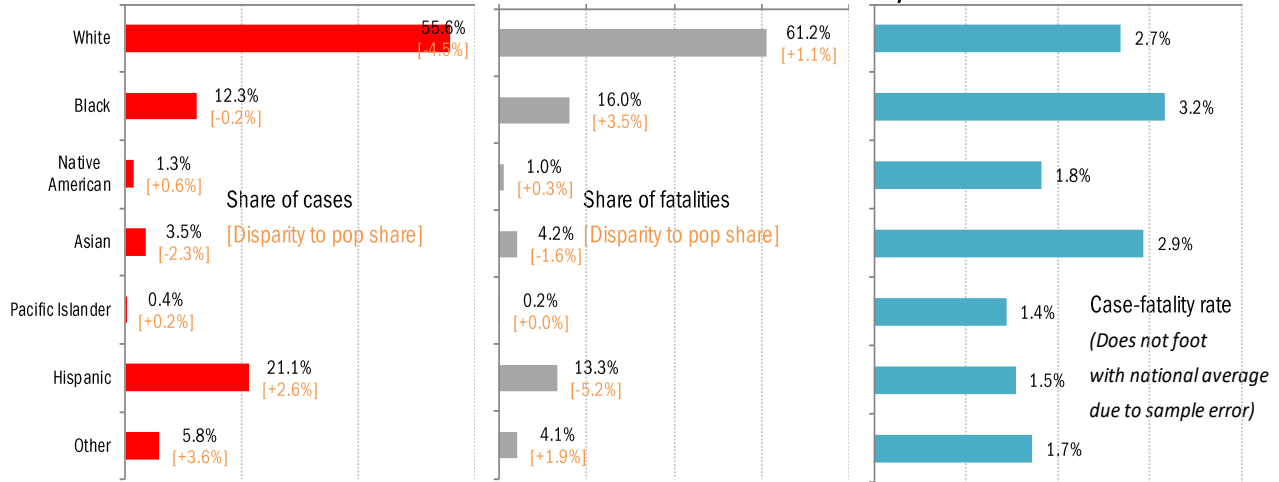
Source: [Covid Tracking Project](#), TrendMacro calculations

US deep-dive on the demographics of age, race and health

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

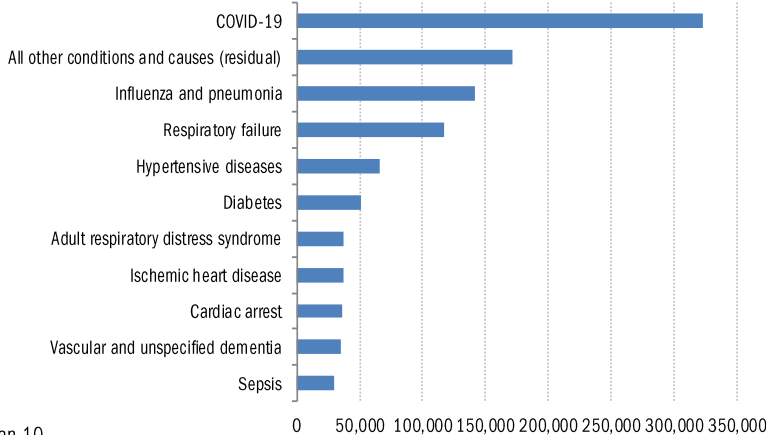


Racial distribution of US cases, fatalities and case-fatality rates



Comorbidities

Top-ten joint causes of Covid mortalities, cumulative



As of Jan 10

For 6% of the deaths, COVID-19 was the only cause mentioned. For deaths with conditions or causes in addition to COVID-19, on average, there were 2.9 additional conditions or causes per death.

Source: Distributions [CDC](#), Comorbidities [CDC](#), TrendMacro calculations

Recommended reading

[COVID Fatality Rates: A Different Perspective](#)

John Hinderaker
Power Line Blog
January 17, 2021

[Fauci Says Biden's 100 Million Doses 'Doable' in 100 Days](#)

Ros Krasny
Bloomberg
January 17, 2021

[Coronavirus second wave surges across Africa](#)

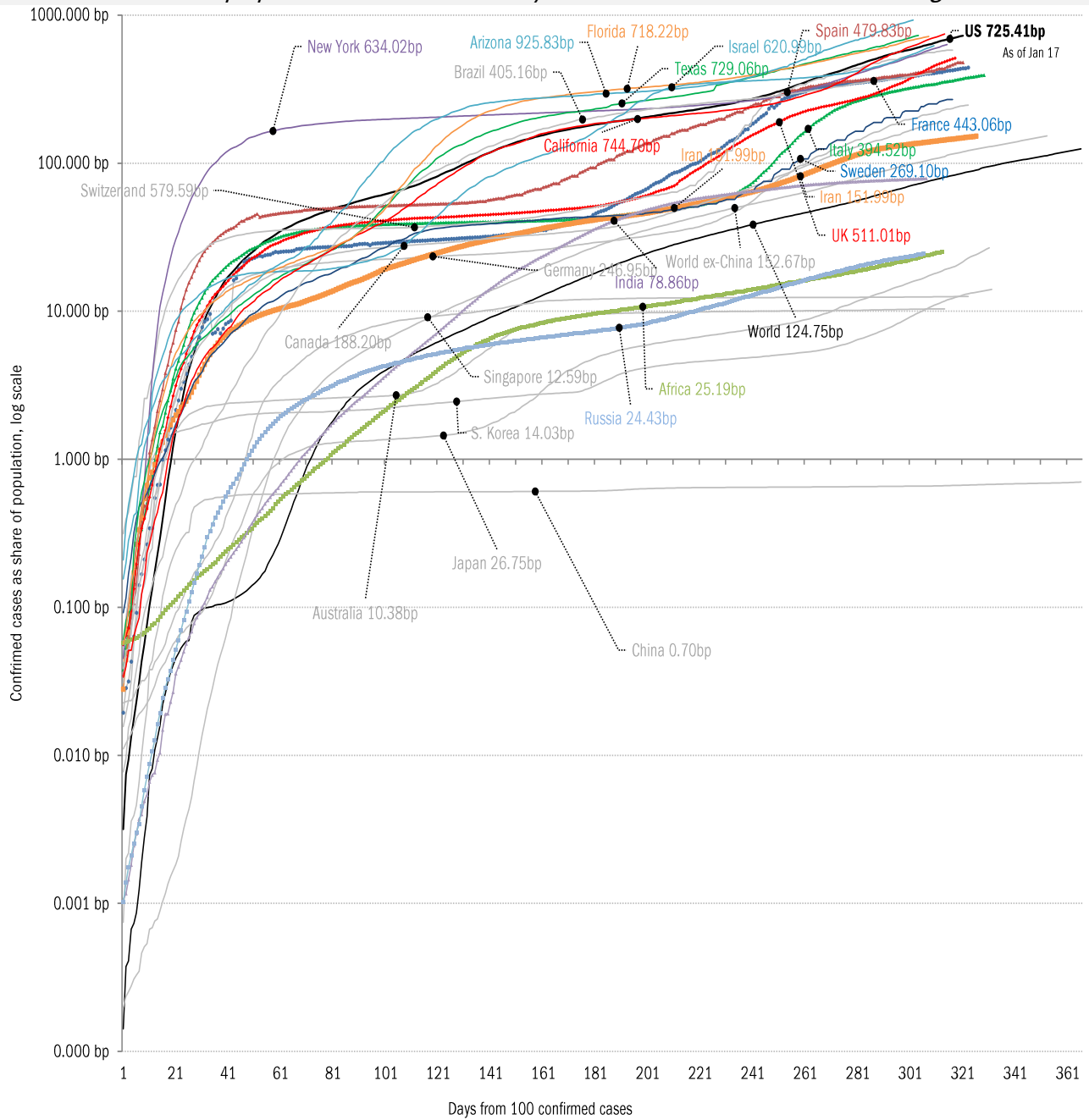
Neil Munshi, Joseph Cotterill and Andres Schipani
Financial Times
January 17, 2021

Meme of day



Source: Our beloved clients, and [Power Line blog "The Week in Pictures"](#)

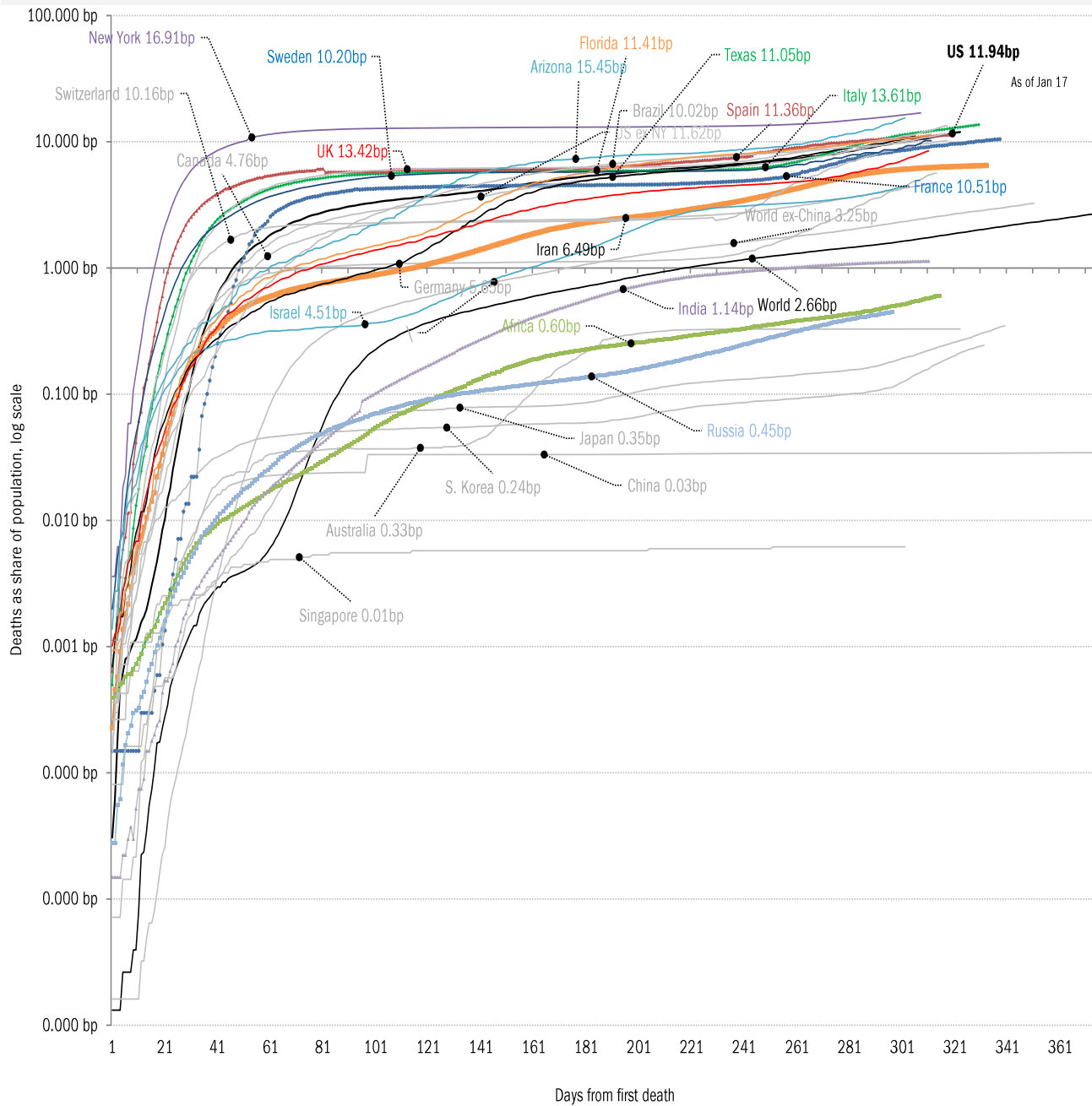
The coronavirus case accelerometer... tracking the world's infection curves
Share of infected population from first day with 100 confirmed cases, log scale



Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

The coronavirus mortality accelerometer ... tracking the world's fatality curves

Share of deceased population from day of first fatality

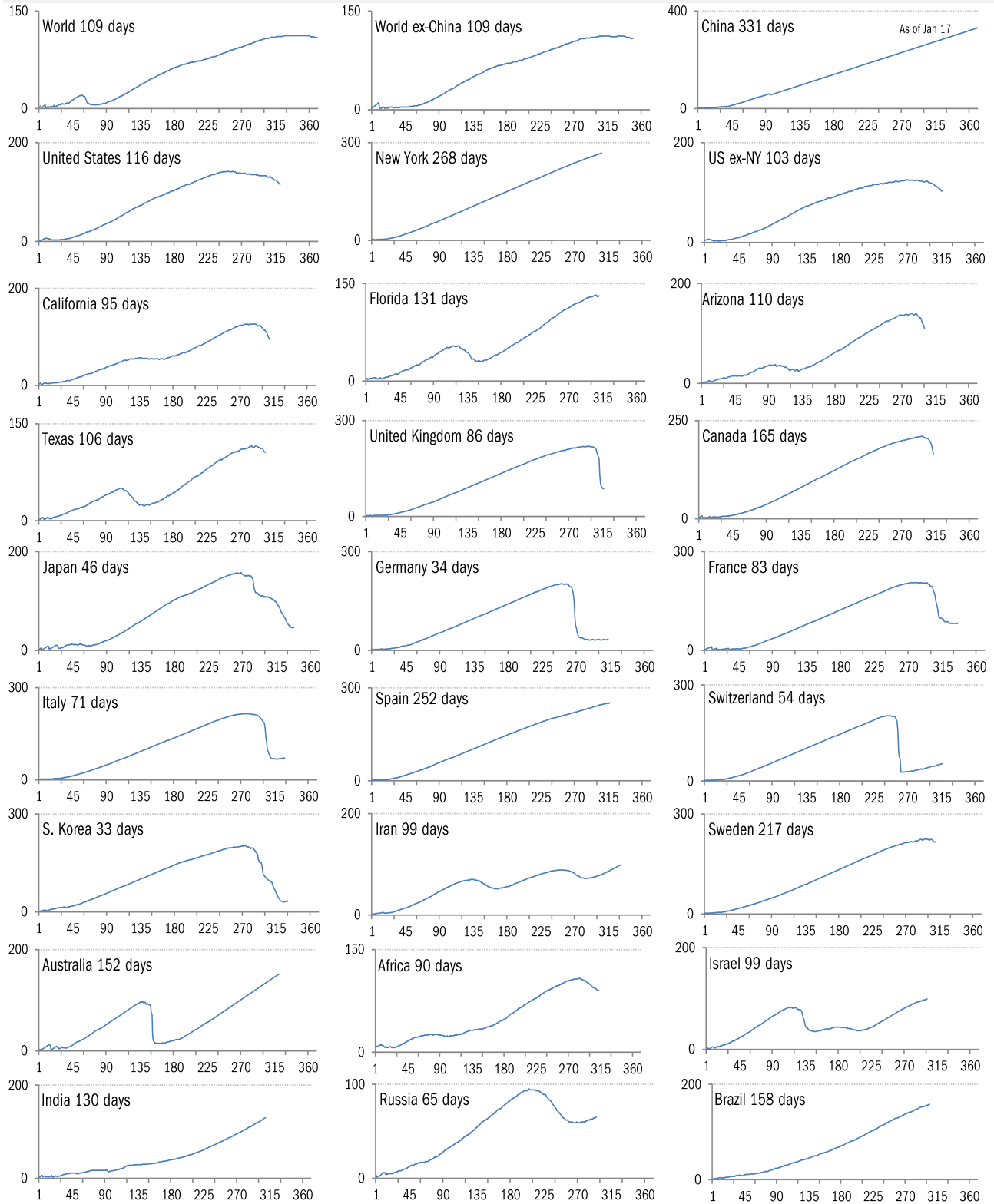


Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

"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

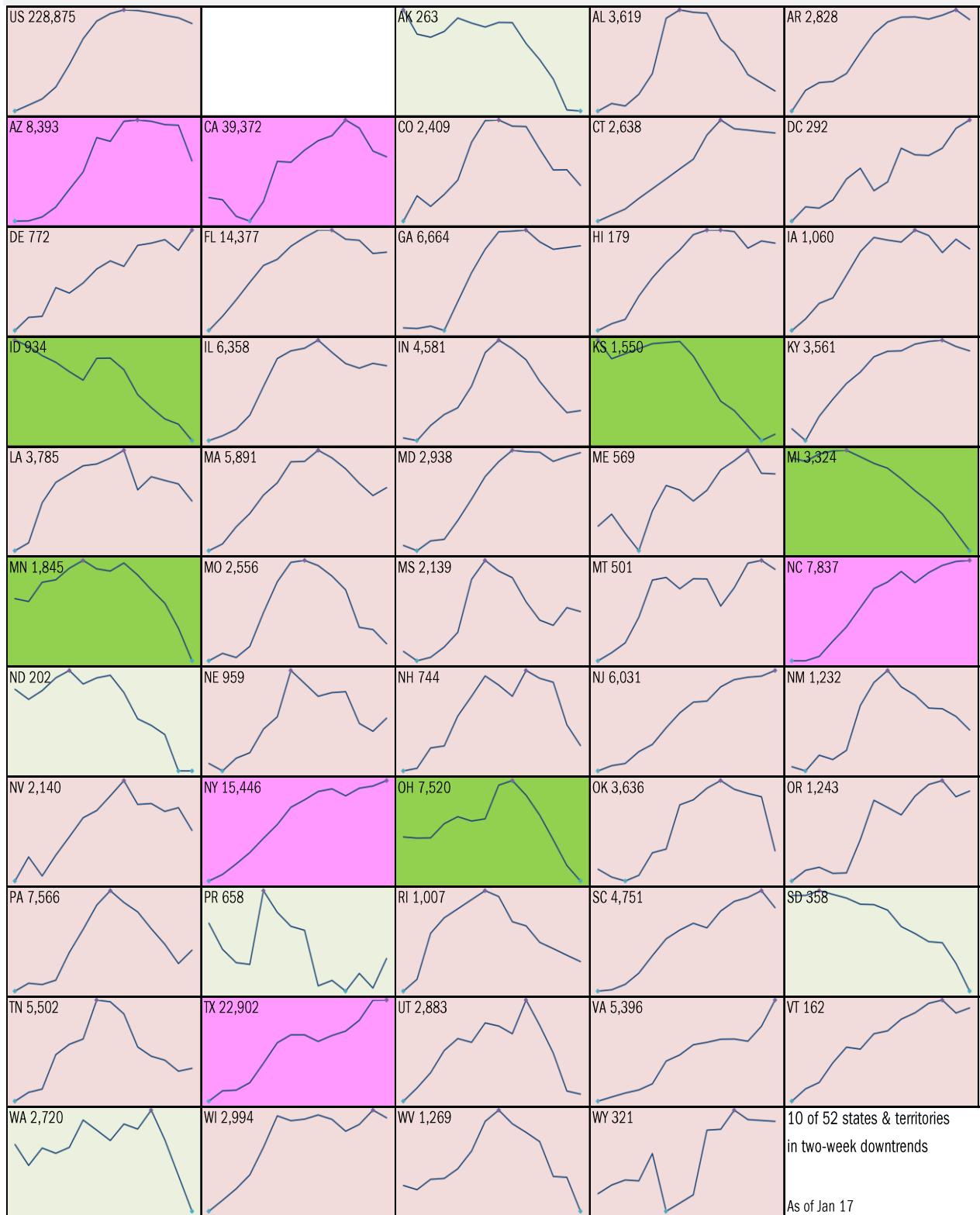


Source: [Johns Hopkins, Covid Tracking Project](#), TrendMacro calculations

Requirement to [Open Up America Again](#): 14-day "downward trajectory" in new cases

14-day moving average, last 14 days *Most recent value displayed* ● High ● Low

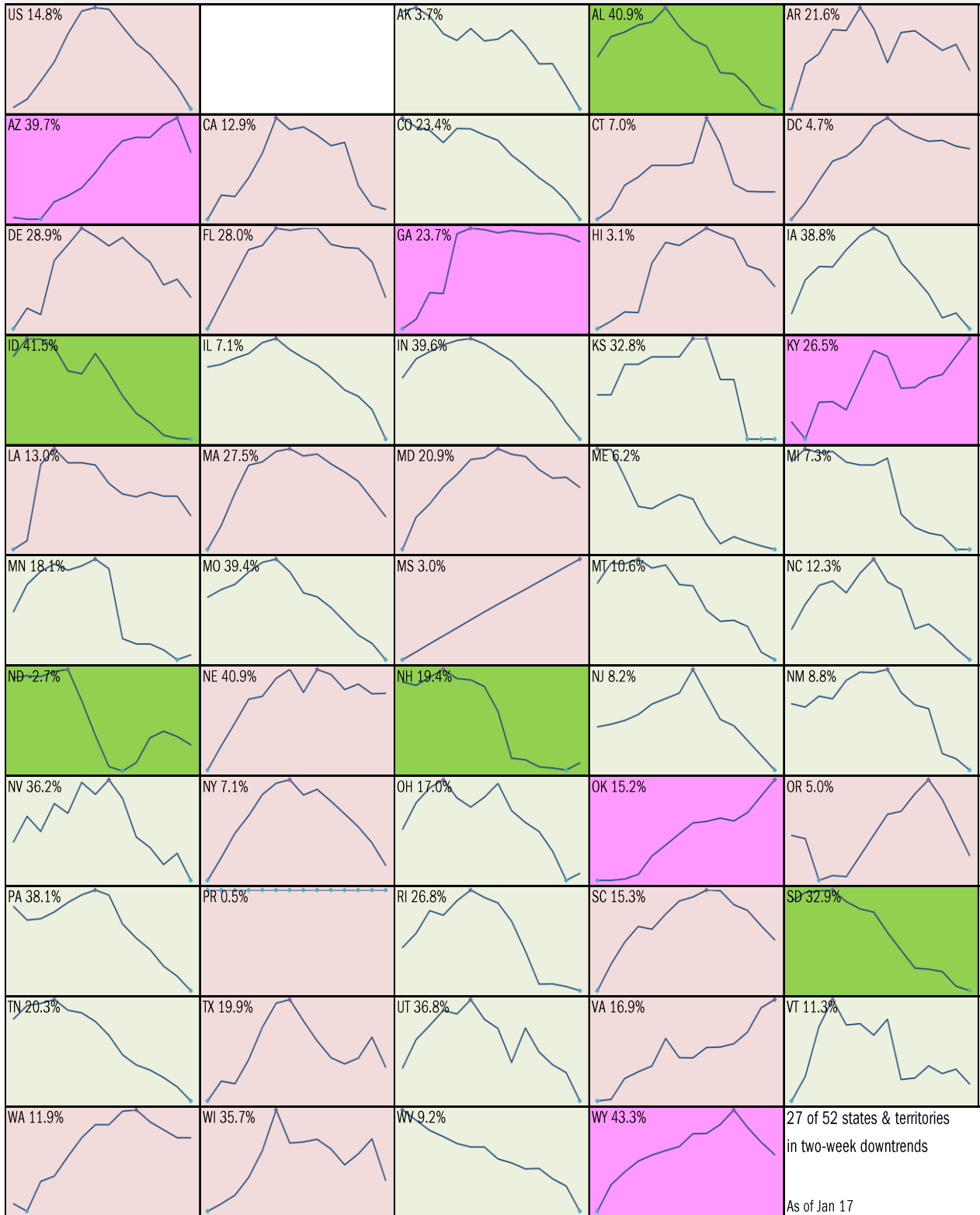
■ Downward trajectory ■ Five best ■ Upward trajectory ■ Five worst



Source: [Covid Tracking Project](#), TrendMacro calculations

Alt requirement to [Open Up America Again](#): 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



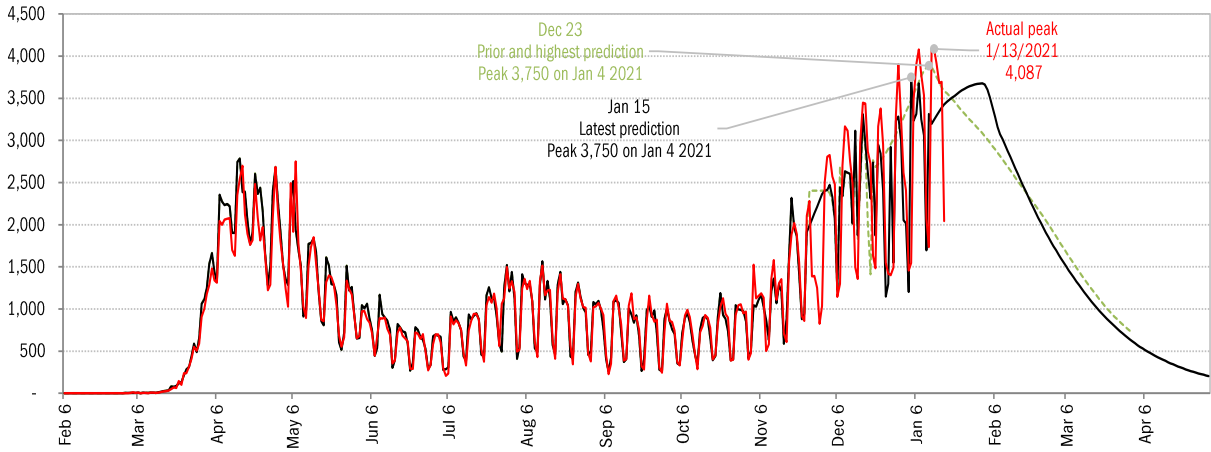
Source: [Covid Tracking Project](#), TrendMacro calculations

Reality-checking the models: actuals versus [IHME](#) predictions

New daily fatalities

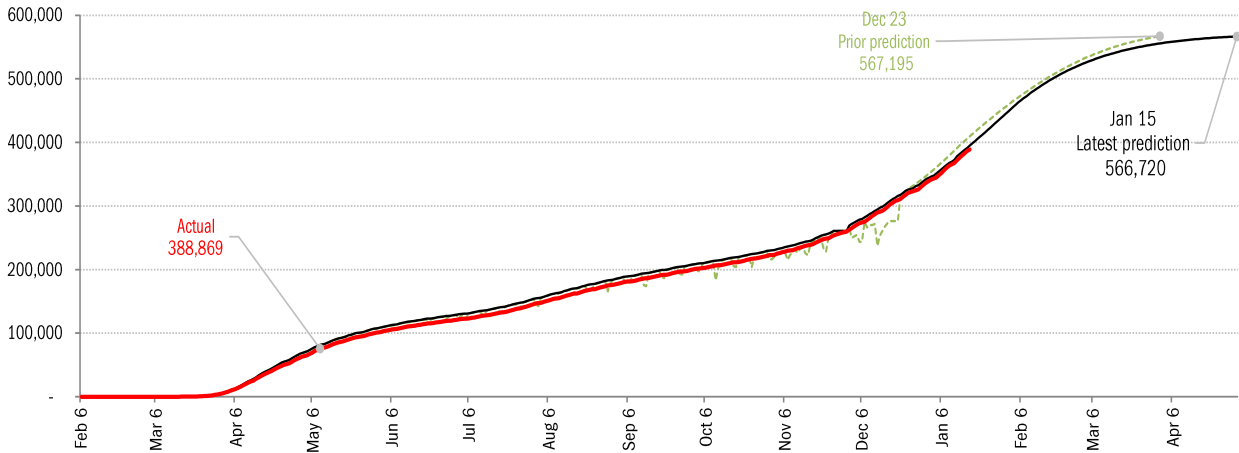
As of Jan 17

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

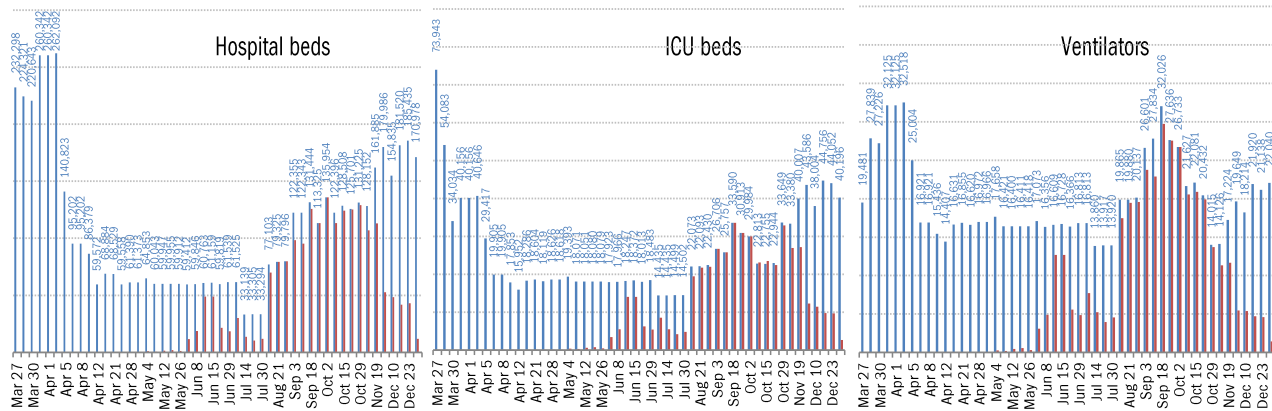


Cumulative fatalities

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

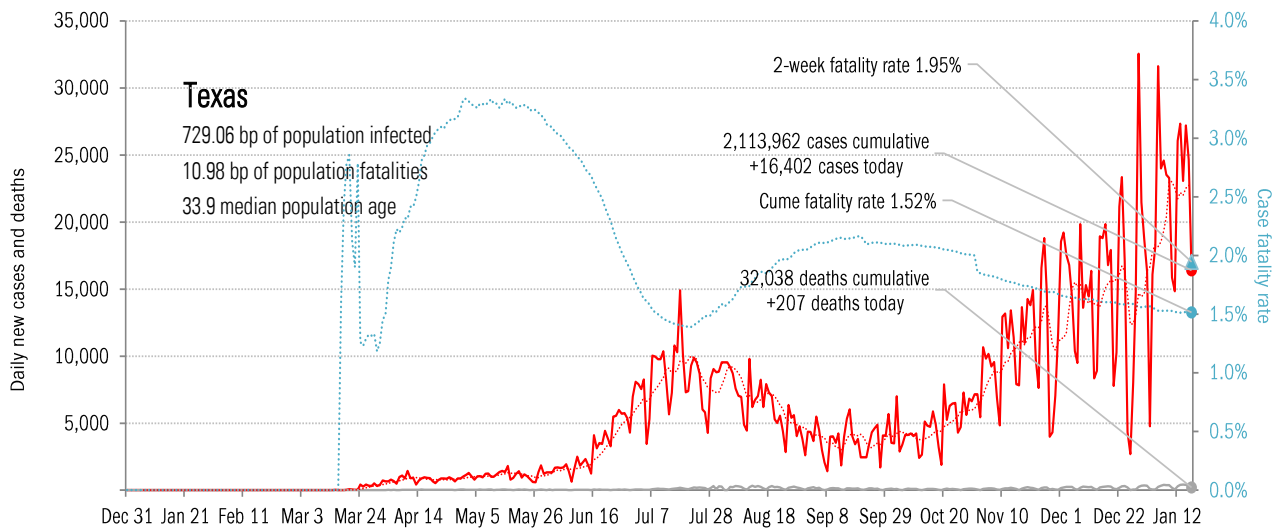
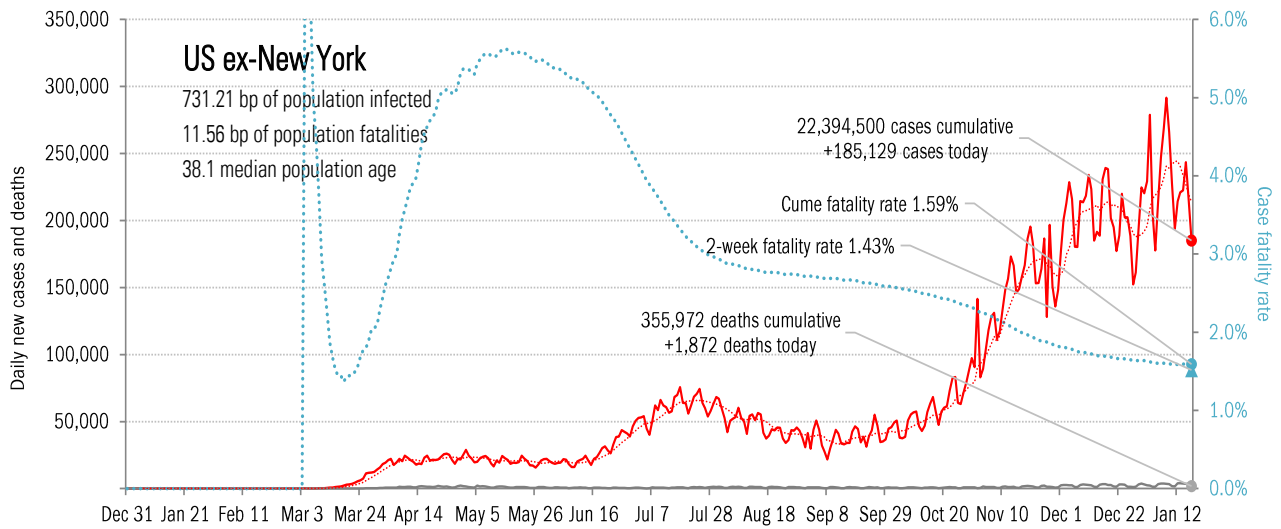
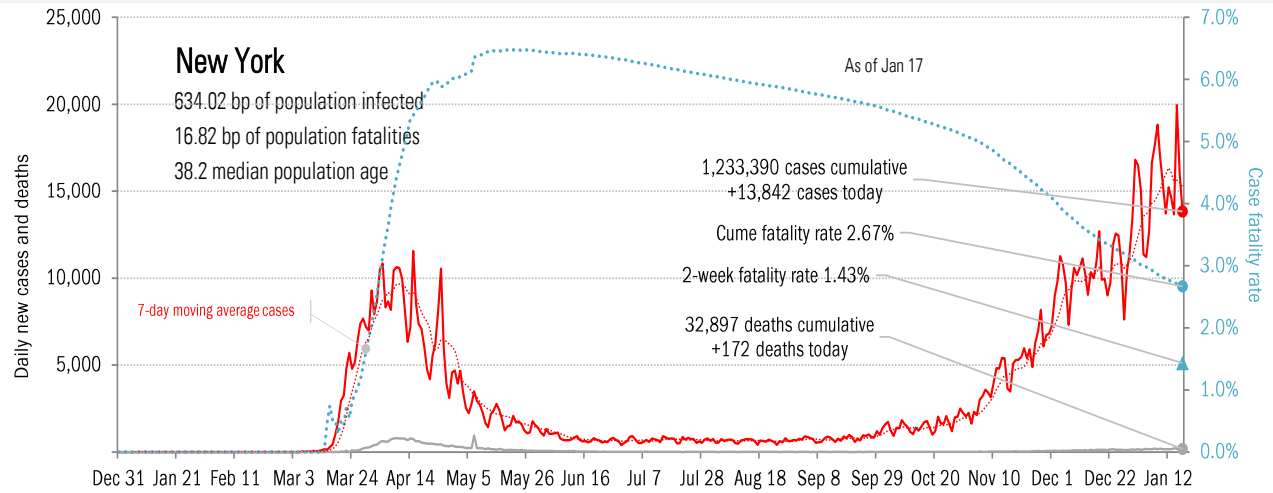


Healthcare system stress, **peak** and **ultimate** estimated at each model revision



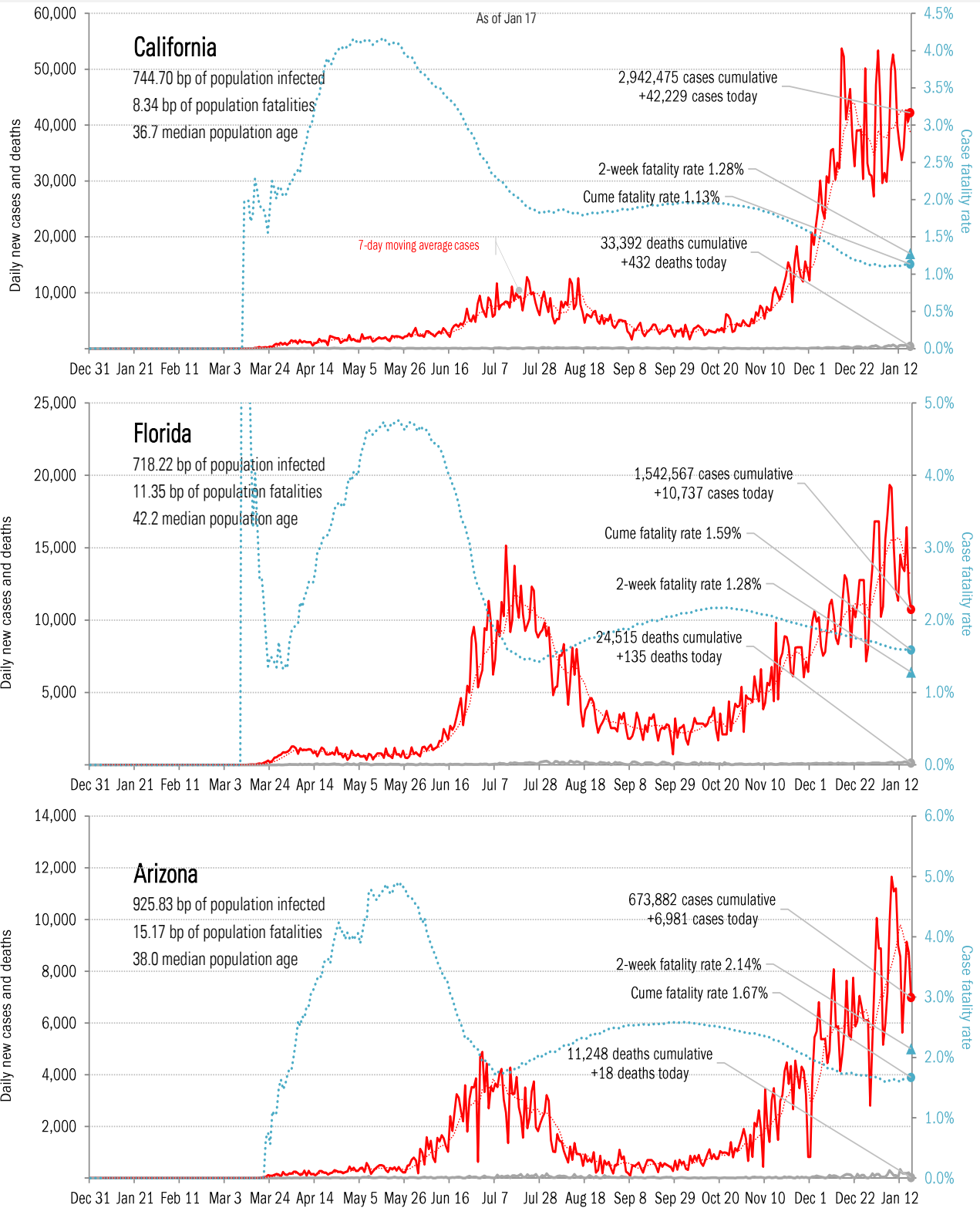
Source: [IHME](#), [Covid Tracking Project](#), TrendMacro calculations

From Ground Zero to the Rio Grande



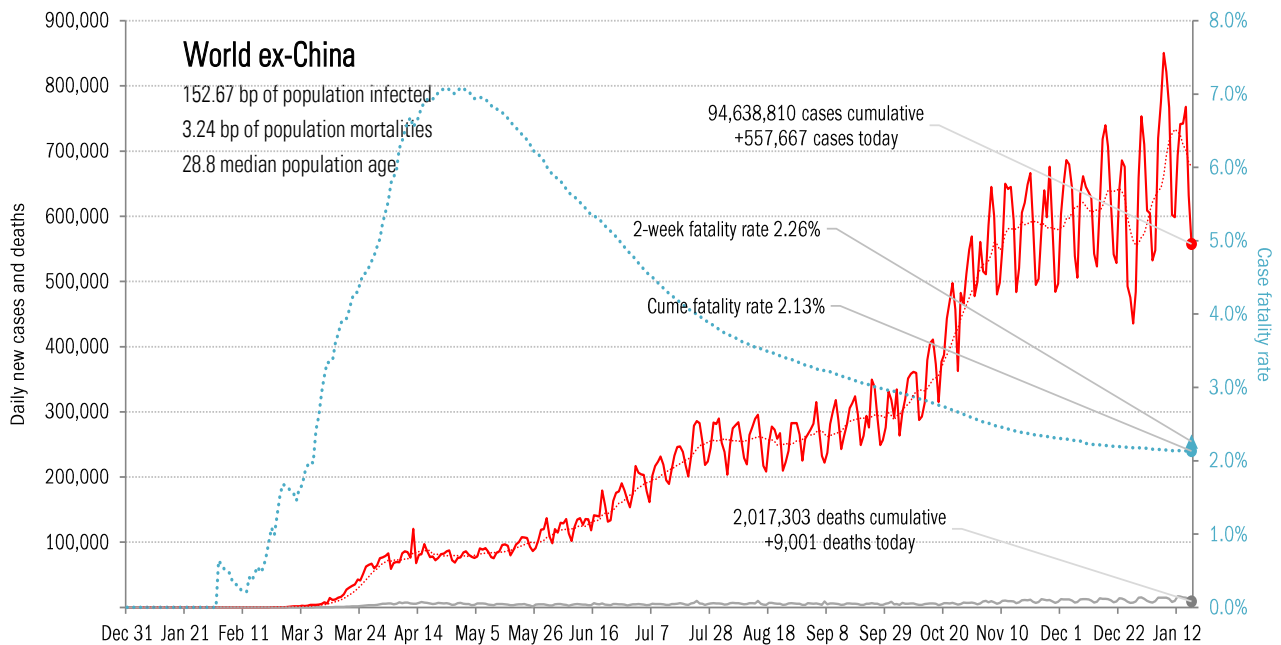
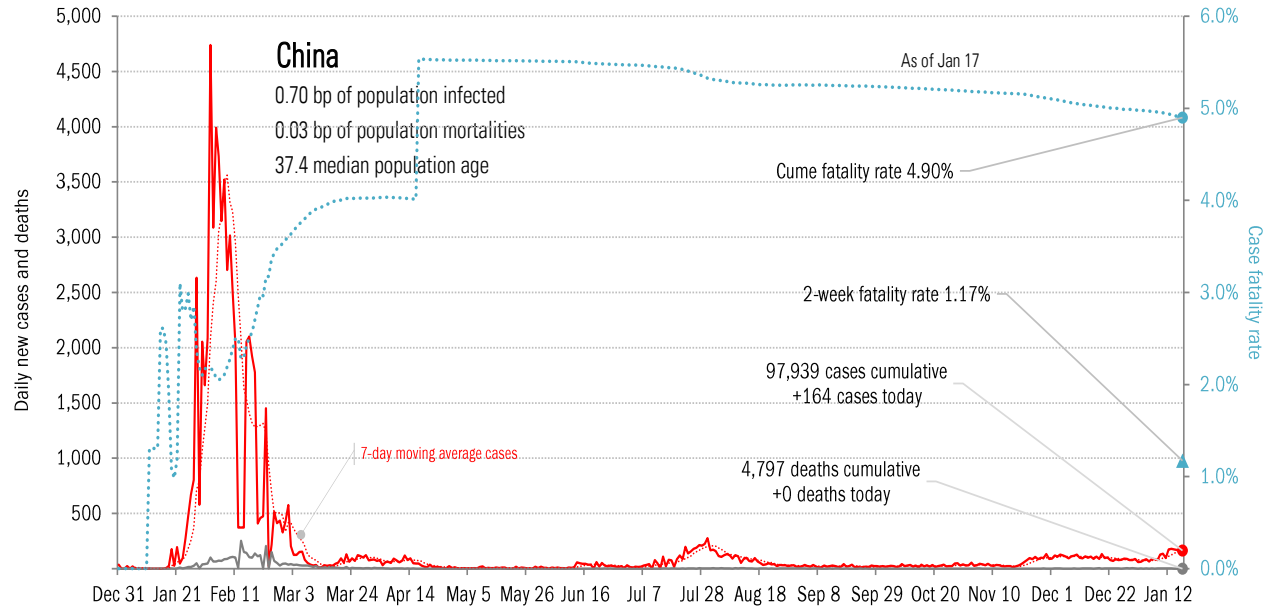
Source: [Covid Tracking Project](#), TrendMacro calculations

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



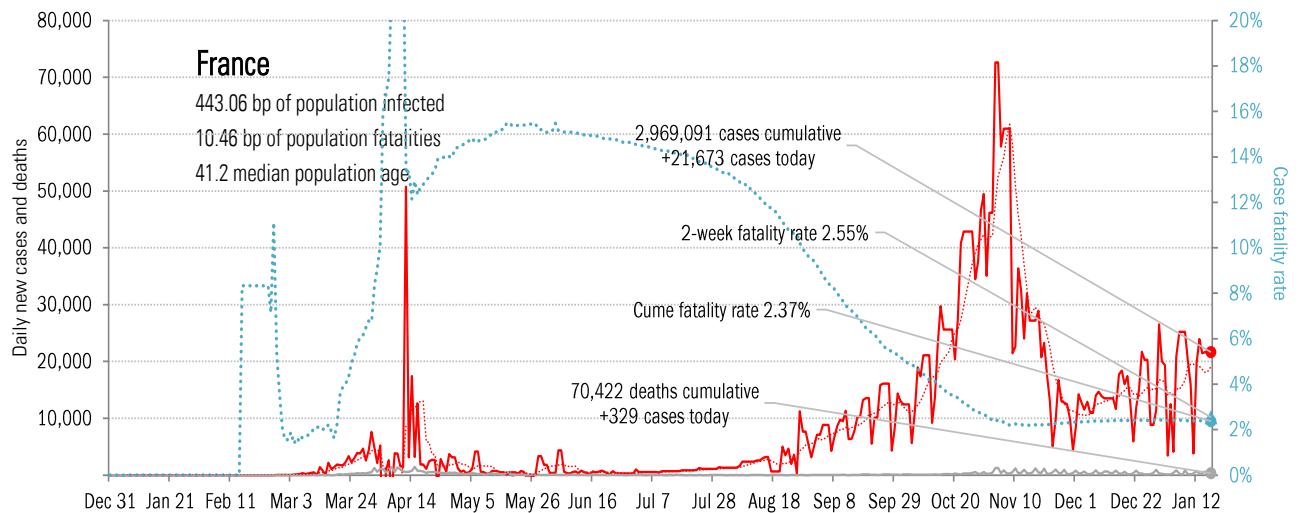
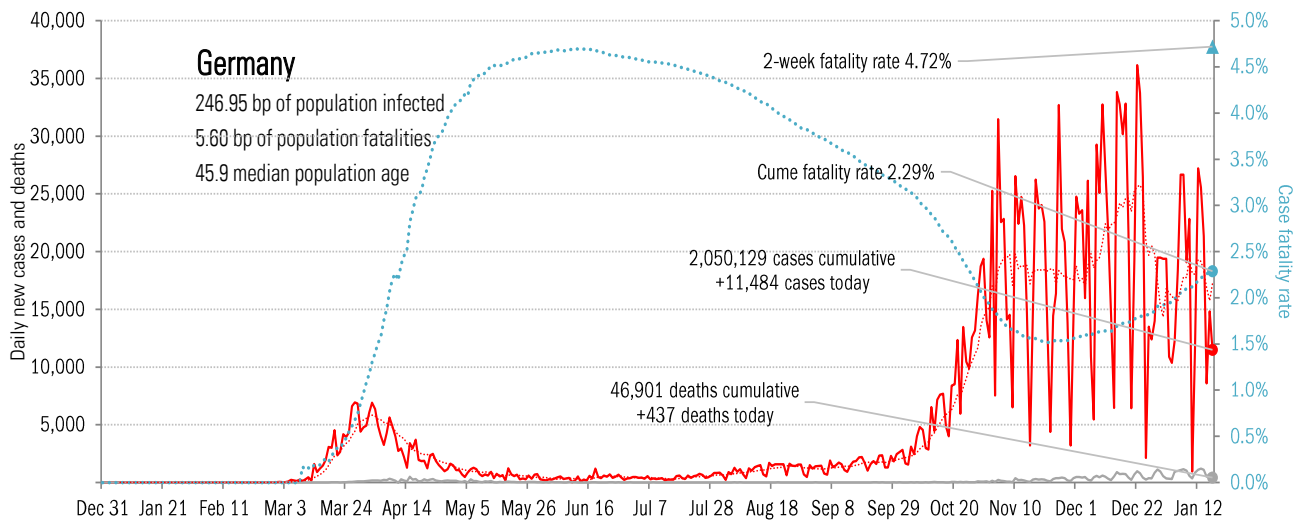
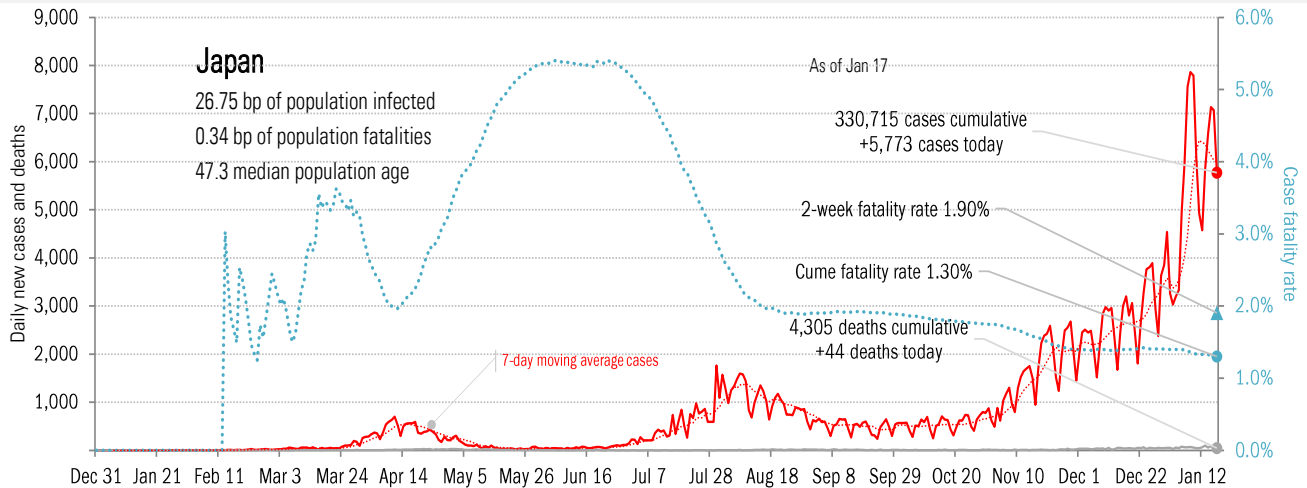
Source: [Covid Tracking Project](#), TrendMacro calculations

Patient zero... and then everyone else



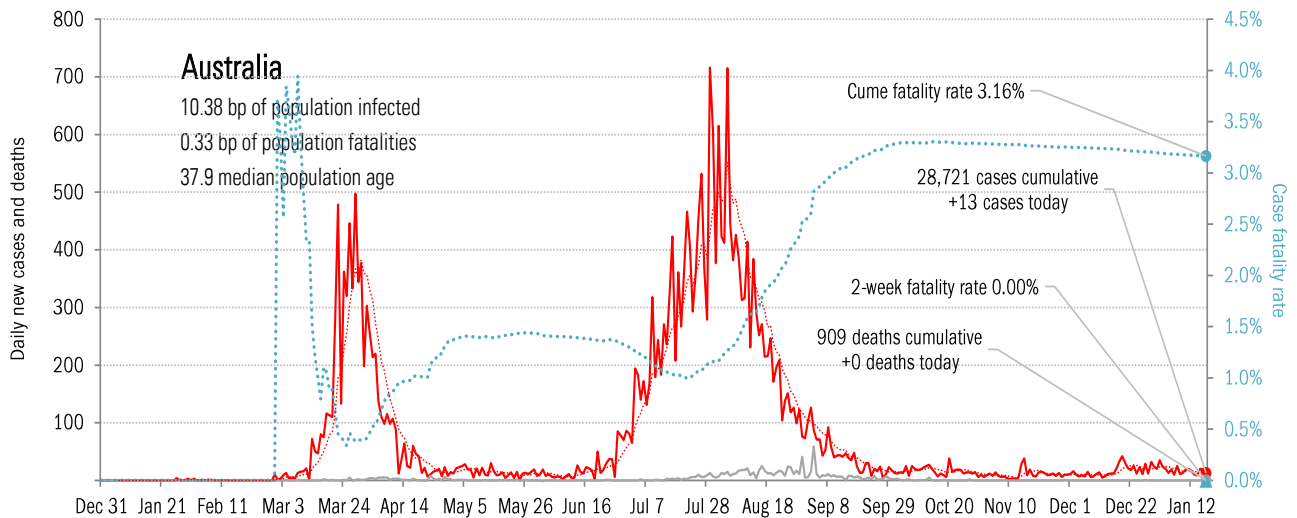
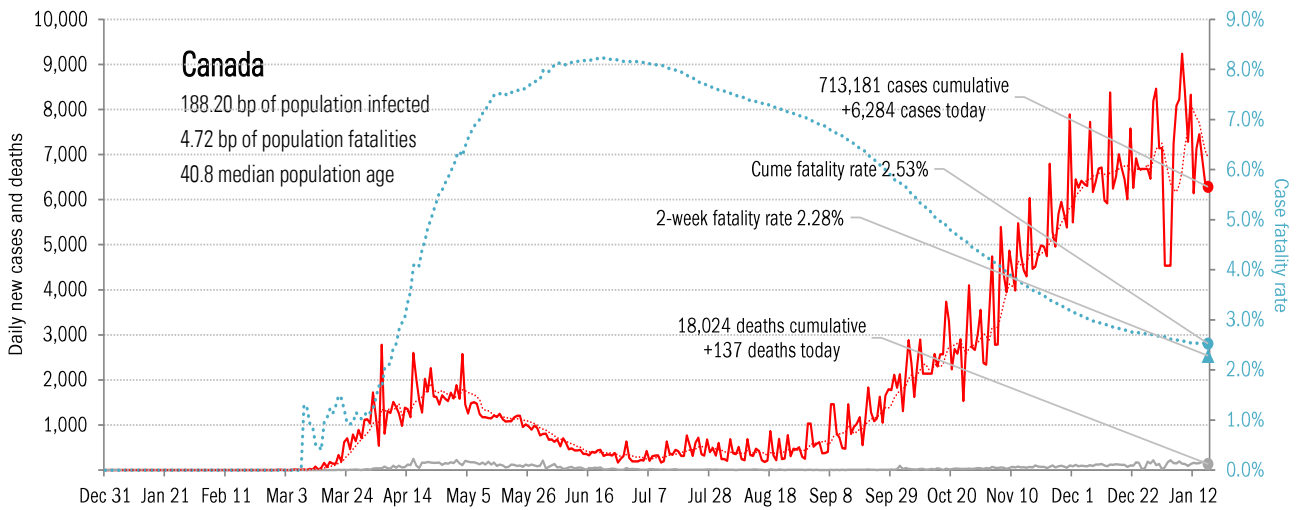
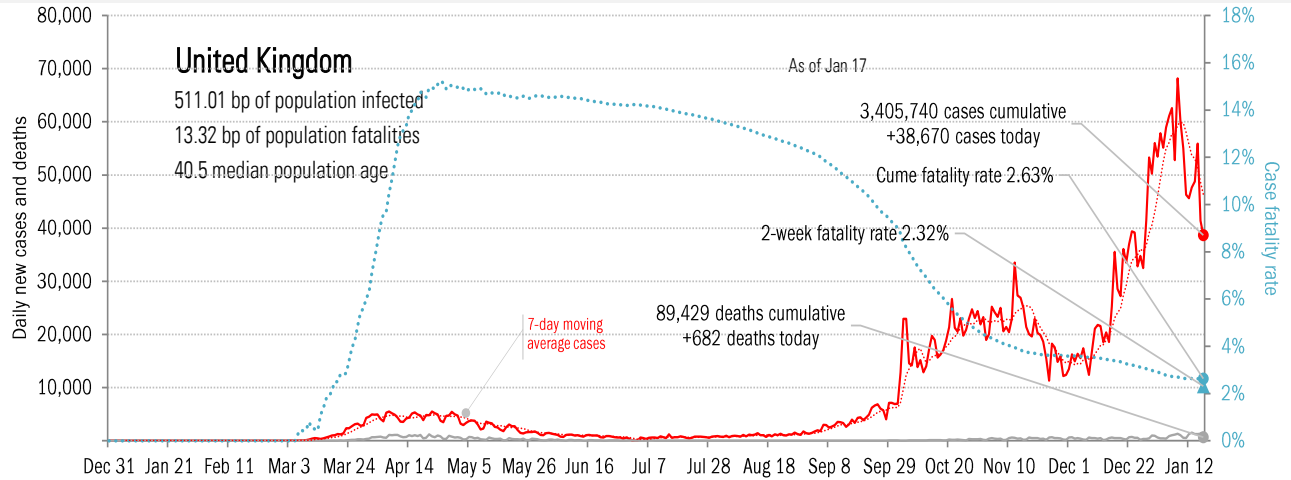
Source: [Johns Hopkins](#), [Covid Tracking Project](#), TrendMacro calculations

Impact in the largest economies



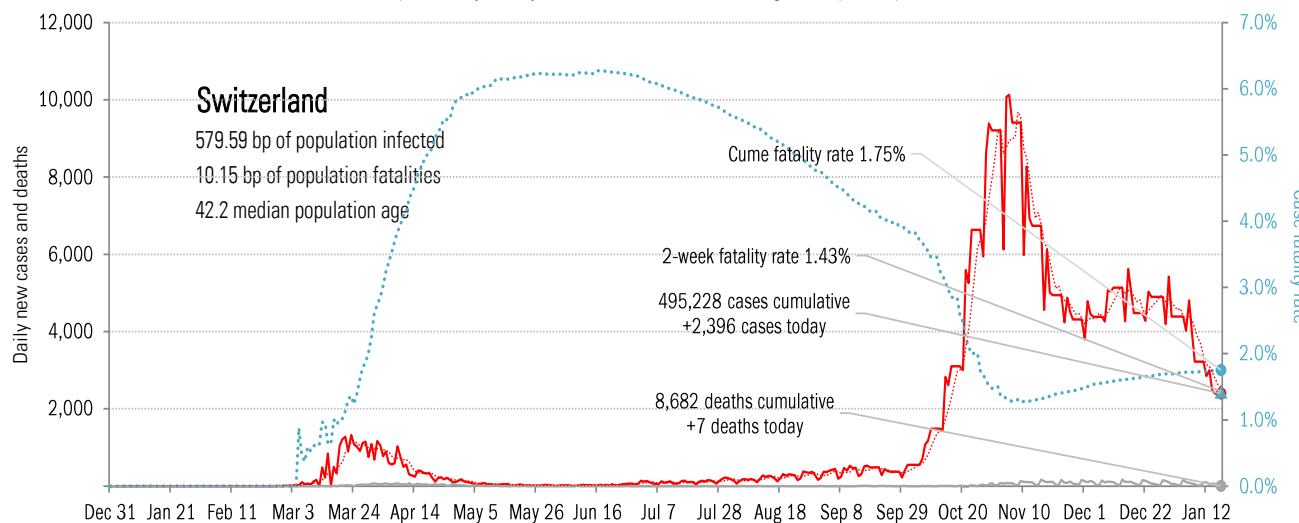
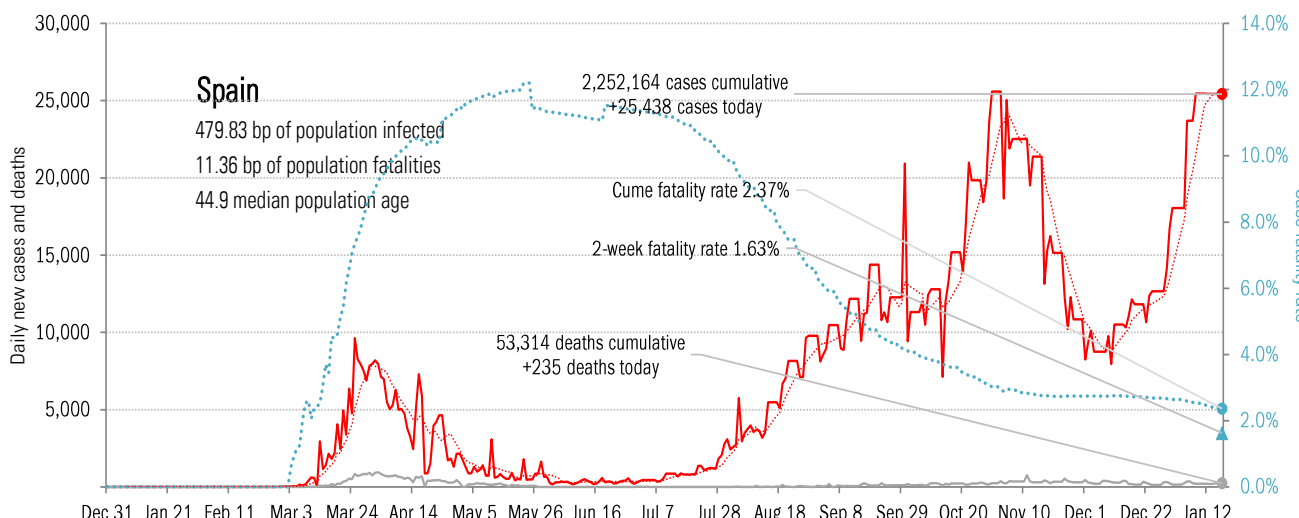
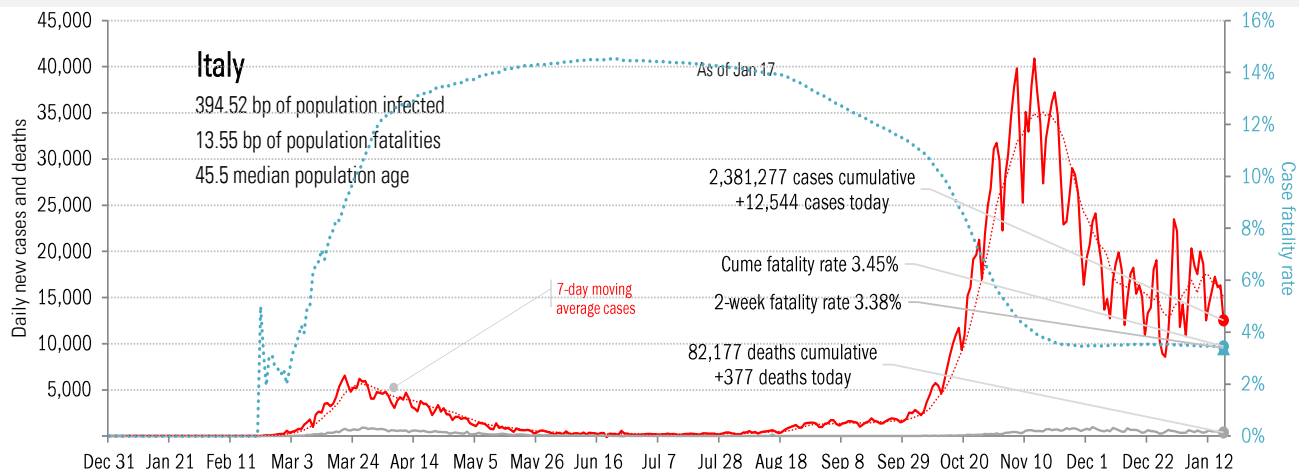
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in The Anglosphere



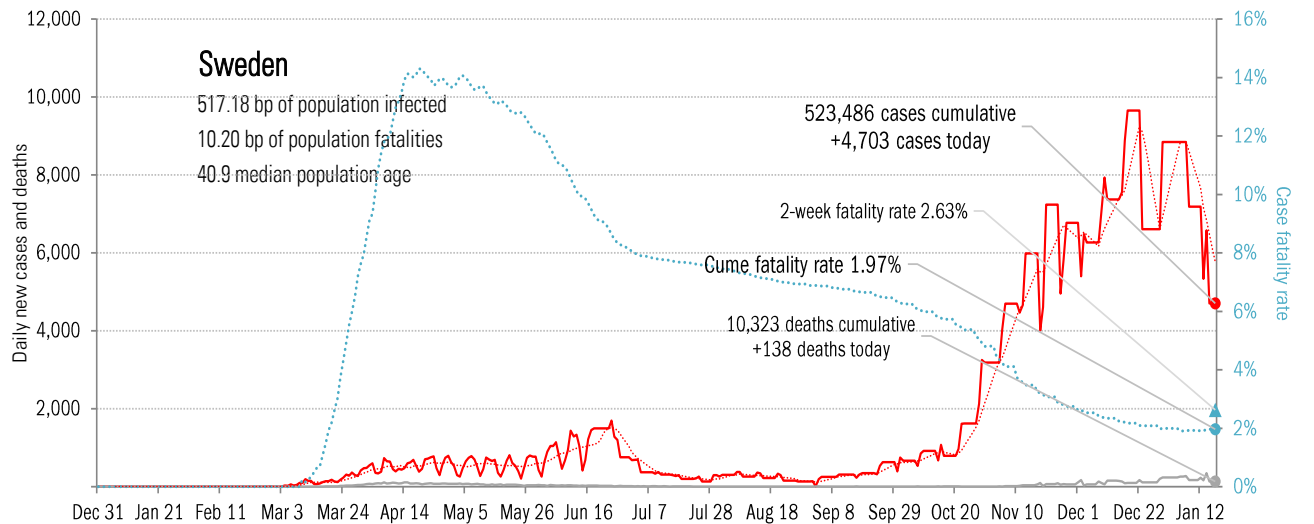
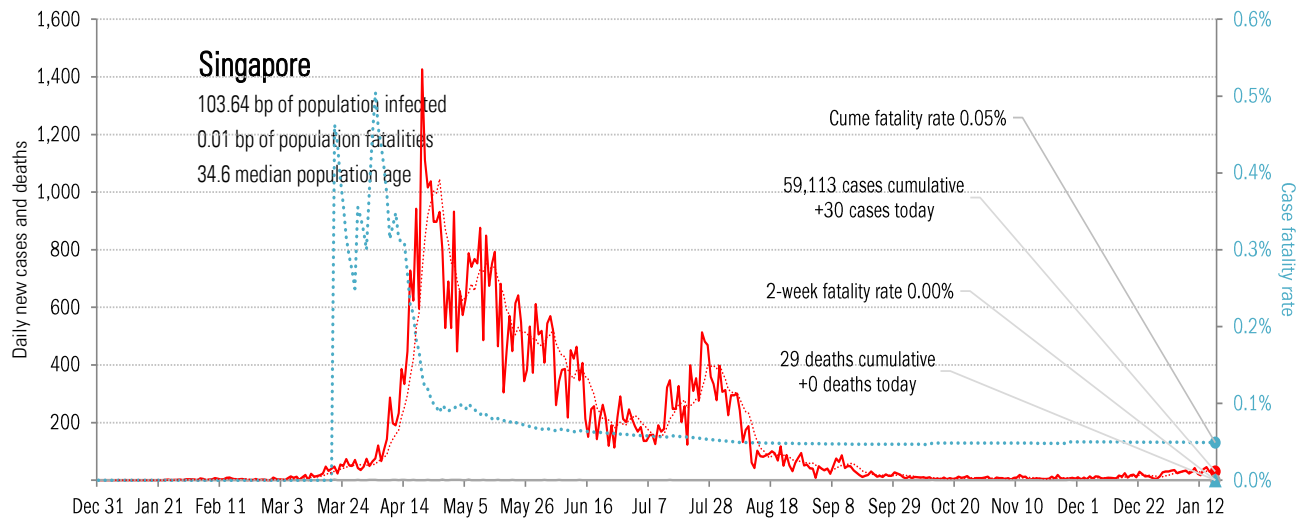
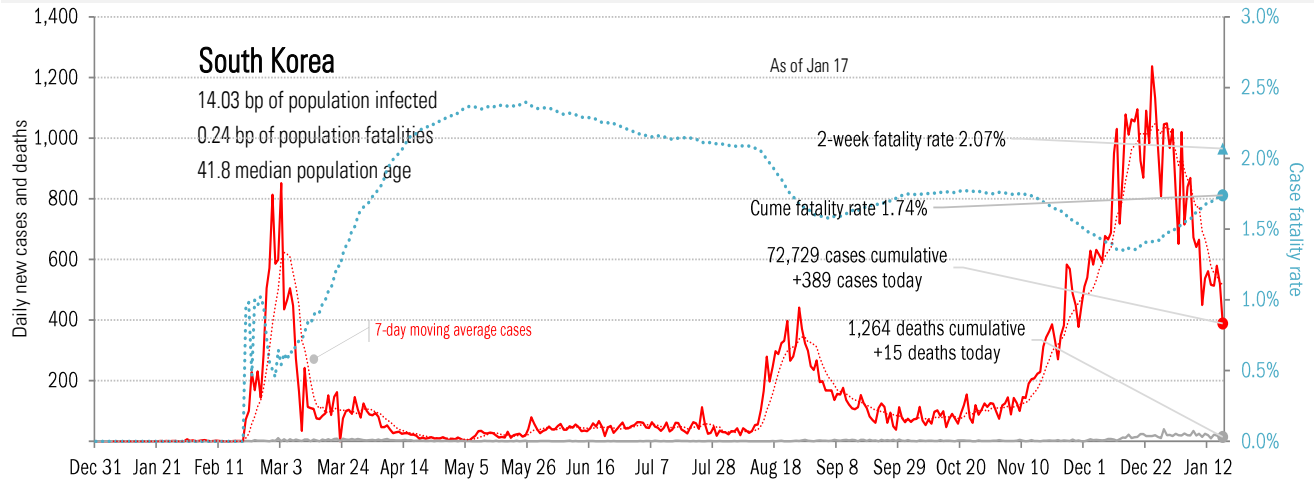
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in continental Europe



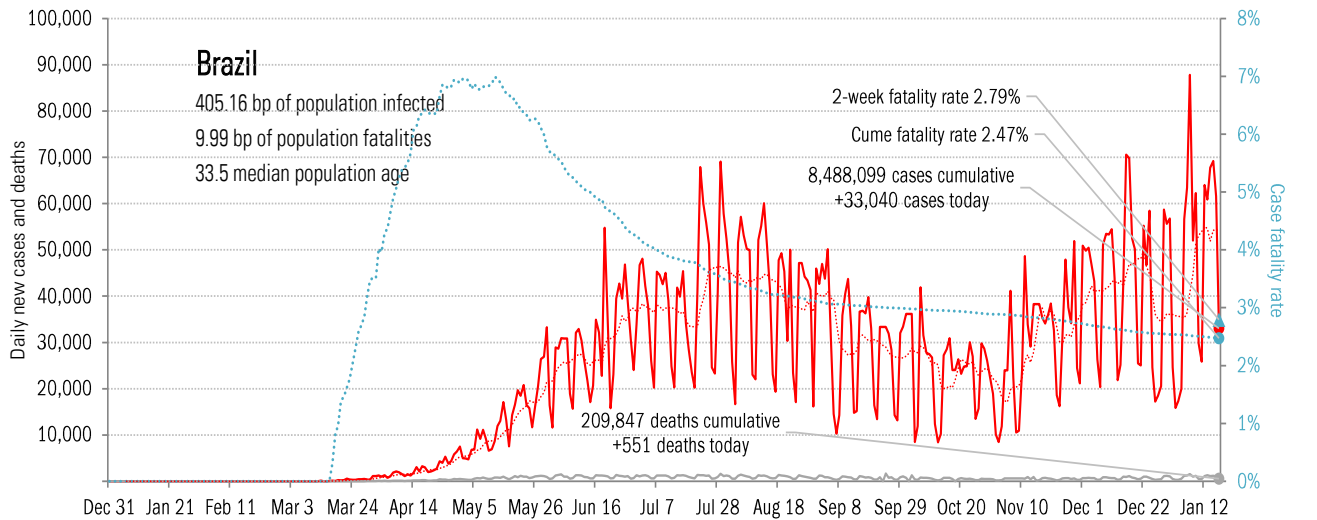
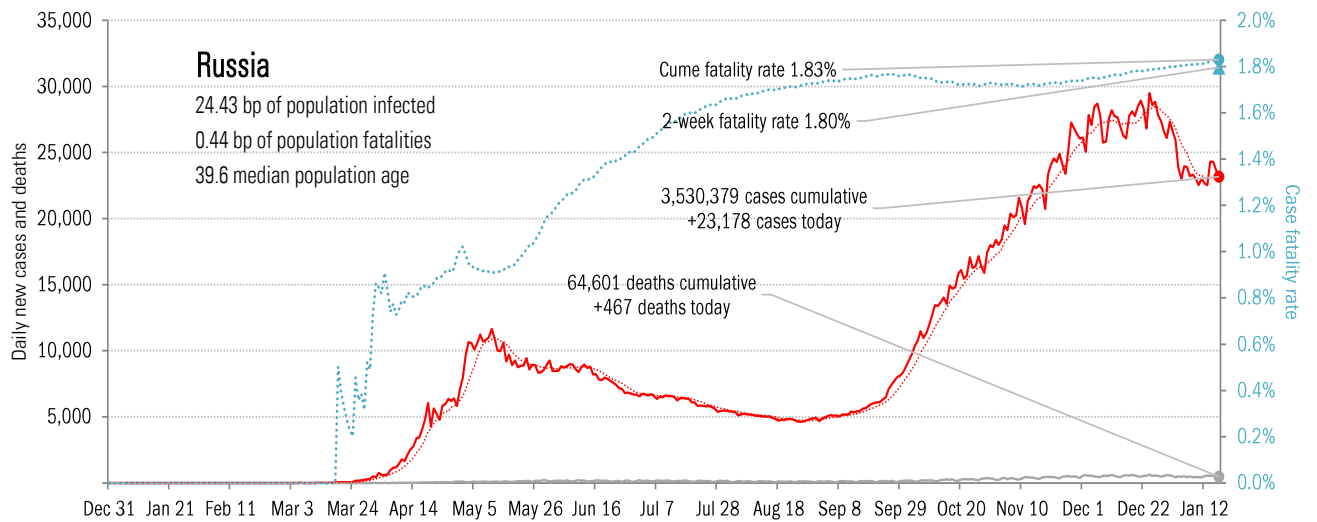
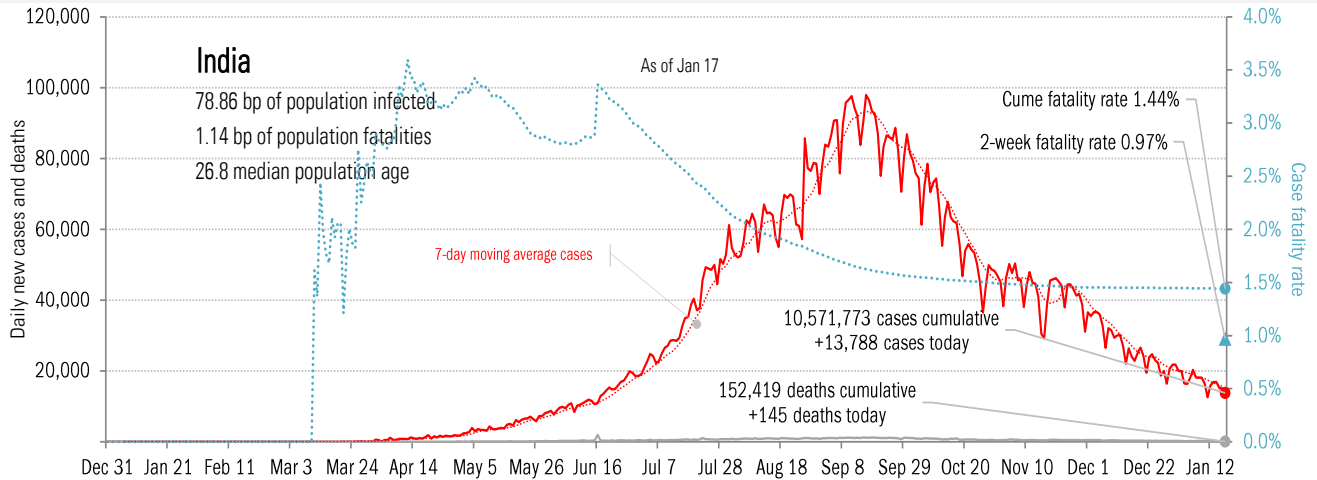
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in other hot-spots



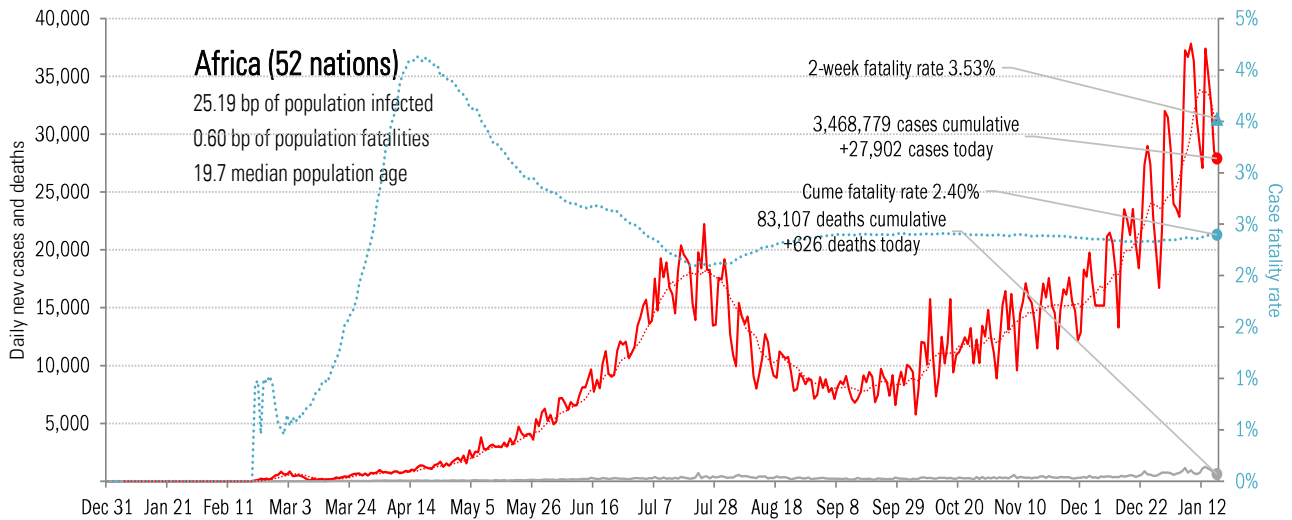
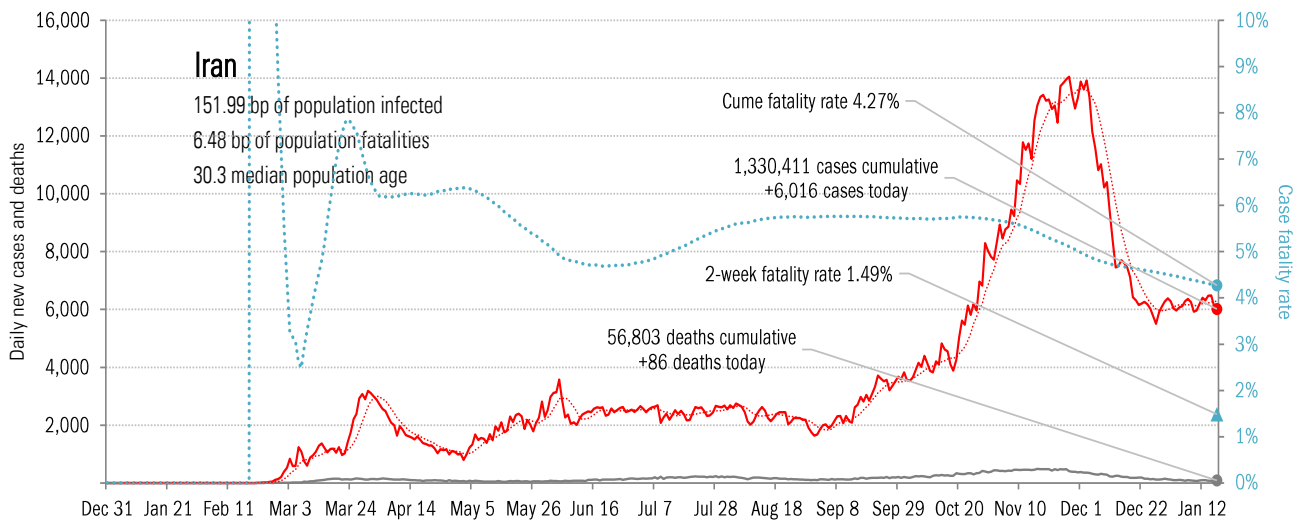
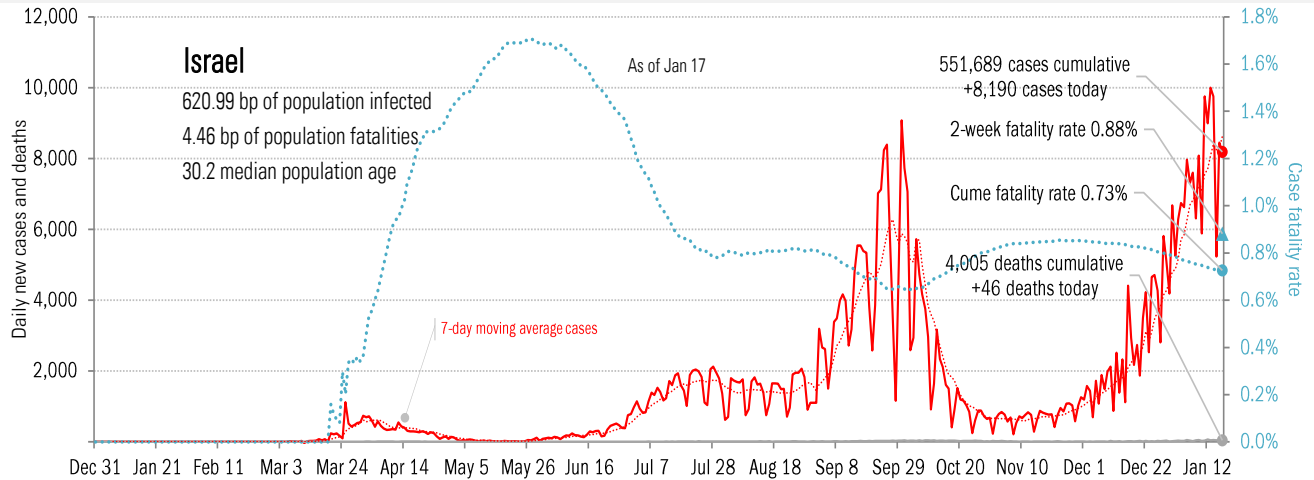
Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the BRICs ex-China



Source: [Johns Hopkins](#), TrendMacro calculations

Impact in the Middle East and Africa



Source: [Johns Hopkins](#), TrendMacro calculations