

# Measuring the burden

Tracking the cost, research effort and human impact of global diseases. **Data analysis by Bo Wu.**  
**Infographic by Bec Crew and Tanner Maxwell.**

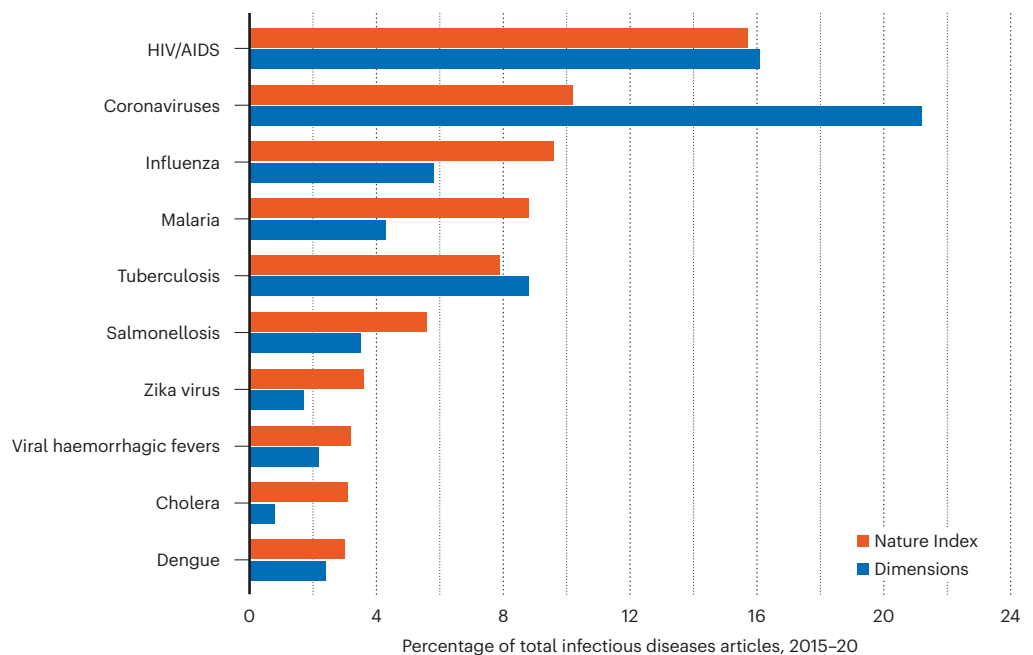
## WHICH DISEASES HAVE THE HIGHEST OUTPUT IN THE RESEARCH LITERATURE?

The top diseases by output in the Nature Index, which tracks articles in 82 selected natural-sciences journals, are shown in orange. Articles related to HIV account for 15.7% of the total infectious-diseases-related articles for 2015–20, the highest of any infectious disease.

Output in the Dimensions database from Digital Science is shown in blue. Coronavirus dominates, accounting for 21.2% of infectious-diseases articles. The vast majority of these articles are related to COVID-19, which accounts for 19.7% of total infectious-disease-related articles in Dimensions for 2015–20.

Top infectious diseases in Dimensions that do not appear in the Nature Index top 10 are human papillomavirus (ranked fourth), hepatitis C (ranked sixth) and hepatitis B (ranked 8th).

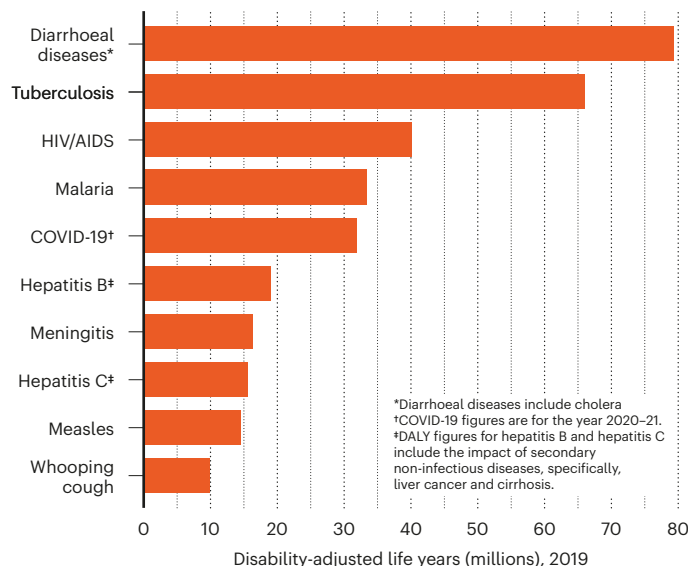
Top 10 infectious diseases tracked by the Nature Index



## WHICH DISEASES EXACT THE GREATEST TOLL?

One disability-adjusted life years (DALY) represents the loss of the equivalent of one year of full health. COVID-19 has quickly assumed a place among the world's deadliest diseases.

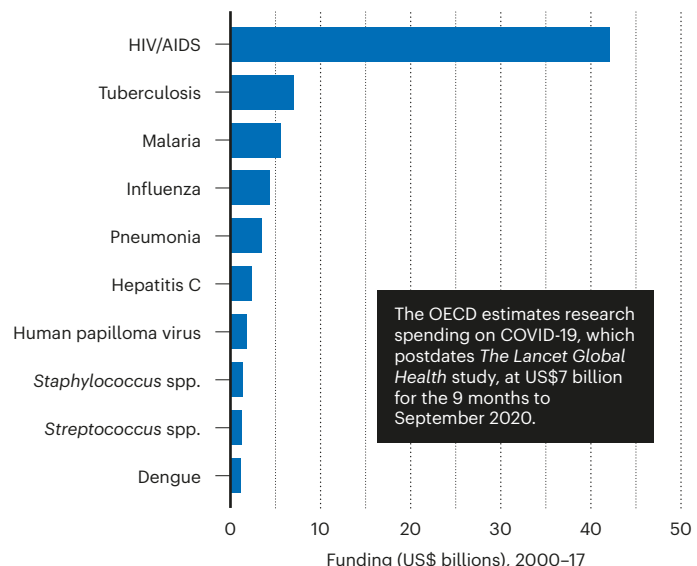
Top 10 infectious diseases tracked by disability-adjusted life years (DALY)

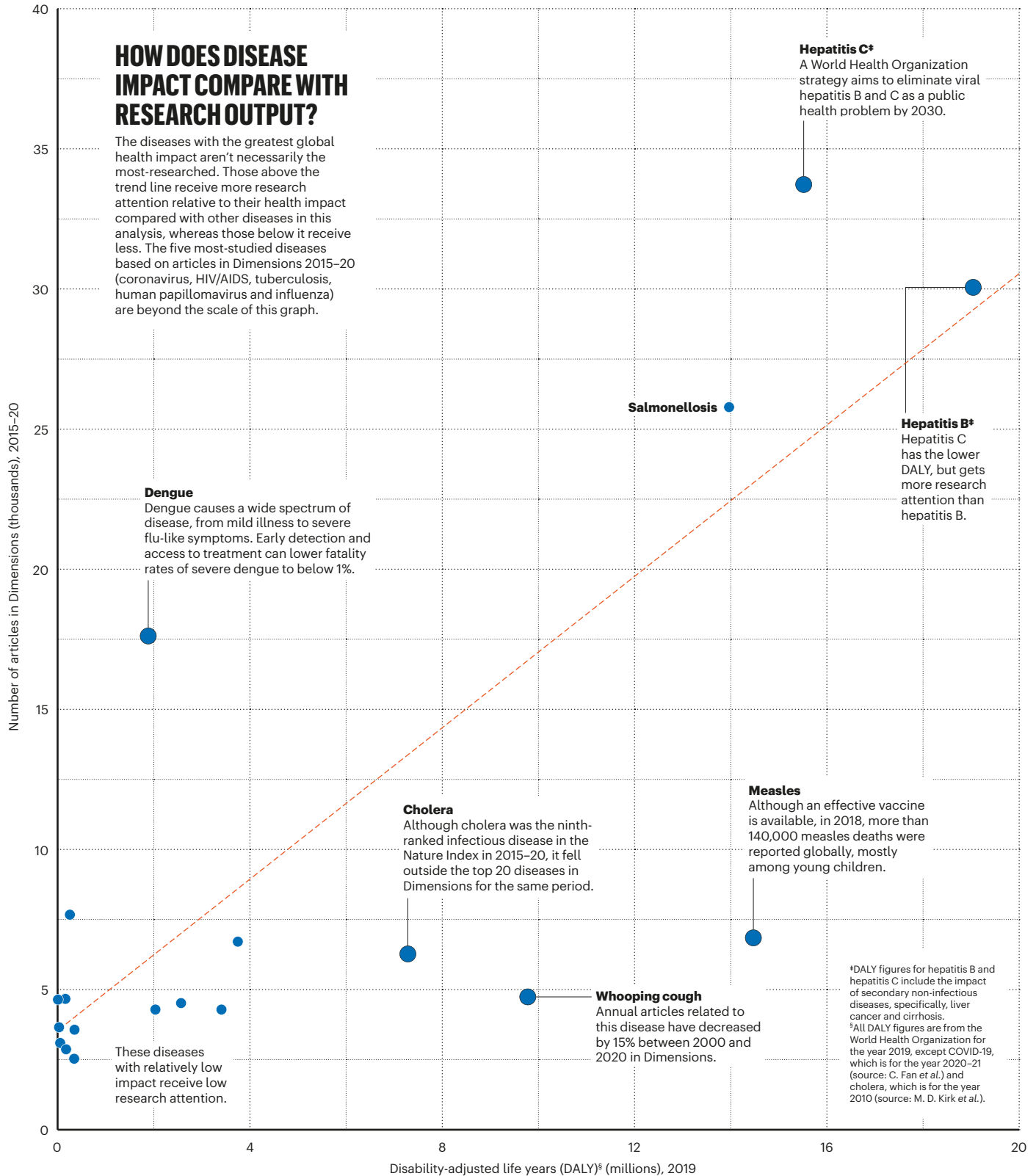


## WHICH DISEASES GET THE MOST RESEARCH FUNDING?

In 2000–17, HIV/AIDS received six times more funding than tuberculosis, according to a 2020 study in *The Lancet Global Health*. The study examined grants made for infectious-disease research from public and philanthropic funders in G20 countries.

Top 10 infectious diseases tracked by funding





**Correction**

The data used to assess the DALY figures for hepatitis B and C originally omitted the impact of secondary conditions such as liver cancer and cirrhosis. When these are included, both hepatitis B and C have relatively high health impacts and receive correspondingly high attention in the research literature. The graphs on top 10 infectious diseases tracked by DALY and on disease impact compared with research output have been updated to include the impact of secondary conditions.