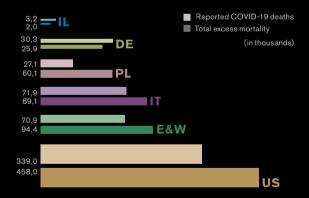
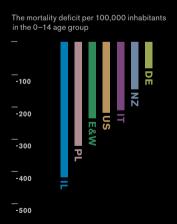
is costing millions of lives. The true extent of the pandemic is revealed by "excess mortality": the difference between total reported deaths in 2020 and those expected to occur on the basis of previous years. A team at the Max Planck Institute for Demographic Research compared these figures, and their results show that the mortality rate not only depends on the rate of infections and the protective measures implemented, but also on such factors as the capacity and efficiency of the health care system, as well as the aging structure of the population.

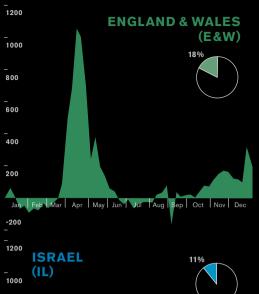
## REPORTED AND ACTUAL DEATHS

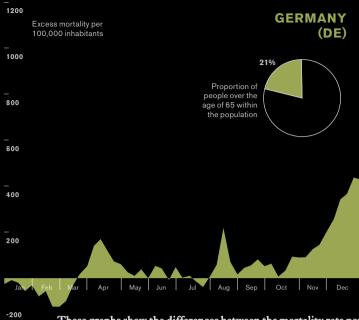


In many places, the pandemic has claimed more victims than reported, due, for example, to overstretched health systems. On the other hand, measures such as mask-wearing, social distancing and restrictions on travel have also prevented deaths from other infections and accidents. This can be seen in Germany and Israel, for example, where the number of reported COVID-19 deaths was higher than excess mortality (above). This probably also accounts for the decreased mortality rate among children and adolescents (right).

## **FEWER CHILDREN DIED**







-800 -600 -400

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

These graphs show the differences between the mortality rate per 100,000 inhabitants per calendar week throughout 2020 and the average rates for the same periods between 2016 and 2019. New Zealand, where only 25 people per 100,000 of the population died from COVID-19, is an outlier. The relatively low excess mortality rate in Israel, by contrast, which was heavily impacted by the pandemic, is probably related to the relatively young population. In addition, effects unrelated to COVID-19 are apparent: many people in Germany, for example, died in August as a result of a heat wave.



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