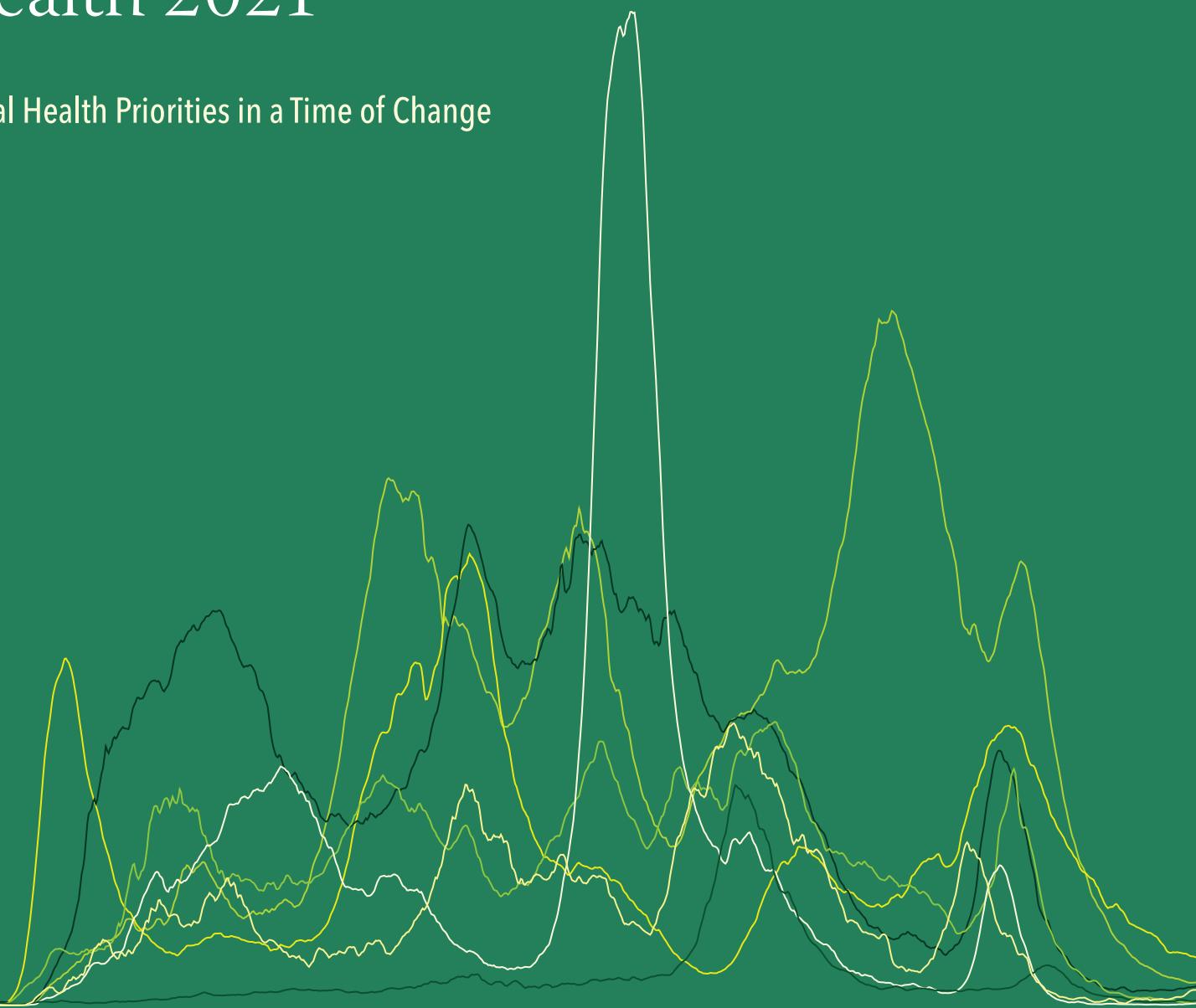


Financing Global Health 2021

Global Health Priorities in a Time of Change



Financing Global Health 2021

Global Health Priorities in a Time of Change



INSTITUTE FOR HEALTH METRICS AND EVALUATION
UNIVERSITY OF WASHINGTON

This report was prepared by the Institute for Health Metrics and Evaluation (IHME) through core funding from the Bill & Melinda Gates Foundation. The views expressed are those of the authors.

The contents of this publication may be reproduced and redistributed in whole or in part, provided the intended use is for noncommercial purposes, the contents are not altered, and full acknowledgment is given to IHME.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 Unported License.

To view a copy of this license, please visit <https://creativecommons.org/licenses/by-nc-nd/4.0/>. For any usage that falls outside of these license restrictions, please contact IHME Global Engagement at engage@healthdata.org.

Citation: Institute for Health Metrics and Evaluation (IHME). *Financing Global Health 2021: Global Health Priorities in a Time of Change*. Seattle, WA: IHME, 2023.

Institute for Health Metrics and Evaluation
Population Health Building/Hans Rosling Center
3980 15th Ave. NE, Seattle WA 98195 USA
UW Campus Box #351615
www.healthdata.org

To request copies of this report, please contact
IHME:
TELEPHONE: +1-206-897-2800
FAX: +1-206-897-2899
EMAIL: engage@healthdata.org

Printed in the United States of America
ISBN 978-1-7341306-0-7
© 2023 Institute for Health Metrics and Evaluation

Contents

Acronyms.....	7
Acknowledgments	8
About IHME	9
Call for collaborators.....	9
Executive summary.....	11
Introduction.....	39
What's new in Financing Global Health 2021.....	39
COVID-19 and health spending	41
Part One: Funding today's priorities	45
Total health spending through 2019	45
Development assistance for health through 2021.....	48
Part Two: Meeting tomorrow's challenges.....	61
Future spending on health	61
Funding for pandemic preparedness and response	63
Conclusion.....	69
Global health financing focus area profiles.....	73
COVID-19	74
HIV/AIDS	76
Tuberculosis.....	78
Malaria.....	80
Other infectious diseases	82
Reproductive, maternal, newborn, and child health	84
Non-communicable diseases.....	86
References.....	89
Annex: Methods.....	91

Figures

FIGURE 1 COVID-19 daily deaths by Global Burden of Disease super-region, January 2020–October 2022	17
FIGURE 2 Overall development assistance for health, 1990–2021*	18
FIGURE 3 Total health spending by source of financing, 1995–2019	22
FIGURE 4 Health spending, population, and disability-adjusted life years by World Bank income group, 2019.....	23
FIGURE 5 Government health spending as a fraction of total health spending, 2019.....	24
FIGURE 6 Development assistance for health and COVID-19 by source of funding, 1990–2021.....	25
FIGURE 7 Development assistance for health by health focus area, 1990–2021.....	26
FIGURE 8 Development assistance for health by channel of assistance, 1990–2021	27
FIGURE 9 Flows of development assistance for health for COVID-19 from source to channel to program area, 2021.....	28
FIGURE 10 Annualized rate of change in development assistance for health disbursed by source, 2000–2015, 2015–2019, and 2019–2021*.....	29
FIGURE 11 Annualized rate of change in development assistance for health disbursed by channel, 2000–2015, 2015–2019, and 2019–2021*.....	30
FIGURE 12 Annualized rate of change in development assistance for health disbursed, by health focus area, 2000–2015, 2015–2019, and 2019–2021*.....	31
FIGURE 13 The share of development assistance for health allocated by health focus area, 1990–2021	32
FIGURE 14 Development assistance for health targeting COVID-19 and deaths from COVID-19, 2020–2021*.....	33
FIGURE 15 Global COVID-19 vaccine coverage, August 2022.....	34
FIGURE 16 Percentage of development assistance for health for COVID-19, 2020–2021.....	35
FIGURE 17 Forecasted total health spending per person, 2050	37
FIGURE 18 Forecasted development assistance for health, 2015–2050	38
FIGURE 19 Development assistance for pandemic preparedness and response by source of funding, 1990–2021	40
FIGURE 20 Development assistance for pandemic preparedness and response by disbursing entity, 1990–2021.....	41
FIGURE 21 Development assistance for pandemic preparedness and COVID-19, 1995–2026.....	42

Source for all figures and tables unless otherwise indicated: Financing Global Health Database 2021

Tables

TABLE 1 Total health spending and health spending by source, global and by income group, 2019..... **12**

Boxes

BOX 1	This report's peer-reviewed foundation.....	15
BOX 2	Health financing terms defined	16
BOX 3	Development assistance for health terms defined	22

Acronyms

COVAX	COVID-19 Vaccines Global Access Facility
DAH	Development assistance for health
DALY	Disability-adjusted life year
GBD	Global Burden of Diseases, Injuries, and Risk Factors Study
GDP	Gross domestic product
ICU	Intensive care unit
IHME	Institute for Health Metrics and Evaluation
MDGs	Millennium Development Goals
NCDs	Non-communicable diseases
PPR	Pandemic preparedness and response
RMH	Reproductive and maternal health
SDGs	Sustainable Development Goals
SWAps	Sector-wide approaches
UHC	Universal health coverage
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office of Humanitarian Assistance

Research team:

ANGELA E. MICAH, PHD
JOSEPH L. DIELEMAN, PHD
KEVIN F. O'ROURKE, MFA
KAYLEIGH BHANGDIA, MS
IAN E. COGSWELL, BS
SIMON HAY, DSc
DYLAN LASHER, MS
BRENDAN LIDRAL-PORTER, MA
EMILIE R. MADDISON, MPH
CHRISTOPHER J.L. MURRAY, MD, DPhil
TRANG NGUYEN, BA
SHUHEI NOMURA, PhD
NISHALI K. PATEL, MSc
PAOLA PEDROZA, MPH
JUAN SOLORIO, MS
HAYLEY N. STUTZMAN, BA
GOLSUM TSAKALOS, MS
YIFENG WANG, MS
WESLEY WARRINER, BA
YINGXI ZHAO, MPH
BIANCA ZLAVOG, MS

Acknowledgments

First, we would like to thank past contributors to the Financing Global Health series of reports for developing and refining the analytical foundation upon which this work is based. We would also like to acknowledge the staff members of the numerous development agencies, public-private partnerships, international organizations, non-governmental organizations, and foundations who responded to our data requests and questions. We appreciate their time and assistance.

Our interpretation of this year's findings benefitted greatly from the contributions of Melanie Renshaw, Elizabeth Sully, and Jennifer Asman.

The analysis of development assistance for health, COVID-19, and other sources of health spending presented in *Financing Global Health 2021* draw in part on data and analysis presented in "Global investments in pandemic preparedness and COVID-19: tracking development assistance and domestic spending on health, 1990–2026," published this year in *The Lancet Global Health*. We also thank the 2021 Global Burden of Disease Health Financing Collaborator Network for feedback on data, methods, and preliminary results.

We would also like to acknowledge the broader efforts of the IHME community, which contributed greatly to the production of this year's report. In particular, we thank IHME's Board for their continued leadership, Adrienne Chew and Rebecca Sirull for editing, Joan Williams for her steadfast production oversight and publication management, and Michaela Loeffler for design.

Finally, we would like to extend our gratitude to the Bill & Melinda Gates Foundation for generously funding IHME and for its consistent support of this research and report.

About IHME

An independent population health research organization based at the University of Washington School of Medicine, the Institute for Health Metrics and Evaluation (IHME) works with collaborators around the world to develop timely, relevant, and scientifically valid evidence that illuminates the state of health everywhere. In making our research available and approachable, we aim to inform health policy and practice in pursuit of our vision: all people living long lives in full health. For more information about IHME and its work, please visit www.healthdata.org.

Call for collaborators

In addition to conducting the Financing Global Health study, IHME coordinates the Global Burden of Diseases, Injuries, and Risk Factors (GBD) Study, a comprehensive effort to measure epidemiological levels and trends worldwide. (More information on GBD is available at www.healthdata.org/gbd.) The GBD study relies on a worldwide network of more than 8,000 collaborators in over 150 countries. Current collaborator areas of expertise include epidemiology, public health, demography, statistics, and other related fields. IHME has expanded the scope of GBD to encompass quantification of health resource flows, health system attributes, and the performance of health systems. To that end, IHME is seeking GBD collaborators who are experts in health financing and health systems. GBD collaborators – many of whom have co-authored GBD or Financing Global Health publications – provide timely feedback related to the interpretation of GBD and Financing Global Health results, data sources, and methodological approaches pertaining to their areas of expertise. We invite researchers and analysts with expertise in health financing to join the GBD Collaborator Network. Potential collaborators may apply at www.healthdata.org/gbd/call-for-collaborators.

Executive summary

Financing Global Health 2021 provides estimates of total spending on health, development assistance for health, and projections of future health spending. Much global progress has been made since the previous edition of *Financing Global Health*, which was written and produced during some of the worst days of the pandemic. In many parts of the world, COVID-19 deaths and hospitalizations have decreased dramatically, and some no longer consider the pandemic to be a global emergency. Reported global daily deaths from COVID-19 have dropped from above 16,000 per day on January 24, 2021, to approximately 1,600 as of mid-December 2022. Likewise, global hospital resource use has dropped precipitously from its peak in April 2021.¹

Financing for vaccine development and distribution has been integral to these gains. According to WHO, almost 200 COVID-19 vaccines have been developed globally since the start of the pandemic,² and nearly 13 billion doses³ have been administered to date.

However, challenges loom. COVID-19 vaccine distribution has been far from equal, with high-income countries receiving the majority of available vaccines to date. Health conditions like mpox – and now the resurgence of polio – are also issues of concern. Another is the war in Ukraine, which is proving to have wide global repercussions, from food insecurity to energy and economic implications. Finally, there is the increasing possibility of a global recession driven by inflation, the aftereffects of COVID-19, the war in Ukraine, and downturns in several economies. As much health spending originates from tax revenue, funding both government spending and development assistance, economic uncertainty and recession could have large impacts on global health.

A year underscored by major gains and losses highlights the importance of tracking spending on health. The health spending tracking and estimates in *Financing Global Health* show patterns across income groups and regions, as well as over time, and highlight variations between countries, which can identify where more resources are needed most. *Financing Global Health 2021*'s health spending estimates cover 204 countries from 1995 to 2019, while for development assistance for health (DAH), we present estimates from 1990 to 2021 for 137 low- and middle-income countries.* Our future health spending scenarios cover 204 countries for the period from 2020 to 2050.

Two particular focuses of this year's report are development assistance for COVID-19 and the historical lack of funding for pandemic preparedness. Understanding how much is being spent on health to fight COVID-19 is integral to both managing the current pandemic and preparing for the next one.

We estimate that total global health spending increased to \$9.2 trillion (95% uncertainty interval 9.1–9.3) in 2019. This constitutes a 3.1% increase over the 2018 total. Table 1 shows total 2019 spending and 2019 spending by source.

*2021 DAH estimates are projections.

TABLE 1 Total health spending and health spending by source, global and by income group, 2019

	Health spending per person (USD)	Health spending per person (\$PPP)	Health spending per GDP (%)	Government health spending per total health spending (%)	Out-of-pocket spending per total health spending (%)	Prepaid private spending per total health spending (%)	Development assistance for health per total health spending (%)
Global	1,183 (1,171 to 1,195)	1,518 (1,505 to 1,531)	9.7% (9.6 to 9.8)	59.8% (59.8 to 59.8)	18.2% (17.9 to 18.5)	21.5% (21.1 to 21.9)	0.5% (0.5 to 0.5)
WORLD BANK INCOME GROUP							
High-income	5,938 (5,876 to 6,004)	6,469 (6,405 to 6,535)	12.4% (12.2 to 12.5)	62.0% (61.4 to 62.7)	13.7% (13.3 to 14.3)	24.3% (23.6 to 24.9)	0.0% (0.0 to 0.0)
Upper-middle-income	575 (561 to 590)	1,085 (1,062 to 1,108)	5.7% (5.6 to 5.9)	56.0% (54.6 to 57.4)	32.6% (31.5 to 33.7)	11.2% (10.4 to 12.2)	0.2% (0.1 to 0.2)
Lower-middle-income	117 (114 to 121)	300 (291 to 309)	4.1% (3.9 to 4.2)	39.9% (38.7 to 41.1)	47.3% (45.9 to 48.6)	10.6% (9.7 to 11.6)	2.2% (2.2 to 2.3)
Low-income	37 (36 to 38)	145 (140 to 150)	4.9% (4.7 to 5.2)	23.0% (22.1 to 23.8)	43.8% (42.6 to 44.9)	4.7% (4.3 to 5.2)	28.5% (28.0 to 29.1)

*Estimates in parentheses are 95% uncertainty intervals.

Development assistance for health includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries.

PPP = Purchasing power parity

According to our preliminary estimates, there was \$67.4 billion in DAH in 2021. Between 2020 and 2021, total DAH increased 8.6%; \$37.8 billion was directed to DAH for COVID-19 between 2020 and 2021. Despite a plateauing in DAH growth in the years immediately preceding the pandemic, the increase in DAH between 2019 and 2020 – when DAH grew 43.9% – as a result of COVID-19 was unprecedented. So the continued increase between 2020 and 2021, while not as dramatic as 2019–2020, continues this trend. Notably, the \$37.8 billion that has been spent on DAH for COVID-19 is 810% more than total spending on DAH for pandemic preparedness between 2000 and 2019, which totaled \$4.2 billion.

DAH for health focus areas other than COVID-19 reached \$45.6 billion in 2021, about 0.9% lower than the non-COVID-19 total in 2020, although 5.8% higher than 2019. By health focus area, our preliminary estimates suggest that DAH for non-communicable diseases (NCDs), reproductive and maternal health (RMH), and sector-wide approaches (swaps) and health systems strengthening decreased between 2020 and 2021, going down by 2.8%, 6.7%, and 11.1%, respectively. Conversely, DAH for newborn and child health (10.3%), HIV/AIDS (2.2%), malaria (13.6%), other infectious diseases (which includes COVID-19) (26.1%), and tuberculosis (2.1%) increased between 2020 and 2021.

The pandemic has skewed development spending: DAH has increased 56.3% since 2019, largely due to COVID-19. And while it is positive that our preliminary estimates suggest DAH for a number of non-COVID health focus areas grew between 2020 and 2021 after declining between 2019 and 2020, that spending on areas like NCDs and reproductive and maternal health seems to have declined is a cause for concern. According to the most recent Global Burden of Disease study, in 2019, six of the top 10 Level 3^a causes of disease burden (as measured by age-standardized disability-adjusted life

^aFor information about GBD cause levels, please visit <https://www.healthdata.org/node/7849>.

years) were NCDS, and there were nearly 200,000 deaths from maternal disorders.⁴

Low-income countries are most reliant on DAH, where it makes up 28.5% (28.0–29.1) of 2019 total health spending, while lower-middle-income countries rely on out-of-pocket spending to finance health care, amounting to 47.3% (45.9–48.6) of 2019 health spending. Government and prepaid private spending were the largest contributors to health spending in high-income countries (86.3% [85.0–87.5] of 2019 health spending), and in upper-middle-income countries, government and prepaid private spending constituted 56.0% (54.6–57.4) and 11.2% (10.4–12.2) of 2019 spending on health, respectively.

Financing Global Health 2021's estimates of future health spending from 2020 to 2050 estimate spending will grow to \$16.9 trillion (16.1–17.8) by 2050. Global disparities will likely remain, as high-income country spending is projected to grow to \$10,141 per person (9,546–10,737) by 2050, while low-income country spending is only projected to grow from \$42 per person (42–43) in 2020 (less than 1% of 2019 high-income spending) to \$56 per person (53–60) in 2050, remaining less than 1% of the per person spending rate across high-income countries.

Overall, *Financing Global Health 2021* is focused on pandemic preparedness and response spending, specifically as it relates to COVID-19. This year's report also includes updated estimates of overall global domestic spending, now through 2019, updated estimates of contributions to DAH, including preliminary estimates through 2021, and updated estimates of future health spending, to 2050. Last but hardly least, also included in *Financing Global Health 2021* are up-to-date financing profiles for seven health focus areas: COVID-19; HIV/AIDS; tuberculosis; malaria; other infectious diseases; reproductive, maternal, newborn, and child health; and NCDS.

摘要

全球卫生筹资2021发布了卫生总支出、卫生发展援助和未来卫生支出的预测。自从在大流行最严重的时期编写和发布的上一版全球卫生筹资以来，全球已经取得了很大进展。在世界很多地方，2019冠状病毒病(COVID-19)死亡和住院数显著下降，许多也不再认为这是全球紧急情况。据报道，全球每天死于COVID-19的人数已从2021年1月24日的每天16,000多人下降到2022年12月中旬的大约1,600人。同样地，全球医院资源使用也从2021年4月的使用峰值急剧下降。¹

为疫苗研制和分发提供筹资对于这些成果功不可没。据世界卫生组织称，自大流行以来，全球已经研发出近两百多种COVID-19疫苗²，迄今为止已经接种近130亿剂³。

然而，挑战迫在眉睫。COVID-19疫苗分配远非公平，迄今为止高收入国家获得了大部分可用的疫苗。像猴痘(Mpox)这类健康状况，以及脊髓灰质炎的死灰复燃，都是令人担忧的问题。另外乌克兰战争也具有广泛的全球影响，从粮食安全到能源和经济影响。最后，由于通货膨胀、COVID-19的后遗症、乌克兰战争和几个经济体的低迷，全球经济衰退的可能性越来越大。由于大部分卫生支出来源于税收，用于政府支出和发展援助，经济的不确定性和衰退对于全球卫生可能产生重大影响。

过去一年间重要收益和损失凸显了追踪卫生支出的重要性。全球卫生筹资中卫生支出的追踪和预测凸显了不同收入群体和地区以及不同时间段的差异，并突出了国家之间的差异，来明确最需更多资源的地方。全球卫生筹资2021包括了1995年至2019年204个国家的卫生支出估算，而对于卫生发展援助，我们汇报了1990年至2021年137个中低收入国家的估算*。而我们卫生支出未来期望涵盖了204个国家从2020年至2050年的预测。

今年报告的两个重点是对于COVID-19的卫生发展援助以及对于大流行防范的历史性资金缺乏。了解抗击COVID-19的卫生支出对于当前大流行和预防下一个都是不可或缺的。

我们估算2019年全球卫生总支出增长到9.2万亿美元(95%置信区间9.1-9.3)，这相比于2018年增长了3.1%。表1展示了2019年总支出和根据来源的支出。

根据我们的估算，2021年卫生发展援助总额为674亿美元。在2020年和2021年间，卫生发展援助增长了8.6%，有378亿美元用于COVID-19。尽管在大流行前几年卫生发展援助增长趋于平缓，COVID-19带来了援助数额前所未的增长：2019年至2020年增长了43.9%，2020年至2021年增长虽然不像前一年一样剧烈，但是依然延续了这一趋势。值得注意的是，用于COVID-19的卫生发展援助数额的378亿美元比2000年至2019年间用于大流行防范的卫生发展援助总额(42亿美元)高了810%。

除COVID-19以外卫生领域的发展援助总额在2021年达到了456亿美元，比2020年COVID-19以外的总额低0.8%，但是比2019年高5.8%。按照卫生领域，我们初步估算表明2020年至2021年用于非传染性疾病、生殖和孕产妇健康、全部门方法(SWAs)和卫生系统加强分别降低了2.8%、6.7%和11.1%。而用于新生儿和儿童健康(10.3%)、艾滋病(2.2%)、疟疾(13.6%)、其他传染病(包括COVID-19)(26.1%)和结核病(2.1%)在2020年至2021年间有所增长。

大流行改变了发展援助支出：自2019年起卫生发展援助增长了56.3%，这主要归功于COVID-19。尽管我们初步估算表明对于一些非COVID-19领域在2019年至2020年下降后，2020年至2021年的增长是积极的，但是在非传染性疾病和生殖和孕产妇健康的下降值得担忧。根据最新的全球疾病负担研究表明，2019年疾病负担前十名三级风险因素(按年龄标准化伤残调整寿命年)有

*2021年卫生发展援助数额为预测值

表1 2019年全球和根据收入水平的卫生总支出和根据来源的卫生支出

	人均卫生支出 (USD)	人均卫生支出 (\$PPP)	卫生支出/ GDP(%)	政府卫生支 出/总卫生支 出(%)	个人或家庭现 金支出/总卫生 支出(%)	预付私人保险 支出/总卫生支 出(%)	卫生发展援助 支出/总卫生支 出(%)
全球	1,183 (1,171–1,195)	1,518 (1,505–1,531)	9.7% (9.6–9.8)	59.8% (59.8–59.8)	18.2% (17.9–18.5)	21.5% (21.1–21.9)	0.5% (0.5–0.5)
世界银行收入水平							
高收入国家	5,938 (5,876–6,004)	6,469 (6,405–6,535)	12.4% (12.2–12.5)	62.0% (61.4–62.7)	13.7% (13.3–14.3)	24.3% (23.6–24.9)	0.0% (0.0–0.0)
中高收入国家	575 (561–590)	1,085 (1,062–1,108)	5.7% (5.6–5.9)	56.0% (54.6–57.4)	32.6% (31.5–33.7)	11.2% (10.4–12.2)	0.2% (0.1–0.2)
中低收入国家	117 (114–121)	300 (291–309)	4.1% (3.9–4.2)	39.9% (38.7–41.1)	47.3% (45.9–48.6)	10.6% (9.7–11.6)	2.2% (2.2–2.3)
低收入国家	37 (36–38)	145 (140–150)	4.9% (4.7–5.2)	23.0% (22.1–23.8)	43.8% (42.6–44.9)	4.7% (4.3–5.2)	28.5% (28.0–29.1)

*括号内为95%置信区间

卫生发展援助包括对于旨在改善中低收入国家卫生活动的财政和实物援助。

PPP 为购买力平价

六个是非传染性疾病，而每年有接近200,000孕产妇疾病导致的死亡。⁴

低收入国家最依赖卫生发展援助，占比2019年总卫生支出的28.5% (28.0–29.1)，而中低收入国家依靠个人或者家庭自付支出，占2019年总卫生支出的47.3% (45.9–48.6)。政府和预付私人保险支出是高收入国家卫生支出的最大占比 (占2019年总卫生支出的86.3% [85.0–87.5])，而对于中高收入国家，政府和预付私人保险支出分别占2019年卫生支出的56.0% (54.6–57.4) 和11.2% (10.4–12.2)。

全球卫生筹资2021估算了2020年至2050年的未来卫生支出，预测到2050年总支出将达到16.9万亿美元 (16.1–17.8)。全球差距可能仍然存在，高收入国家的人均支出将在2050年增长到10,141美元 (9,546–10,737)，而低收入国家只会从2020年的人均42美元 (42–43) (不到2019年高收入国家支出的1%) 增长到2050年的人均56美元 (53–60)，依旧少于高收入国家人均支出的1%。

总体而言，全球卫生筹资2021关注了大流行防范和应对支出，尤其是和COVID-19相关的支出。今年的报告还提供了更新到2019年的国内卫生支出估算、更新到2021年的卫生发展援助估算、以及更新到2050年未来卫生支出的最新预测。最后，全球卫生筹资2021还包括了按照七个卫生领域最新筹资概况：COVID-19、艾滋病、结核病、疟疾、其他传染性疾病、生殖孕产妇新生儿和儿童健康、以及非传染性疾病。

*了解GBD因素级别信息可以访问
<https://www.healthdata.org/node/7849>.

Краткое резюме

В отчете *Финансирование сферы всемирного здравоохранения за 2021 год* представлены оценка суммарных расходов на здравоохранение и содействие в его развитии, а также прогнозы будущих расходов на здравоохранение. Со времени выпуска предыдущего отчета *Финансирование сферы всемирного здравоохранения*, который был подготовлен в самые тяжелые дни пандемии, был достигнут значительный глобальный прогресс. Во многих частях мира количество смертей и госпитализаций, связанных с COVID-19, значительно снизилось, и некоторые уже не считают пандемию глобальной чрезвычайной ситуацией. Количество зарегистрированных за сутки смертей от COVID-19 в мире снизилось с более чем 16 000 по состоянию на 24 января 2021 года до приблизительно 1600 по состоянию на середину декабря 2022 года. Аналогичным образом, в мире резко сократилось использование больничных ресурсов в сравнении с пиковым значением, достигнутым в апреле 2021 года.¹

Неотъемлемой частью этих успехов является финансирование разработки и распространения вакцин. По данным ВОЗ, с начала пандемии в мире разработано почти 200 вакцин против COVID-19², и на сегодняшний момент для вакцинации использовано почти 13 млрд доз³.

Тем не менее, проблемы остаются. Распределение вакцин против COVID-19 было далеко не равномерным и на данный момент большинство имеющихся вакцин получили страны с высоким уровнем доходов. Такие заболевания, как оспа обезьян, а теперь и всплеск случаев полиомиелита, также вызывают озабоченность. Другой проблемой является война в Украине, которая оказывает значительное глобальное влияние: от недостатка продовольствия до энергетических и экономических последствий. И наконец, растет вероятность глобальной рецессии, связанной с инфляцией, последствиями COVID-19, войны в Украине и спадом в экономиках ряда стран. В связи с тем, что значительная часть средств, из которых оплачиваются расходы на здравоохранение — как государственные расходы, так и расходы на содействие в развитии здравоохранения — формируется за счет налоговых поступлений, экономическая неопределенность и рецессия могут оказать значительное влияние на глобальное здравоохранение.

Год, отмеченный и крупными достижениями, и крупными потерями, подчеркивает важность отслеживания расходов на здравоохранение. Механизмы наблюдения и оценки расходов на здравоохранение в отчете *Финансирование сферы всемирного здравоохранения* позволяют в динамике отследить закономерности по категориям доходов и регионам, включая их эволюцию во времени, а также выделить различия между странами и, соответственно, определить районы, наиболее нуждающиеся в дополнительных ресурсах. Оценочные показатели расходов на здравоохранение в отчете *Финансирование сферы всемирного здравоохранения за 2021 год* охватывают 204 страны за период с 1995 года по 2019 год, а в отношении содействия в развитии здравоохранения (СРЗ), приведены оценки за период с 1990 года по 2021 год для 137 стран с низким и средним уровнем доходов.* Кроме того, приведены варианты прогноза расходов на здравоохранение для 204 стран на период с 2020 года по 2050 год.

В отчете за текущий год особое внимание уделяется двум вопросам — содействию в развитии здравоохранения для борьбы с COVID-19 и исторически сложившемуся недофинансированию обеспечения готовности к пандемиям. Понимание того, сколько средств в здравоохранении

* Оценочные показатели расходов на СРЗ за 2021 год являются прогнозами.

ТАБЛИЦА 1 Суммарные расходы на здравоохранение и расходы на здравоохранение с распределением по источникам в 2019 году, во всем мире и в группах стран с разным уровнем доходов

	Расходы на здравоохранение на человека (долл. США)	Расходы на здравоохранение на человека (ППС долл.)	Расходы на здравоохранение — доля (%) от ВВП	Государственные расходы на здравоохранение — доля (%) от суммарных расходов на здравоохранение	Расходы на здравоохранение из личных средств — доля (%) от суммарных расходов на здравоохранение	Предоплаченные частные расходы — доля (%) от суммарных расходов на здравоохранение	Содействие в развитии здравоохранения — доля (%) от суммарных расходов на здравоохранение
Во всем мире	1183 (от 1171 до 1195)	1518 (от 1505 до 1531)	9,7 % (от 9,6 до 9,8)	59,8 % (от 59,8 до 59,8)	18,2 % (от 17,9 до 18,5)	21,5 % (от 21,1 до 21,9)	0,5 % (от 0,5 до 0,5)
ГРУППЫ СТРАН ПО УРОВНЮ ДОХОДОВ ПО КЛАССИФИКАЦИИ ВСЕМИРНОГО БАНКА							
С высоким уровнем доходов	5938 (от 5876 до 6004)	6469 (от 6405 до 6535)	12,4 % (от 12,2 до 12,5)	62,0 % (от 61,4 до 62,7)	13,7 % (от 13,3 до 14,3)	24,3 % (от 23,6 до 24,9)	0,0 % (от 0,0 до 0,0)
С уровнем доходов выше среднего	575 (от 561 до 590)	1085 (от 1062 до 1108)	5,7 % (от 5,6 до 5,9)	56,0 % (от 54,6 до 57,4)	32,6 % (от 31,5 до 33,7)	11,2 % (от 10,4 до 12,2)	0,2 % (от 0,1 до 0,2)
С уровнем доходов ниже среднего	117 (от 114 до 121)	300 (от 291 до 309)	4,1 % (от 3,9 до 4,2)	39,9 % (от 38,7 до 41,1)	47,3 % (от 45,9 до 48,6)	10,6 % (от 9,7 до 11,6)	2,2 % (от 2,2 до 2,3)
С низким уровнем доходов	37 (от 36 до 38)	145 (от 140 до 150)	4,9 % (от 4,7 до 5,2)	23,0 % (от 22,1 до 23,8)	43,8 % (от 42,6 до 44,9)	4,7 % (от 4,3 до 5,2)	28,5 % (от 28,0 до 29,1)

* Оценочные показатели в скобках представляют собой 95%-е интервалы неопределенности.

Содействие в развитии здравоохранения включает как финансовые взносы, так и взносы в натуральном выражении на меры, направленные на улучшение здоровья в странах с низким и средним уровнем доходов.

ППС — паритет покупательной способности.

тратится для борьбы с COVID-19, является неотъемлемой частью как ликвидации текущей пандемии, так и подготовки к следующей.

По нашим оценкам, в 2019 году суммарные глобальные расходы на здравоохранение увеличились до 9,2 трлн долларов (95%-й интервал неопределенности 9,1 - 9,3). Это на 3,1 % больше, чем в 2018 году. В таблице 1 показаны суммарные расходы за 2019 год и расходы за 2019 год с распределением по источникам.

По нашим предварительным оценкам, в 2021 году расходы на СРЗ составили 67,4 млрд долларов. В 2021 году по сравнению с 2020 годом суммарные расходы на СРЗ увеличились на 8,6 %; в этот же период на СРЗ в области борьбы с COVID-19 было направлено 37,8 млрд долларов. Несмотря на отсутствие роста расходов на СРЗ в годы, непосредственно предшествующие пандемии, увеличение СРЗ в 2020 году по сравнению с 2019 годом, когда в результате COVID-19 расходы на СРЗ выросли на 43,9 %, было беспрецедентным. Таким образом, сохраняющееся увеличение расходов в 2021 году по сравнению с 2020 годом, хотя и не такое выраженное, как в 2020 году по сравнению с 2019 годом, продолжает эту тенденцию. Примечательно, что сумма в 37,8 млрд долларов, потраченных на СРЗ в области борьбы с COVID-19, на 810 % превышает суммарные расходы на СРЗ за период с 2000 года по 2019 год в области обеспечения готовности к пандемии, которые составили 4,2 млрд долларов.

Расходы на СРЗ в других областях, нежели борьба с COVID-19, в 2021 году достигли 45,6 млрд долларов, что приблизительно на 0,9 % ниже, чем в 2020 году, но на 5,8 % выше, чем в 2019 году. При распределении по областям здравоохранения, наши предварительные оценки показывают, что расходы на СРЗ в областях неконтагиозных заболеваний (НКЗ), репродуктивного и материнского здоровья (РМЗ), а также общесекторальных подходов (ОСП) и укрепления систем здравоохранения в 2021 году в сравнении с 2020 годом

снизились на 2,8 %, 6,7 % и 11,1 % соответственно. И наоборот, расходы на СРЗ в областях охраны здоровья новорожденных и детей (10,3 %), борьбы с ВИЧ/СПИД (2,2 %), малярией (13,6 %), другими инфекционными заболеваниями (которые включают COVID-19) (26,1 %) и туберкулезом (2,1 %) в 2021 году в сравнении с 2020 годом увеличились.

Пандемия привела к перекосу в расходах на содействие развитию здравоохранения: с 2019 года расходы на СРЗ увеличились на 56,3 %, преимущественно за счет расходов на борьбу с COVID-19. И хотя наши предварительные оценки свидетельствуют о том, что расходы на СРЗ в ряде областей здравоохранения, не относящихся к борьбе с COVID, выросли в 2021 году в сравнении с 2020 годом после их снижения в 2020 году в сравнении с 2019 годом, расходы в таких областях, как НКЗ и репродуктивное и материнское здоровье, похоже, снизились, что вызывает беспокойство. Согласно последнему исследованию глобального бремени болезней, в 2019 году шесть из 10 ведущих причин бремени болезней 3-го уровня* (определеняемых по количеству лет жизни с поправкой на нетрудоспособность и стандартизацией по возрасту) относились к НКЗ и почти 200 000 смертей были обусловлены материнскими заболеваниями.⁴

Страны с низким уровнем доходов больше всего зависят от средств, выделяемых на СРЗ, в 2019 году такие расходы составили 28,5 % (28,0 - 29,1 %) от суммарных расходов на здравоохранение. В то время как страны с уровнем доходов ниже среднего зависят от личных средств, выделяемых для финансирования здравоохранения, в 2019 году такие расходы составили 47,3 % (45,9 - 48,6 %) от общих расходов на здравоохранение. В странах с высоким уровнем доходов наибольшую долю в расходах на здравоохранение составили государственные и предоплаченные частные расходы — 86,3 % (85,0 - 87,5 %) от расходов на здравоохранение в 2019 году. В странах с уровнем доходов выше среднего государственные и предоплаченные частные расходы составили 56,0 % (54,6 - 57,4 %) и 11,2 % (10,4 - 12,2 %) от расходов на здравоохранение в 2019 году соответственно.

Оценки будущих расходов на здравоохранение с 2020 года по 2050 год, приведенные в отчете *Финансирование сферы всемирного здравоохранения за 2021 год*, предполагают рост расходов до 16,9 триллиона долларов (16,1 - 17,8) к 2050 году. Глобальное неравенство, вероятнее всего, сохранится, поскольку, согласно прогнозам, к 2050 году расходы стран с высоким уровнем доходов вырастут до 10 141 доллара на человека (9546 - 10 737), в то время как расходы стран с низким уровнем доходов вырастут с 42 долларов на человека (42 - 43) в 2020 году (менее 1 % от расходов стран с высоким уровнем доходов в 2019 году) до 56 долларов на человека (53 - 60) в 2050 году, по-прежнему составляя менее 1 % от уровня расходов на человека в странах с высоким уровнем доходов.

В целом, отчет *Финансирование сферы всемирного здравоохранения за 2021 год* сфокусирован на расходах на обеспечение готовности к пандемии и ответные меры, особенно связанные с COVID-19. В этом году отчет также включает обновленные оценки суммарных глобальных внутренних расходов на здравоохранение, теперь вплоть до 2019 года, обновленные оценки отчислений на СРЗ, в том числе предварительные оценки до 2021 года, и обновленные оценки будущих расходов на здравоохранение вплоть до 2050 года. И последнее, но не менее важное: в отчет *Финансирование сферы всемирного здравоохранения за 2021 год* также включены актуальные профили финансирования для семи основных областей здравоохранения: COVID-19; ВИЧ/СПИД; туберкулез; малярия; другие инфекционные заболевания; репродуктивное здоровье; материнское здоровье, здоровье новорожденных и детей; НКЗ.

* Для получения информации об уровнях причин глобального бремени болезней посетите веб-страницу <https://www.healthdata.org/node/7849>.

Résumé analytique

Le rapport *Financing Global Health 2021* présente des estimations actualisées des dépenses de santé, de l'aide au développement pour la santé et des projections quant aux dépenses de santé futures. Des progrès importants ont été réalisés depuis la dernière édition de *Financing Global Health*, rédigée et publiée durant une des pires périodes de la pandémie. Dans de nombreuses parties du monde, les taux de décès et d'hospitalisations liés à la COVID-19 ont considérablement diminué, au point que certains ne considèrent plus la pandémie comme une urgence à l'échelle mondiale. Le nombre de décès quotidiens dans le monde dus à la COVID-19 est à la baisse : environ 1 600 par jour à la mi-décembre 2022 par rapport à plus de 16 000 par jour au 24 janvier 2021. De même, l'utilisation des ressources hospitalières mondiales a chuté abruptement par rapport à son point culminant en avril 2021¹.

Ces gains sont attribuables en grande partie au financement de la mise au point et de la distribution de vaccins. Selon l'OMS, près de 200 vaccins contre la COVID-19 ont été développés dans le monde depuis le début de la pandémie² et près de 13 milliards de doses³ ont été administrées jusqu'à présent.

Toutefois, les défis persistent. La distribution des vaccins contre la COVID-19 est loin d'être uniforme ; les pays à revenu élevé ont, jusqu'à présent, bénéficié de la majorité des stocks de vaccins disponibles. Les maladies comme la variole du singe (mpox) – ainsi que la recrudescence de polio – sont également une source de préoccupation. À cela s'ajoute la guerre en Ukraine – avec ses répercussions à l'échelle mondiale, dont l'insécurité alimentaire et énergétique et d'autres retombées économiques. Et pour couronner le tout, le monde doit faire face à la possibilité croissante d'une récession mondiale liée à l'inflation, aux séquelles de la COVID-19, au conflit qui se poursuit en Ukraine, ainsi qu'au ralentissement économique qui touche plusieurs pays. Étant donné qu'une grande partie des dépenses de santé proviennent des recettes fiscales, qui financent les dépenses publiques et l'aide au développement, il est probable que l'incertitude économique et la récession auront de fortes répercussions sur la santé au niveau mondial.

Après une année marquée par des gains et des pertes significatifs, il est d'autant plus important de suivre attentivement les dépenses de santé. Le suivi de ces dépenses et les estimations présentés dans *Financing Global Health* indiquent les tendances entre les groupes de revenus et les régions ainsi qu'au fil du temps et soulignent les variations entre les pays, ce qui permet d'identifier là où le besoin en ressources est le plus important. Le rapport *Financing Global Health 2021* comprend des estimations des dépenses de santé dans 204 pays entre 1995 et 2019, ainsi que des estimations de l'aide au développement pour la santé (ADS) entre 1990 et 2021 dans 137 pays à revenus faible et intermédiaire⁴. Nos scénarios de dépenses de santé futures couvrent 204 pays pour la période allant de 2020 à 2050.

Ce rapport annuel se concentre tout particulièrement sur l'aide au développement liée à la COVID-19 et le manque historique de financement pour la préparation aux pandémies. Pour gérer la pandémie actuelle et se préparer à la prochaine, il est essentiel de bien comprendre les dépenses

* Les estimations d'ADS pour 2021 sont des prévisions.

TABLE 2 Dépenses totales de santé et dépenses de santé par source, au niveau mondial et par groupe de revenu, 2019

	Dépenses de santé par personne (USD)	Dépenses de santé par personne (PPA en USD)	Dépenses de santé en % du PIB (%)	Dépenses publiques de santé en % des dépenses totales de santé (%)	Coût à la charge des patients en % des dépenses totales de santé (%)	Dépenses de santé, privées et prépayées, en % des dépenses totales de santé (%)	Aide au développement pour la santé en % des dépenses totales de santé (%)
Au niveau mondial	1 183 (1 171 à 1 195)	1 518 (1 505 à 1 531)	9,7 % (9,6 à 9,8)	59,8 % (59,8 à 59,8)	18,2 % (17,9 à 18,5)	21,5 % (21,1 à 21,9)	0,5 % (0,5 à 0,5)
GROUPE DE REVENU DE LA BANQUE MONDIALE							
Revenu élevé	5 938 (5 876 à 6 004)	6 469 (6 405 à 6 535)	12,4 % (12,2 à 12,5)	62,0 % (61,4 à 62,7)	13,7 % (13,3 à 14,3)	24,3 % (23,6 à 24,9)	0,0 % (0,0 à 0,0)
Revenu intermédiaire, tranche supérieure	575 (561 à 590)	1 085 (1 062 à 1 108)	5,7 % (5,6 à 5,9)	56,0 % (54,6 à 57,4)	32,6 % (31,5 à 33,7)	11,2 % (10,4 à 12,2)	0,2 % (0,1 à 0,2)
Revenu intermédiaire, tranche inférieure	117 (114 à 121)	300 (291 à 309)	4,1 % (3,9 à 4,2)	39,9 % (38,7 à 41,1)	47,3 % (45,9 à 48,6)	10,6 % (9,7 à 11,6)	2,2 % (2,2 à 2,3)
Faible revenu	37 (36 à 38)	145 (140 à 150)	4,9 % (4,7 à 5,2)	23,0 % (22,1 à 23,8)	43,8 % (42,6 à 44,9)	4,7 % (4,3 à 5,2)	28,5 % (28,0 à 29,1)

* Les estimations entre parenthèses représentent les intervalles d'incertitude à 95 %.

L'aide au développement pour la santé comprend à la fois des contributions financières et en nature pour les activités visant à améliorer la santé dans les pays à revenus faible et intermédiaire.

PPA = Parité de pouvoir d'achat

de santé pour lutter contre la COVID-19.

Nous estimons que le montant total des dépenses de santé mondiales en 2019 a augmenté jusqu'à 9,2 billions de dollars (intervalle d'incertitude à 95 % : 9,1 – 9,3). Cela représente une augmentation de 3,1 % par rapport au total de 2018. Le tableau 1 montre les dépenses totales ainsi que les dépenses par source de financement en 2019.

Selon nos estimations préliminaires, l'ADS en 2021 s'est élevé à 67,4 milliards de dollars. Entre 2020 et 2021, l'ADS totale a augmenté de 8,6 % ; 37,8 milliards de dollars ont été consacrés à l'ADS pour la COVID-19 au cours de cette même période de 2020 et 2021. Malgré un plafonnement de l'ADS au cours des années immédiatement avant la pandémie, l'augmentation de l'ADS entre 2019 et 2020 – de l'ordre de 43,9 % – destinée à la COVID-19 a été sans précédent. Cette tendance a continué entre 2020 et 2021, dans une moindre mesure par rapport à 2019 – 2020. Il convient de noter que les 37,8 milliards de dollars consacrés à l'ADS pour la COVID-19 représentent un surcoût de 810 % par rapport au montant total des dépenses d'ADS pour la préparation aux pandémies entre 2000 et 2019, à savoir 4,2 milliards de dollars.

L'ADS pour les domaines de santé autres que la COVID-19 était de l'ordre de 45,6 milliards de dollars en 2021, soit environ 0,9 % de moins que le montant total non lié à la COVID-19 en 2020, mais 5,8 % de plus qu'en 2019. Nos estimations préliminaires par domaine de santé suggèrent que l'ADS pour les maladies non transmissibles (MNT), la santé reproductive et maternelle (SRM) et les approches sectorielles (sector-wide approaches, SWAP), ainsi que le renforcement des systèmes de santé, a affiché une baisse de 2,8 %, 6,7 % et 11,1 % respectivement entre 2020 et 2021. Par contre, l'ADS pour la santé des nouveau-nés et des enfants (10,3 %), le VIH/SIDA (2,2 %), le paludisme (13,6 %), les autres maladies infectieuses (y compris la COVID-19) (26,1 %) et la

tuberculose (2,1 %) a augmenté entre 2020 et 2021.

La pandémie a fortement influencé les dépenses en aide au développement : l'ADS a connu une hausse de 56,3 % depuis 2019, en grande partie en raison de la COVID-19. Malgré nos estimations préliminaires prometteuses suggérant une augmentation de l'ADS pour un nombre de domaines de santé non liés à la COVID entre 2020 et 2021 (après un déclin entre 2019 et 2020), la baisse des dépenses de santé dans les domaines comme les MNT et la santé reproductive et maternelle est un sujet de préoccupation. Selon la dernière étude sur la charge mondiale de la morbidité (Global Burden of Disease, GBD) de 2019, six parmi les dix principales causes de niveau 3^e de charge de la morbidité (mesurées par années de vie ajustées en fonction de l'âge et de l'incapacité) étaient attribuables aux MNT et près de 200 000 décès étaient liés à des troubles maternels⁴.

Les pays à faible revenu sont particulièrement dépendants de l'ADS qui, en 2019, y a constitué jusqu'à 28,5 % (28,0 – 29,1) du montant total des dépenses de santé ; tandis que les pays à revenu intermédiaire de la tranche inférieure dépendent des coûts à la charge des patients pour couvrir les dépenses de santé, de l'ordre de 47,3 % (45,9 – 48,6) en 2019. Les dépenses publiques et privées prépayées ont contribué le plus aux dépenses de santé dans les pays à revenu élevé (86,3 % [85,0 – 87,5] en 2019) et, dans les pays à revenu intermédiaire de la tranche supérieure, les dépenses publiques et privées prépayées ont représenté 56,0 % (54,6 – 57,4) et 11,2 % (10,4 – 12,2) des dépenses de santé en 2019, respectivement.

Le rapport *Financing Global Health 2021* estime que les dépenses de santé futures (2020 à 2050) s'élèveront à 16,9 billions de dollars (16,1 – 17,8) d'ici 2050. Des disparités subsisteront vraisemblablement au niveau mondial. Les dépenses dans les pays à revenu élevé devraient atteindre 10 141 dollars par personne (9 546 – 10 737) d'ici 2050, tandis que les dépenses dans les pays à faible revenu ne devraient atteindre que 56 dollars par personne (53 – 60) en 2050 par rapport à 42 dollars par personne (42 – 43) en 2020 (moins de 1 % des dépenses dans les pays à revenu élevé en 2019), ce qui continuerait de représenter moins de 1 % du taux de dépenses par personne dans l'ensemble des pays à revenu élevé.

Dans l'ensemble, le rapport *Financing Global Health 2021* se concentre sur les dépenses liées à la préparation et aux interventions en cas de pandémies, particulièrement en ce qui concerne la COVID-19. Ce rapport annuel comprend également des estimations actualisées des dépenses de santé mondiales totales par pays jusqu'en 2019, ainsi que des estimations des contributions à l'ADS, y compris les estimations préliminaires jusqu'en 2021 et les estimations actualisées des dépenses de santé futures d'ici 2050. Enfin et surtout, le rapport *Financing Global Health 2021* présente des profils actualisés de financement de sept domaines stratégiques relatifs à la santé : COVID-19 ; VIH/SIDA ; tuberculose ; paludisme ; autres maladies infectieuses ; santé reproductive, maternelle, des nouveau-nés et des enfants ; et MNT.

* Pour en savoir plus sur les niveaux de causalité de la charge mondiale de la morbidité, veuillez consulter le site <https://www.healthdata.org/node/7849>.

Resumen ejecutivo

Financiación de la salud en el mundo 2021 presenta estimaciones actualizadas del gasto sanitario, ayuda al desarrollo de la salud y proyecciones de gasto futuro. Se ha avanzado mucho a nivel mundial desde la edición anterior de *Financiación de la salud en el mundo*, escrita y producida durante algunos de los peores días de la pandemia. En muchas partes del mundo, las muertes y hospitalizaciones por COVID-19 han disminuido drásticamente y algunos ya no consideran que la pandemia sea una emergencia mundial. Las muertes diarias mundiales notificadas por COVID-19 han descendido de más de 16 000 al día el 24 de enero de 2021 a unas 1600 a fecha de mediados de diciembre de 2022. Del mismo modo, el uso global de recursos hospitalarios ha descendido vertiginosamente desde su máximo alcanzado en abril de 2021¹.

La financiación para el desarrollo y la distribución de vacunas ha sido esencial para estos logros. Según la OMS, se han desarrollado casi 200 vacunas contra la COVID-19 en todo el mundo desde el inicio de la pandemia² y se han administrado casi 13 000 millones de dosis³ hasta la fecha.

Sin embargo, se avecinan desafíos. La distribución de la vacuna contra la COVID-19 ha estado lejos de ser equitativa, siendo los países de ingresos altos los que han recibido la mayoría de las vacunas disponibles hasta el momento. Enfermedades como la viruela símica –y ahora el resurgimiento de la poliomielitis– también son motivo de inquietud. Otro es la guerra en Ucrania, que está demostrando tener amplias repercusiones mundiales, desde la inseguridad alimentaria hasta implicaciones energéticas y económicas. Por último, existe la posibilidad cada vez mayor de una recesión mundial impulsada por la inflación, las secuelas de la COVID-19, la guerra en Ucrania y la desaceleración de diversas economías. Dado que gran parte del gasto sanitario procede de los ingresos fiscales, que financian tanto el gasto público como la ayuda al desarrollo, la incertidumbre económica y la recesión podrían tener grandes repercusiones sobre la salud mundial.

Un año marcado por grandes ganancias y pérdidas pone de relieve la importancia de hacer un seguimiento del gasto en sanidad. Las estimaciones y el seguimiento del gasto sanitario de *Financiación de la salud en el mundo* muestran patrones entre grupos de ingresos y regiones y también a lo largo del tiempo, además de destacar variaciones entre países que permiten identificar las áreas donde se necesitan más recursos. Las estimaciones del gasto sanitario de *Financiación de la salud en el mundo 2021* abarcan 204 países entre 1995 y 2019, mientras que para la ayuda al desarrollo de la salud (ADS), presentamos estimaciones de 1990 a 2021 para 137 países de renta baja y media⁴. Nuestro panorama futuro de gasto sanitario cubre un total de 204 países durante el período de 2020 a 2050.

Dos aspectos en los que se centra especialmente el informe de este año son la ayuda al desarrollo para la COVID-19 y la falta histórica de financiación para la preparación ante una pandemia. Conocer cuánto se

*Las estimaciones de la ADS para 2021 son proyecciones.

TABLE 3 Gasto sanitario total y gasto sanitario por fuente, global y por grupo de ingresos (2019)

	Gasto sanitario por persona (USD)	Gasto sanitario por persona (\$PPA)	Gasto sanitario por PIB (%)	Gasto sanitario gubernamental por gasto sanitario total (%)	Gasto corriente por gasto sanitario total (%)	Gasto privado de prepago por gasto sanitario total (%)	Ayuda al desarrollo de la salud por gasto sanitario total (%)
Global	1183 (1171 a 1195)	1518 (1505 a 1531)	9,7 % (9,6 a 9,8)	59,8 % (59,8 a 59,8)	18,2 % (17,9 a 18,5)	21,5 % (21,1 a 21,9)	0,5 % (0,5 a 0,5)
GRUPO DE RENTA DEL BANCO MUNDIAL							
Renta alta	5938 (5876 a 6004)	6469 (6405 a 6535)	12,4 % (12,2 a 12,5)	62,0 % (61,4 a 62,7)	13,7 % (13,3 a 14,3)	24,3 % (23,6 a 24,9)	0,0 % (0,0 a 0,0)
Renta media-alta	575 (561 a 590)	1085 (1062 a 1108)	5,7 % (5,6 a 5,9)	56,0 % (54,6 a 57,4)	32,6 % (31,5 a 33,7)	11,2 % (10,4 a 12,2)	0,2 % (0,1 a 0,2)
Renta media-baja	117 (114 a 121)	300 (291 a 309)	4,1 % (3,9 a 4,2)	39,9 % (38,7 a 41,1)	47,3 % (45,9 a 48,6)	10,6 % (9,7 a 11,6)	2,2 % (2,2 a 2,3)
Renta baja	37 (36 a 38)	145 (140 a 150)	4,9 % (4,7 a 5,2)	23,0 % (22,1 a 23,8)	43,8 % (42,6 a 44,9)	4,7 % (4,3 a 5,2)	28,5 % (28,0 a 29,1)

*Las estimaciones entre paréntesis son intervalos de incertidumbre del 95 %.

La ayuda al desarrollo de la salud incluye tanto aportaciones económicas como en especie para actividades destinadas a mejorar la salud en los países de renta baja y media.

PPA = Paridad de poder adquisitivo.

gasta en sanidad para luchar contra la COVID-19 es fundamental tanto para gestionar la pandemia actual como para prepararse para la próxima.

Estimamos que el gasto sanitario mundial total aumentará hasta los 9,2 billones de dólares (intervalo de incertidumbre del 95 %: 9,1-9,3) en 2019. Esto representa un aumento del 3,1 % con respecto al total de 2018. En la tabla 1 se muestra el gasto total de 2019 y el gasto de 2019 por fuente.

Según nuestras estimaciones preliminares, la ADS contó con 67 400 millones de dólares en 2021. Entre 2020 y 2021, el total de ADS aumentó un 8,6 %; se destinaron 37 800 millones de dólares a ADS para la COVID-19 entre 2020 y 2021. A pesar de un estancamiento en el crecimiento de la ADS en los años inmediatamente anteriores a la pandemia, el aumento de la ADS entre 2019 y 2020 –cuando la ADS creció un 43,9 %– como consecuencia de la COVID-19 no tiene precedentes. El aumento continuado entre 2020 y 2021, aunque no tan espectacular como entre 2019 y 2020, continúa esta tendencia. Cabe destacar que los 37 800 millones de dólares que se han gastado en ADS para la COVID-19 suponen un aumento del 810 % respecto al gasto total en ADS para la preparación ante una pandemia entre 2000 y 2019, que ascendió a 4200 millones de dólares.

La ADS para las áreas prioritarias de salud distintas de la COVID-19 alcanzó los 45 600 millones de dólares en 2021, aproximadamente un descenso del 0,9 % frente al total para fines distintos de la COVID-19 en 2020, si bien es un aumento del 5,8 % respecto a 2019. Por área prioritaria de salud, nuestras estimaciones preliminares sugieren que la ADS para enfermedades no transmisibles (ENT), salud reproductiva y materna (SRM) y para los enfoques sectoriales (ES) y el fortalecimiento de los sistemas sanitarios disminuyó entre 2020 y 2021, con descensos del 2,8 %, 6,7 % y 11,1 %, respectivamente. Por el contrario, la ADS para salud neonatal e infantil (10,3 %), VIH/SIDA (2,2 %), malaria (13,6 %), otras enfermedades infecciosas (que incluye la COVID-19) (26,1 %) y tuberculosis (2,1 %) aumentó

entre 2020 y 2021.

La pandemia ha sesgado el gasto para el desarrollo: la ADS ha aumentado un 56,3 % desde 2019, en gran parte debido a la COVID-19. Aunque es positivo que nuestras estimaciones preliminares sugieran que la ADS para una serie de áreas prioritarias de salud distintas de la COVID creció entre 2020 y 2021 tras haber disminuido entre 2019 y 2020, el hecho de que el gasto en áreas como las ENT y la salud reproductiva y materna parezca haber disminuido es preocupante. Según el estudio más reciente sobre la carga mundial de morbilidad (CMM), en 2019, seis de las 10 principales causas de carga de morbilidad de nivel 3° (medida por años de vida ajustados por discapacidad y normalizados por edad) pertenecían a las ENT y se produjeron casi 200 000 muertes por afecciones relacionadas con la maternidad⁴.

Los países de renta baja son los más dependientes de la ADS, donde representa el 28,5 % (28,0-29,1) del gasto sanitario total de 2019, mientras que los países de renta media-baja dependen del gasto corriente para financiar la asistencia sanitaria, que asciende al 47,3 % (45,9-48,6) del gasto sanitario de 2019. El gasto gubernamental y el privado de prepago fueron los mayores contribuyentes al gasto sanitario en los países de renta alta (86,3 % [85,0-87,5] del gasto sanitario de 2019); en los países de renta media-alta, el gasto gubernamental y el privado de prepago constituyeron el 56,0 % (54,6-57,4) y el 11,2 % (10,4-12,2) del gasto sanitario de 2019, respectivamente.

Las estimaciones de *Financiación de la salud en el mundo 2021* sobre el gasto sanitario futuro de 2020 a 2050 prevén que el gasto crecerá hasta los 16,9 billones de dólares (16,1-17,8) hasta 2050. Es probable que se mantengan las disparidades globales, ya que se prevé que el gasto de los países de renta alta aumente a 10 141 dólares por persona (9546-10 737) hasta 2050, mientras que el gasto de los países de renta baja solo aumentará de 42 dólares por persona (42-43) en 2020 (menos del 1 % del gasto de los países de renta alta en 2019) a 56 dólares por persona (53-60) hasta 2050, lo que supone menos del 1 % de la tasa de gasto por persona en los países de renta alta.

En conjunto, *Financiación de la salud en el mundo 2021* se centra en el gasto en preparación y respuesta ante pandemias, en concreto en lo referente a la COVID-19. El informe de este año también incluye estimaciones actualizadas del gasto interno global desde ahora hasta 2019, estimaciones actualizadas de las aportaciones a la ADS (incluidas estimaciones preliminares hasta 2021) y estimaciones actualizadas del gasto sanitario futuro (hasta 2050). Por último, pero no por ello menos importante, también se incluyen en *Financiación de la salud en el mundo 2021* perfiles actualizados de financiación para siete áreas prioritarias de salud: COVID-19; VIH/SIDA; tuberculosis; malaria; otras enfermedades infecciosas; salud reproductiva, materna, neonatal e infantil y ENT.

*Para obtener información sobre los niveles de las causas de la CMM, visite <https://www.healthdata.org/node/7849>.

Resumo executivo

O *Financiamento da Saúde Global 2021* fornece estimativas das despesas totais de saúde, assistência ao desenvolvimento da saúde e projeções das despesas de saúde no futuro. Houve muito progresso mundial desde a edição anterior do *Financiamento da Saúde Global*, que foi elaborada e produzida durante alguns dos piores dias da pandemia. Em muitas partes do mundo, as mortes e hospitalizações devido à COVID-19 diminuíram drasticamente, e algumas pessoas já não consideram a pandemia como uma emergência mundial. As mortes diárias notificadas devido à COVID-19 diminuíram de mais de 16.000 por dia em 24 de janeiro de 2021 para cerca de 1.600 em meados de dezembro de 2022. Do mesmo modo, o uso de recursos hospitalares no mundo diminuiu vertiginosamente desde o pico de abril de 2021.¹

O financiamento do desenvolvimento e distribuição de vacinas teve um papel fundamental nesses avanços. Segundo a OMS, quase 200 vacinas contra a COVID-19 foram desenvolvidas em todo o mundo desde o início da pandemia², e quase 13 bilhões de doses³ foram administradas até o momento.

No entanto, surgiram desafios. A distribuição da vacina contra a COVID-19 esteve longe de ser igualitária: os países de alta renda receberam a maioria das vacinas disponíveis até o momento. Problemas de saúde, como a Mpox (varíola dos macacos), e o recente ressurgimento da poliomielite, são igualmente preocupantes. Outra questão é a guerra na Ucrânia, que está causando amplas repercussões mundiais, desde insegurança alimentar até implicações econômicas e de energia. Por fim, existe a possibilidade crescente de uma recessão global causada pela inflação, pelas sequelas da COVID-19, pela guerra da Ucrânia e pela desaceleração de várias economias. Como grande parte dos recursos para as despesas com a saúde são provenientes da receita tributária, a saúde global pode sofrer um grande impacto causado pelo financiamento tanto das despesas do governo quanto da assistência ao desenvolvimento, pela incerteza econômica e pela recessão.

Em um ano marcado por grandes ganhos e perdas, destaca-se a importância de monitorar as despesas de saúde. O monitoramento e as estimativas das despesas de saúde no *Financiamento da Saúde Global* revelam padrões em regiões e faixas de renda, bem como ao longo do tempo, e destaca as variações entre países, o que serve para identificar onde há a maior necessidade de recursos adicionais. As estimativas de despesas de saúde do *Financiamento da Saúde Global 2021* abrange 204 países no período de 1995 a 2019, ao passo que, para a assistência ao desenvolvimento da saúde (DAH, development assistance for health), apresentamos estimativas do período de 1990 a 2021 para 137 países de baixa e média renda.⁴ Nossas conjunturas de despesas futuras com saúde abrangem 204 países no período entre 2020 e 2050.

Dois aspectos centrais do relatório deste ano são a assistência ao desenvolvimento para a COVID-19 e o histórico da falta de financiamento da preparação para o enfrentamento de pandemias. Compreender o quanto está sendo investido em saúde para combater a COVID-19 é fundamental

¹As estimativas da DAH de 2021 são projeções.

TABLE 4 Total de despesas de saúde, despesas de saúde globais, por fonte e por faixa de renda em 2019

	Despesas de saúde por pessoa (USD)	Despesas de saúde por pessoa (\$PPP)	Despesas de saúde por PIB (%)	Despesas públicas de saúde por total de despesas de saúde (%)	Recursos próprios por total de despesas de saúde (%)	Despesas privadas antecipadas por total de despesas de saúde (%)	Assistência ao desenvolvimento da saúde por total de despesas de saúde (%)
Global	1.183 (1.171 a 1.195)	1.518 (1.505 a 1.531)	9,7% (9,6 a 9,8)	59,8% (59,8 a 59,8)	18,2% (17,9 a 18,5)	21,5% (21,1 a 21,9)	0,5% (0,5 a 0,5)
FAIXA DE RENDA SEGUNDO O BANCO MUNDIAL							
Alta renda	5.938 (5.876 a 6.004)	6.469 (6.405 a 6.535)	12,4% (12,2 a 12,5)	62,0% (61,4 a 62,7)	13,7% (13,3 a 14,3)	24,3% (23,6 a 24,9)	0,0% (0,0 a 0,0)
Renda média-alta	575 (561 a 590)	1.085 (1.062 a 1.108)	5,7% (5,6 a 5,9)	56,0% (54,6 a 57,4)	32,6% (31,5 a 33,7)	11,2% (10,4 a 12,2)	0,2% (0,1 a 0,2)
Renda média-baixa	117 (114 a 121)	300 (291 a 309)	4,1% (3,9 a 4,2)	39,9% (38,7 a 41,1)	47,3% (45,9 a 48,6)	10,6% (9,7 a 11,6)	2,2% (2,2 a 2,3)
Baixa renda	37 (36 a 38)	145 (140 a 150)	4,9% (4,7 a 5,2)	23,0% (22,1 a 23,8)	43,8% (42,6 a 44,9)	4,7% (4,3 a 5,2)	28,5% (28,0 a 29,1)

*As estimativas entre parênteses têm intervalos de incerteza de 95%.

A assistência ao desenvolvimento da saúde inclui contribuições financeiras e em espécie para atividades destinadas a melhorar a saúde em países de baixa e média renda.

PPP = Paridade de poder de compra

tanto para o manejo da pandemia atual quanto para a preparação para uma próxima.

Estimamos que as despesas totais mundiais com saúde aumentaram US\$ 9,2 trilhões (9,1–9,3, com intervalo de incerteza de 95%) em 2019. Isso constitui um aumento de 3,1% em relação ao total de 2018. A Tabela 1 mostra o total de despesas em 2019 e as despesas de 2019 por fonte.

De acordo com nossas estimativas preliminares, US\$ 67,4 bilhões foram destinos à DAH em 2021. Entre 2020 e 2021, a DAH total aumentou 8,6%; US\$ 37,8 bilhões foram direcionados à DAH para a COVID-19 entre 2020 e 2021. Embora tenha ocorrido uma estabilização no crescimento da DAH nos anos imediatamente anteriores à pandemia, o aumento na DAH entre 2019 e 2020 como resultado da COVID-19 — quando a DAH cresceu 43,9% — foi sem precedentes. Portanto, o aumento constante entre 2020 e 2021, apesar de não ser dramático como o de 2019–2020, mantém essa tendência.

É importante mencionar que os US\$ 37,8 bilhões gastos com a DAH para a COVID-19 representam um aumento de 810% em relação ao total das despesas com DAH destinadas à preparação para o enfrentamento de pandemias entre 2000 e 2019, que totalizou US\$ 4,2 bilhões.

A DAH para as áreas de foco da saúde, além da COVID-19, chegou a US\$ 45,6 bilhões em 2021, cerca de 0,9% a menos que o total não relacionado à COVID-19 em 2020, embora seja 5,8% a mais que em 2019. Nossa estimativa preliminar por área de foco da saúde sugere que a DAH para doenças não transmissíveis (NCDs, non-communicable diseases), saúde materna e reprodutiva (RMH, reproductive and maternal health) e abordagens setoriais amplas (SWAPS, sector-wide approaches) e fortalecimento dos sistemas de saúde diminuíram 2,8%, 6,7% e 11,1% entre 2020 e 2021, respectivamente. Por outro lado, a DAH para a saúde de recém-nascidos e crianças (10,3%), HIV/AIDS (2,2%), malária (13,6%), outras doenças transmissíveis (incluindo a COVID-19) (26,1%) e tuberculose (2,1%) aumentou

entre 2020 e 2021.

A pandemia causou uma distorção das despesas com desenvolvimento: a DAH aumentou 56,3% desde 2019, em grande parte devido à COVID-19. Houve um crescimento benéfico da DAH entre 2020 e 2021 para diversas áreas de foco da saúde além da COVID indicado por nossas estimativas preliminares depois da diminuição que houve entre 2019 e 2020. Contudo, é preocupante que as despesas em áreas como NCDS e saúde materna e reprodutiva pareçam ter diminuído. De acordo com o estudo mais recente sobre o estudo Global Burden of Disease (GBD — Carga Global de Doença), de 2019, seis das 10 maiores causas de ônus de doenças de nível 3^{*} (conforme medido por anos de vida ajustados por incapacidade padronizados por idade) eram NCDS, e houve quase 200.000 mortes devido a problemas de saúde maternos.⁴

Os países de baixa renda são os mais dependentes da DAH, onde representa 28,5% (28,0–29,1) do total de despesas de saúde em 2019. Os países de renda média-baixa, por sua vez, dependem de recursos próprios para financiar a assistência à saúde, que corresponderam a 47,3% (45,9–48,6) das despesas de saúde em 2019. As despesas públicas e privadas antecipadas foram as que mais contribuíram para as despesas de saúde em países de alta renda (86,3% [85,0–87,5] das despesas de saúde em 2019). Nos países de renda média-alta, as despesas públicas e privadas antecipadas constituíram 56,0% (54,6–57,4) e 11,2% (10,4–12,2) das despesas de saúde em 2019, respectivamente.

As estimativas do *Financiamento da Saúde Global 2021* quanto às despesas futuras com saúde de 2020 a 2050 indicam que as despesas chegarão a US\$ 16,9 trilhões (16,1–17,8) até 2050. As disparidades mundiais provavelmente permanecerão, já que as despesas dos países de alta renda devem crescer para US\$ 10.141 por pessoa (9.546–10.737) até 2050. As despesas dos países de baixa renda, por sua vez, devem crescer apenas de US\$ 42 por pessoa (42–43) em 2020 (menos de 1% das despesas dos países de alta renda em 2019) para US\$ 56 por pessoa (53–60) em 2050, permanecendo abaixo de 1% da taxa de despesas por pessoa em relação aos países de alta renda.

De modo geral, o *Financiamento da Saúde Global 2021* concentrou-se no investimento com a preparação para o enfrentamento e resposta a pandemias, especificamente com relação à COVID-19. O relatório deste ano também inclui estimativas atualizadas de despesas domésticas globais até 2019, estimativas atualizadas de contribuições para a DAH, incluindo estimativas preliminares até 2021, e estimativas atualizadas de despesas futuras com saúde até 2050. Por último, mas não menos importante, também estão incluídos no *Financiamento da Saúde Global 2021* os perfis de financiamento atualizados para sete áreas de foco da saúde: COVID-19; HIV/AIDS; tuberculose; malária; outras doenças transmissíveis; saúde reprodutiva, materna, de recém nascidos e crianças; e NCDS.

*Para mais informações sobre os níveis de causa de GBD, acesse <https://www.healthdata.org/node/7849>.

الملخص التنفيذي

يقدم تقرير تمويل قطاع الصحة العالمي لعام 2021 تقديرات لحجم الإنفاق الكلي على الصحة، والمساعدة الإنمائية الصحية، وتوقعات لحجم الإنفاق الصحي في المستقبل. لقد حدث تقدم كبير على المستوى العالمي منذ الإصدار السابق لتقرير تمويل قطاع الصحة العالمي الذي كتب وأصدر خلال بعض من أسوأ أيام الجائحة. وفي أجزاء كثيرة من العالم، انخفضت الوفيات وحالات دخول المستشفى بسبب كوفيد-19 انخفاضاً كبيراً، ولم يعد البعض ينظر إلى الجائحة باعتبارها حالة طوارئ عالمية. انخفضت الوفيات اليومية المبلغ عنها عالمياً بسباب كوفيد-19 مقارنة بـ 16000 حالة يومياً في 24 يناير 2021 لتصل إلى 1600 حالة تقريباً بداية من منتصف ديسمبر 2022. وبالمثل؛ انخفض بصورة حادة معدل استخدام موارد المستشفيات عالمياً عن ذروته التي وصل إليها في¹ إبريل 2021.

كان تمويل تطوير اللقاحات وتوزيعها أمراً أساسياً لتحقيق هذه المكاسب. فوفقاً لمنظمة الصحة العالمية، طور ما يقرب من 200 لقاح لكوفيد-19 على مستوى العالم منذ بداية الجائحة،² وأعطيت 13 مليار جرعة تقريباً³ حتى وقتنا الحالي.

ومع هذا، فإن التحديات تلوح في الأفق. جاء توزيع لقاحات كوفيد-19 بعد ما يكون عن مبدأ المساواة؛ فقد تلقت الدول مرتفعة الدخل معظم اللقاحات المتاحة حتى الآن. وتأتي أيضاً الحالات الصحية مثل جدري القردة - والآن معاودة ظهور شلل الأطفال - كمسائل مثيرة للقلق. كما تمثل الحرب في أوكرانيا تحدياً آخر، إذ تبرهن على أن لها تداعيات عالمية واسعة النطاق، من انعدام الأمن الغذائي إلى التبعات الاقتصادية وتلك المتعلقة بالطاقة. أخيراً، هناك الاحتمالية المتزايدة لحدوث ركود عالمي نتيجة التضخم بالإضافة إلى الآثار اللاحقة لكورونا-19 والحرب في أوكرانيا وحالات الانكماش في العديد من الاقتصادات. نظراً لأن حجماً كبيراً من الإنفاق الصحي يأتي من عائدات الضرائب، لتمويل كل من الإنفاق الحكومي والمساعدة الإنمائية، فإن حالة عدم اليقين والركود الاقتصادي قد تكون لهما آثار كبيرة على قطاع الصحة العالمي.

ومع عام يتسم بمحاسبي وخسائر كبرى، تتأكد أهمية تتبع الإنفاق الصحي. إن عمليات الرصد والتقديرات لحجم الإنفاق الصحي الواردية في تقرير تمويل قطاع الصحة العالمي توضح الأنماط الموجودة بين فئات الدخل والمناطق وبمرور الزمن، وتلقي الضوء على التفاوتات بين الدول، وهو ما يمكنه تحديد الجوانب ذات الحاجة الأمس إلى مزيد من الموارد. تغطي تقديرات الإنفاق الصحي في تقرير تمويل قطاع الصحة العالمي لعام 2021 204 دول بين عامي 1995 و2019، أما بالنسبة لمساعدة الإنمائية الصحية (DAH)، فنقدم تقديرات بين عامي 1990 و2021 لـ 137 دولة منخفضة ومتوسطة الدخل.⁴ وتغطي السينarioهات التي تتوقعها لحجم الإنفاق الصحي في المستقبل 204 دول للفترة من 2020 إلى 2050.

يركز تقرير هذا العام على جانبيين محددين هما المساعدة الإنمائية لمواجهة كوفيد-19 والنقص التاريخي في التمويل بهدف الاستعداد للجائحات. فإن فهم مقدار الإنفاق الصحي لمكافحة كوفيد-19 هو شيء لا غنى عنه لكل من إدارة الجائحة الحالية والاستعداد للجائحة القادمة.

نحن نقدر أن إجمالي حجم الإنفاق الصحي العالمي قد ارتفع إلى 9.2 تريليون دولار (فاحصل عدم اليقين 9.1% - 9.3%) في عام 2019. ويشكل هذا زيادة بنسبة 3.1% عن إجمالي الإنفاق لعام 2018. يعرض الجدول 1 إجمالي الإنفاق لعام 2019 وحجم الإنفاق لعام 2019 حسب المصدر.

*تقديرات المساعدة الإنمائية الصحية لعام 2021 هي توقعات.

الدول منخفضة الدخل هي الأكثر اعتماداً على المساعدة الإنمائية الصحية، حيث تشكل 28.5% (29.1-28.0) من إجمالي الإنفاق الصحي لعام 2019، بينما تعتمد الدول ذات الدخل الأقل من المتوسط على الإنفاق من الأموال الخاصة لتمويل الرعاية الصحية، بإجمالي يصل إلى 47.3% (45.9-48.6) من الإنفاق الصحي لعام 2019. كان الإنفاق الحكومي والإنفاق

الخاص المدفوع مقدماً يشكل الإسهام الأكبر في الإنفاق الصحي في الدول مرتفعة الدخل [87.5-85.0] %86.3 من الإنفاق الصحي لعام 2019) وفي الدول ذات الدخل الأعلى من المتوسط؛ حيث شكل الإنفاق الحكومي والإنفاق الخاص المدفوع مقدماً %56.0 (54.6-57.4) و (10.4-12.2) من الإنفاق الصحي لعام 2019، على التوالي.

تشير تقديرات تقرير تمويل قطاع الصحة العالمي لعام 2021 لحجم الإنفاق الصحي في المستقبل بين عامي 2020 و2050 إلى أنه من المقدر نموه ليصل إلى 16.9 تريليون دولار (16.1-17.8) بحلول عام 2050. على الأرجح، ستظل التفاوتات العالمية قائمة؛ فمن المتوقع أن ينمو حجم إنفاق الدول مرتفعة الدخل إلى 10141 دولاراً للفرد (9546-10737) بحلول 2050، بينما يتوقع أن ينمو حجم إنفاق الدول منخفضة الدخل فقط من 42 دولاراً للفرد (42-43) في 2020 (أقل من 1% من إنفاق الدول مرتفعة الدخل لعام 2019) إلى 56 دولاراً للفرد (53-60) في عام 2050، ليظل أقل من 1% من معدل الإنفاق للفرد في الدول مرتفعة الدخل.

بشكل عام، يركز تقرير تمويل قطاع الصحة العالمي لعام 2021 على الإنفاق لأغراض الاستعداد للجائحة والاستجابة لها، خاصة فيما يتعلق بكوفيد-19. يتضمن تقرير هذا العام أيضاً تقديرات محدثة لإجمالي الإنفاق المحلي على الصعيد العالمي، من الآن حتى عام 2019، وتقديرات محدثة لمساهمات في المساعدة الإنمائية الصحية، بما في ذلك التقديرات الأولية حتى عام 2021، وتقديرات محدثة لحجم الإنفاق الصحي في المستقبل حتى عام 2050. وأخيراً وليس آخرًا، يتضمن تقرير تمويل قطاع الصحة العالمي لعام 2021 أيضاً ملفات تعريفية محدثة لتمويل سبعه مجالات للتركيز الصحي: كوفيد-19، وفيروس HIV/AIDS، والسل، والمalaria، والأمراض المعدية الأخرى، والصحة الإنجابية وصحة الأمهات والأطفال وحديثي الولادة، والأمراض غير السارية.

الجدول 1 إجمالي الإنفاق الصحي والإنفاق الصحي حسب المصدر، عالمياً وحسب فئة الدخل، لعام 2019

المساعدة الإنمائية من الصحية من إجمالي الإنفاق (%)	الإنفاق الصحي (%)	الإنفاق من الأموال المدفوعة إجمالى الإنفاق (%)	الإنفاق من الأموال الحكومية من إجمالي الناتج (%)	الإنفاق الصحي حسب إجمالي الإنفاق (%)	الإنفاق الصحي للفرد بالدولار (%)	الإنفاق الصحي للفرد (بالدولار) الأمريكي (%)	الدخل العالمي (%) إلى 1171 (1195 إلى 1171)
0.5 (0.5 إلى 0.5)	%21.5 (21.9 إلى 21.1)	%18.2 (18.5 إلى 17.9)	%59.8 (59.8 إلى 59.8)	%9.7 (9.8 إلى 9.6)	1518 (1531 إلى 1505)	1183 (1195 إلى 1171)	عالمياً
فئة الدخل وفقاً لتصنيف البنك الدولي							
0.0 (0.0 إلى 0.0)	%24.3 (24.9 إلى 23.6)	%13.7 (14.3 إلى 13.3)	%62.0 (62.7 إلى 61.4)	%12.4 (12.5 إلى 12.2)	6469 (6535 إلى 6405)	5938 (6004 إلى 5876)	الدخل المرتفع
0.2 (0.2 إلى 0.1)	%11.2 (12.2 إلى 10.4)	%32.6 (33.7 إلى 31.5)	%56.0 (57.4 إلى 54.6)	%5.7 (5.9 إلى 5.6)	1085 (1108 إلى 1062)	575 (590 إلى 561)	الدخل الأعلى من المتوسط
%2.2 (2.3 إلى 2.2)	%10.6 (11.6 إلى 9.7)	%47.3 (48.6 إلى 45.9)	%39.9 (41.1 إلى 38.7)	%4.1 (4.2 إلى 3.9)	300 (309 إلى 291)	117 (121 إلى 114)	الدخل الأقل من المتوسط
%28.5 (29.1 إلى 28.0)	%4.7 (5.2 إلى 4.3)	%43.8 (44.9 إلى 42.6)	%23.0 (23.8 إلى 22.1)	%4.9 (5.2 إلى 4.7)	145 (150 إلى 140)	37 (38 إلى 36)	الدخل المنخفض

*التقديرات بين القوسين هي فواصل عدم اليقين 95%.
المساعدة الإنمائية الصحية تتضمن مساهمات مالية ومساهمات عينية للأنشطة التي تستهدف تحسين الصحة في الدول منخفضة ومتوسطة الدخل.

PPP = مماثل القوة الشرائية

وفقاً لتقديراتنا الأولية، كان هناك 67.4 مليار دولار في صورة مساعدات إنمائية صحية في عام 2021. بين عامي 2020 و2021، زاد إجمالي المساعدة الإنمائية الصحية بنسبة 8.6% وُجه 37.8 مليار دولار إلى المساعدة الإنمائية الصحية لمواجهة كوفيد-19 بين عامي 2020 و2021. ورغم استقرار معدل نمو المساعدة الإنمائية الصحية خلال الأعوام السابقة للجائحة مباشرة، فإن الزيادة في المساعدة الإنمائية الصحية بين عامي 2019 و2020 - عندما حدث نمو بنسبة 43.9% في المساعدة الإنمائية الصحية - نتيجة لكورونا-19 كانت غير مسبوقة. استمر هذا الاتجاه باستمرار الزيادة بين عامي 2020 و2021، بالرغم من أنها لم تكن بضخامة ما حدث في 2019-2020. ومن الجدير بالذكر أن 37.8 مليار دولار التي أنفقت على المساعدة الإنمائية الصحية لمواجهة كوفيد-19 تزيد بنسبة 810% عن إجمالي الإنفاق على المساعدة الإنمائية الصحية لأغراض الاستعداد للجائحات بين عامي 2000 و2019، وهو ما بلغ إجمالاً 4.2 مليار دولار.

بلغت المساعدة الإنمائية الصحية لمجالات التركيز الصحي بخلاف كوفيد-19 45.6 مليار دولار عام 2021، أي نحو 0.9% أقل من الإجمالي غير المتعلق بكوفيد-19 في 2020، رغم زيادة نسبتها 5.8% عن 2019. بحسب مجال التركيز الصحي، تشير تقديراتنا الأولية إلى أن المساعدة الإنمائية الصحية لمواجهة الأمراض غير السارية (NCDS)، والصحة الإنجابية وصحة الأمهات (RMH)، والنهج القطاعية الشاملة (swaps) وتعزيز النظم الصحية قد انخفضت بين عامي 2020 و2021، بنسبة 2.8% و6.7% و11.1% على التوالي. وعلى العكس، فقد زادت المساعدة الإنمائية الصحية لصحة الأطفال وحديثي الولادة (%10.3)، ومواجهة فيروس HIV/AIDS (2.2%)، والمalaria (13.6%)، والأمراض المعدية الأخرى (بما في ذلك كوفيد-19)، والسل (%26.1) بين عامي 2020 و2021.

أدت الجائحة إلى انحراف في توزيع الإنفاق الإنمائي: فقد زادت المساعدة الإنمائية الصحية بنسبة 56.3% منذ عام 2019، بشكل كبير نتيجة كوفيد-19. ورغم أنه من الإيجابي أن تشير تقديراتنا الأولية إلى زيادة المساعدة الإنمائية الصحية لعدد من مجالات التركيز الصحي بخلاف كوفيد بين عامي 2020 و2021 بعد انخفاضها بين عامي 2019 و2020، فهذا الإنفاق الذي يبدو أنه انخفض في مجالات مثل الأمراض غير السارية والصحة الإنجابية وصحة الأمهات يشكل سبيلاً يثير القلق. وفقاً لأحدث دراسة عن عبء المرض العالمي، في 2019 كانت الأمراض غير السارية تمثل ستة من أهم 10 أسباب من المستوى 3 لعبء المرض (كما قيست بسنوات العمر المعدلة حسب الإعاقة المعياري حسب السن)، وكان 2000000 تقريباً من الوفيات بسبب اضطرابات لدى الأمهات.⁴

*معرفة معلومات عن مستويات أسباب عبء المرض العالمي، يرجى زيارة الرابط <https://www.healthdata.org/node/7849>

Introduction

The Institute for Health Metrics and Evaluation is pleased to present *Financing Global Health 2021*, the 13th in the report series that tracks global health spending. Each issue in the series is a product of the notable global events that form the context of the report. This year the dramatic impacts of COVID-19 remain close, influencing this report and underscoring the need for continuing to publish retrospective health spending tracking, as well as forward-looking estimates and analyses of health spending. Global challenges both directly and indirectly related to health – like outbreaks of mpox and Ebola, as well as Russia's invasion of Ukraine and the subsequent economic and political fallout – only emphasize this need.

COVID-19 has had a major effect on global health financing. While much progress has been made in the fight against COVID-19, the reported COVID-19 death toll is almost 7.2 million. Estimates from the Institute for Health Metrics and Evaluation indicate that as of mid-December 2022, there have been 17.8 million deaths in some way attributable to COVID-19.¹ And despite many successes, it is clear that the COVID-19 vaccine rollout has been notably unequal, and many low-income countries have far lower vaccine coverage percentages than wealthier countries.

To inform decision-making to address these and other issues, we present estimates of current and future health spending, split into two parts: Part One is focused on funding today's priorities and includes estimates of total health spending for 204 countries, from 1995 to 2019, as well as detailed estimates of DAH from 1990 to 2021. Part Two of *Financing Global Health 2021* is concerned with the future and includes estimates of both domestic spending and DAH, to 2050.

What's new in *Financing Global Health 2021*

Financing Global Health has been published continuously since 2009, and with every edition we seek to improve upon the previous year's work. Here is what's new in *Financing Global Health 2021*:

- **A focus on pandemic preparedness and response (PPR) spending**
 - We present retrospective estimates of DAH for PPR from 1990 to 2021. We also look ahead at the next five years – to 2026 – and forecast the availability of DAH as it relates to the need estimates published by the G20's High Level Independent Panel (HLIP) on pandemic preparedness.
- **Revised future health spending projections to 2050**
 - We have updated our projections of future health spending for 204 countries to 2050, assuming historical spending patterns and relationships persist.

BOX 1 This report's peer-reviewed foundation

The work presented in *Financing Global Health 2021* draws in part on a peer-reviewed research article published on January 24, 2023:

Global investments in pandemic preparedness and COVID-19: tracking development assistance and domestic spending on health, 1990–2026

BOX 2 Health financing terms defined

Annualized rate of change: This is the growth rate needed each year (i.e., annualized) to go from the observed amount in one year to an observed amount in a different year. Also known as compound growth rate (with annual compounding).

Development assistance for health: Financial and in-kind resources that are transferred through international development agencies (such as United Nations Children's Fund [UNICEF], the United Kingdom's Department for International Development, or the Bill & Melinda Gates Foundation) to low- and middle-income countries with the primary purpose of maintaining or improving health.

Disability-adjusted life year (DALY): One DALY is equivalent to one lost year of "healthy" life. The sum of these DALYs across the population, or the health loss, is a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.

Global Burden of Disease super-regions: Seven regions which group sub-regions based on cause of death patterns. Super-regions are as follows: GBD high-income; Latin America and the Caribbean; sub-Saharan Africa; Southeast Asia, East Asia, and Oceania; Central Europe, Eastern Europe, and Central Asia; South Asia; and North Africa and the Middle East.

Government health spending: Spending for health care that is derived from domestic sources and is mutually exclusive from out-of-pocket, prepaid private, and DAH spending. Government spending includes spending on public health system infrastructure and government-provided social health insurance.

Health financing transition: The shift that countries experience from an early period in which health spending is low and primarily out-of-pocket to a later period in which health spending is high and primarily pooled.

Out-of-pocket health spending: Payments made by individuals for health maintenance, restoration, or enhancement at or after the time of health care delivery, including health insurance copayments or payments devoted to deductibles. Health insurance premiums are not considered out-of-pocket.

Prepaid private health spending: Health spending sources from non-public programs that are funded prior to obtaining health care, such as private health insurance and services provided for free by non-governmental agencies.

Total health spending: The sum of government health spending, prepaid private health spending, out-of-pocket health spending, and DAH. Total health spending does not include indirect health spending, such as lost wages due to illness or transportation costs; informal care (spending on care provided by a family member or by traditional healers); or illegal transactions.

Universal health coverage: The goal of universal health coverage is to ensure that all people have access to effective health services and may partake of these services without financial hardship.

World Bank income group: The World Bank classifies countries using gross national income (GNI) per person. This report uses the fiscal year 2023 World Bank income groups, which are high-income (GNI per person greater than \$13,205), upper-middle-income (\$4,256 to \$13,205), lower-middle-income (\$1,086 to \$4,255), and low-income (\$1,085 or less).[‡]

[‡]Source:
<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>

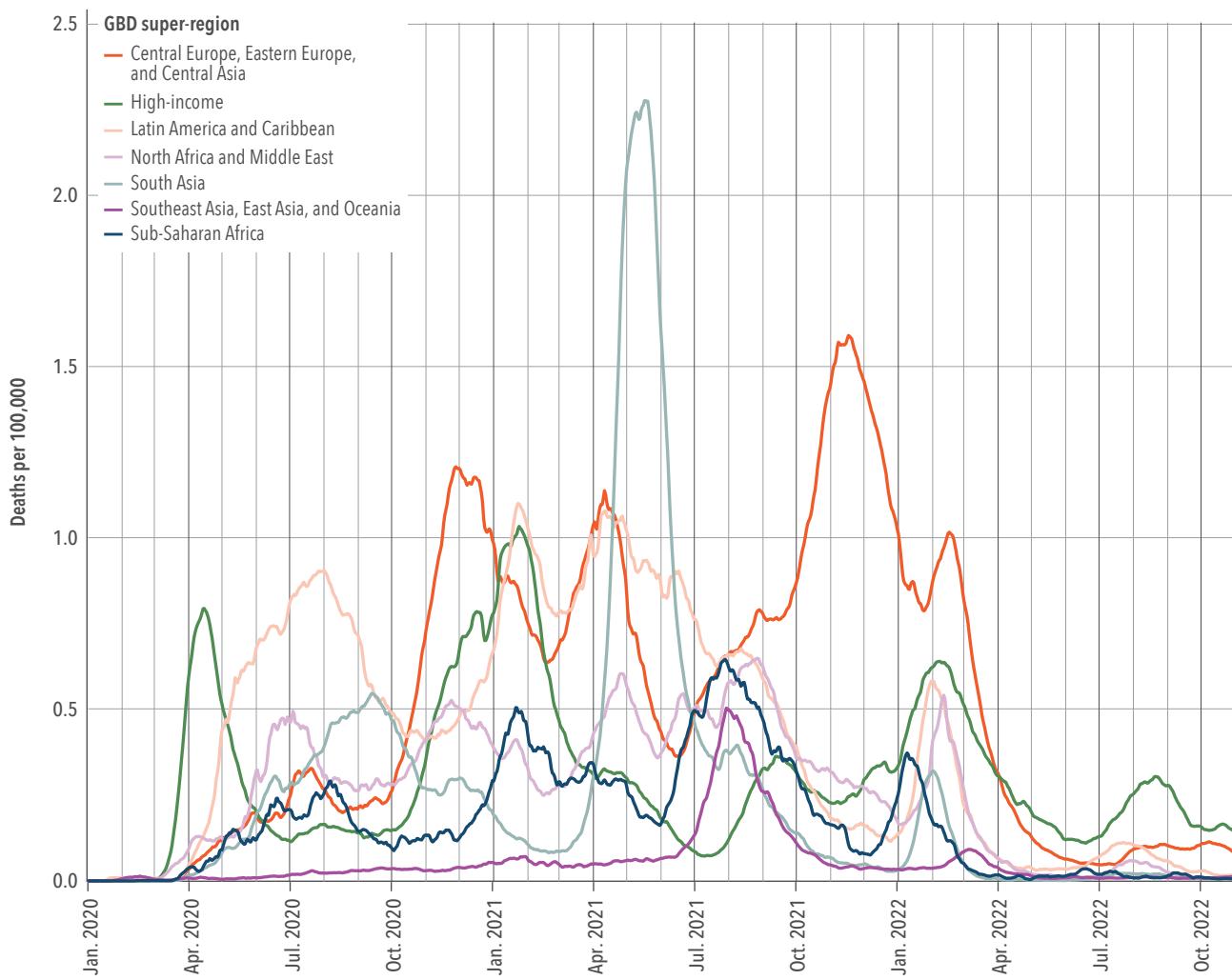
- Updated global health focus area profiles
 - Initially introduced in 2019, the profiles allow stakeholders to easily access information on a number of health focus areas. In addition to being available as a section of *Financing Global Health 2021*, the profiles can be viewed and downloaded individually on healthdata.org.

COVID-19 and health spending

Figure 1 shows how COVID-19's impact on regions has changed over the course of the pandemic, through October 2022.^{**} During its early days, the impact was initially on high-income nations, but over time the regional hot spots shifted, so that, for example, by the fall of 2020, COVID was deadliest, in terms of deaths per capita, in the Central Europe, Eastern Europe, and Central Asia super-region.

*** Examining any data by region can lead to an easily misinterpreted view of that data. For example, by World Bank region, cumulative deaths per capita are highest in North America because of one country in that region – the US.*

FIGURE 1 COVID-19 daily deaths by Global Burden of Disease super-region, January 2020–October 2022



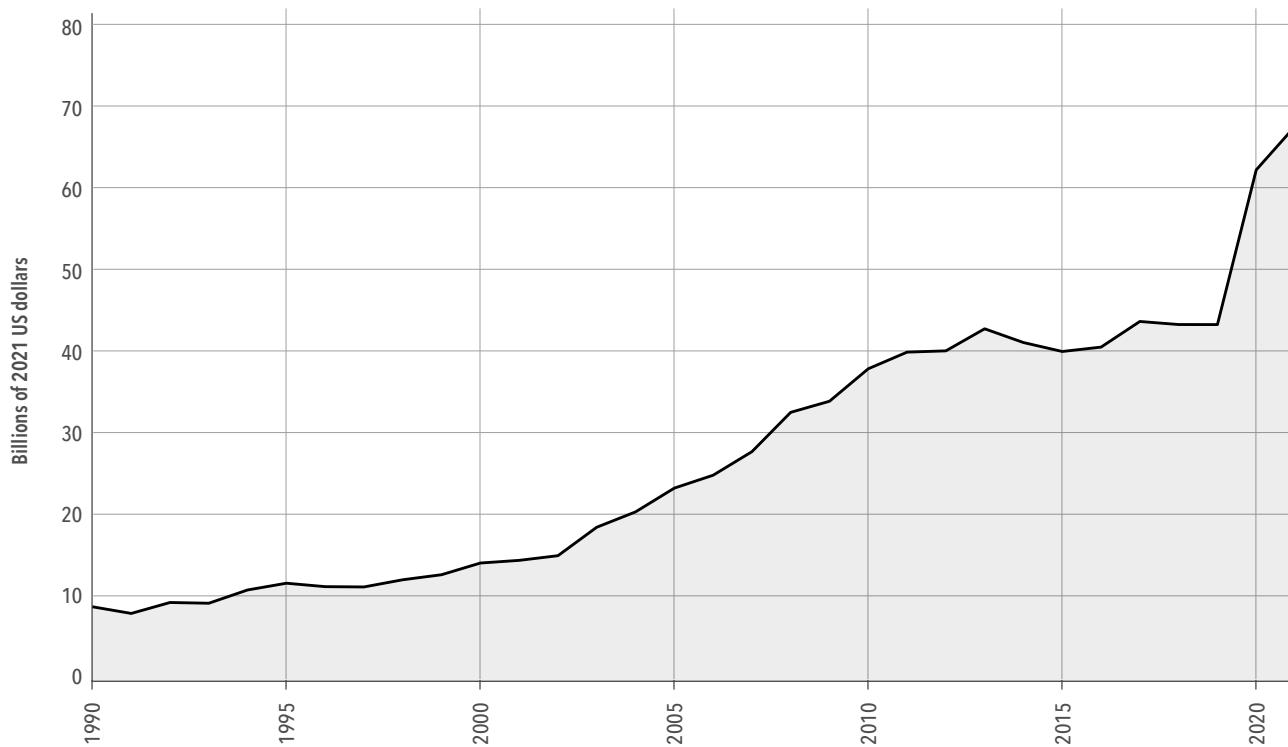
Source: Global Burden of Disease 2019 study and IHME COVID team

Though projections of infections and deaths are far lower than their peaks in early 2021 and early 2022,¹ the pandemic is not yet over. Indeed, the G20 HLIP on Financing the Global Commons for Pandemic Preparedness and Response pointed out that “without urgent and concerted actions” and “significant additional funding,” the likelihood of additional variants emerging remains likely, posing “a risk to every country.” So more spending is needed both to prevent COVID-19 from getting any worse, and to prevent the next pandemic.

Nonetheless, the dramatic effect COVID-19 has already had on health spending cannot be overemphasized. For example, though development assistance for health has grown since 1990 – between 2011 and 2019, it grew at an annual rate of 11.0% – there has never been an increase in DAH of the magnitude of the one observed between 2019 and 2020, when DAH grew \$18.9 billion, or 43.9%. And it has continued to rise: overall DAH grew 8.6% between 2020 and 2021 (or \$5.3 billion more). Even this slowed growth is greater than any other year-over-year increase between 1990 and 2019. The change – and then sudden rise – in DAH between 1990 and 2020 is shown in Figure 2.

Likewise, overall spending on health also increased, going from \$9.2 trillion (9.1–9.3) in 2019 to a forecast of \$9.9 trillion (9.8–10.0) in 2020 (see Part Two of *Financing Global Health 2021* for more details on our prospective estimates).

FIGURE 2 Overall development assistance for health, 1990–2021*



*2021 estimates are preliminary.

Substantial as the increases in health spending have been, they are far smaller than the economic costs of the pandemic, which are estimated to be in the tens of trillions. One study estimated that COVID-19 has cost the US alone \$16 trillion.⁵ Funding to prevent future pandemics should be set aside; the cost of inaction now, both economically and in terms of human lives derailed or lost, could be enormous.

To avoid future pandemics, the HLIP recommends a number of steps, including “greater domestic investments by national authorities” and spending an additional \$15 billion per year (comprising resources for global responses, as well as support for low-income and lower-middle-income countries) on PPR over the next five years. While the latter may be attainable – in 2021, estimated DAH for pandemic preparedness plus COVID-19 was 150.5% higher than the HLIP’s target – increasing government spending on health, particularly by the 1% of GDP recommended by the HLIP, might prove impossible for some low-income and lower-middle-income countries; at the moment, an estimated 13 countries currently devote less than 1% of GDP to health.

Nonetheless, COVID-19 has presented the world with a reminder of the importance of investing in health care, in PPR, and in tracking health spending to better understand the levels and distribution of health spending. Understanding how the world’s financial resources are being used to reduce health loss is valuable for adjusting spending and evaluating how we can better direct those resources. We should make the best use of the opportunity to avoid future pandemics that the huge increase in health spending driven by COVID-19 has given us. “Together with climate change, countering the existential threat of deadly and costly pandemics must be the human security issue of our times,” the HLIP notes.

PART ONE:

Funding today's priorities

Total health spending through 2019

In 2019, total health spending reached \$9.2 trillion (9.1–9.3),^{***} a 3.1% (2.9–3.4) increase over the 2018 estimate. Health spending now constitutes 9.7% (9.6–9.8) of the global economy, due to steady growth over the past two decades; health spending's current share of the global economy reflects an increase since 1995, when health spending was an estimated 8.3% (8.1–8.4) of the global economy.

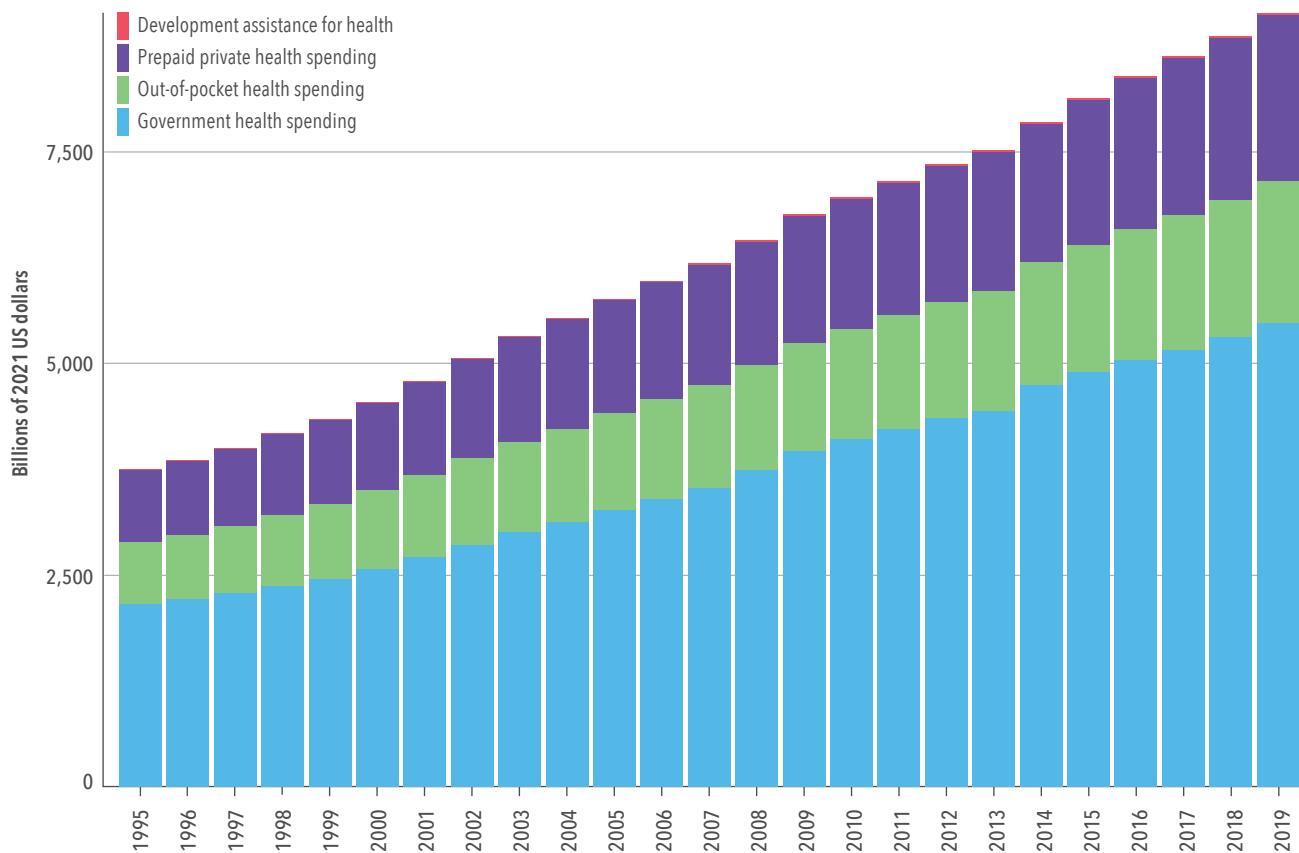
Figure 3 shows the growth of total global health spending between 1995 and 2019, with spending split into four sources: development assistance for health (DAH), prepaid private health spending, out-of-pocket spending, and government health spending. DAH is support provided through major development agencies to improve and maintain health in low- and middle-income countries. Prepaid private spending covers health spending on private insurance premiums and through domestic non-governmental organizations. Out-of-pocket spending includes all health spending not paid in advance. Finally, government health spending is defined as spending on health from all levels of government, in public and private facilities.

Tracking each source of spending is important for several reasons. Understanding how government spending is allocated helps better understand funding needed to build robust public health systems, while prepaid spending (government or private) is essential for reducing the possibility of catastrophic health spending for individuals. Robust prepaid spending is also essential for attaining universal health coverage. Meanwhile, out-of-pocket spending shows how much health spending falls on individuals (that is not prepaid premiums for insurance). And tracking DAH shows which external sources of funding are supporting which health focus areas, and how that money is disbursed. Tracking DAH can also show the degree to which lower-income countries rely on external funding, something integral to planning for future development and sustainability.

Since 1995, the relative fraction of each financing source has remained relatively constant: prepaid private health spending went from 22.7% (22.0–23.4) of total spending in 1995 to 21.6% (21.2–22.0) in 2019; out-of-pocket spending went from 19.4% (18.9–19.9) in 1995 to 18.2% (18.0–18.5) in 2019; and DAH saw growth from 0.3% (0.3–0.3) of total spending on health in 1995 to 0.5% (0.5–0.5) in 2019. Government health spending remains the leading source of spending in high-income and middle-income countries, and the degree to which it dominates overall health spending in wealthier nations has in fact increased. For example, in 1995, government health spending made up 57.8% (57.8–57.9) of total spending, whereas in 2019 it made up 60.0% (60.0–60.0).

****The modeled estimates for total health spending are presented with uncertainty intervals. Our estimates of DAH are generally not modeled and do not include uncertainty intervals. Unless otherwise indicated, all estimates are reported in 2021 inflation-adjusted US dollars. Estimates in 2021 purchasing-power parity-adjusted dollars are available at <http://ghdx.healthdata.org/>.*

FIGURE 3 Total health spending by source of financing, 1995–2019



BOX 3 Development assistance for health terms defined

Sources: The origins of funding, such as government treasuries, private philanthropic foundations, or any private-party contributions.

Channels: The intermediaries in the flow of funds, channels include bilateral aid agencies, multilateral organizations, non-governmental organizations (NGOS), UN agencies, public-private partnerships, and private foundations.

Implementing institutions: DAH is ultimately directed to implementing institutions to provide health services and prevent and treat diseases in low- and middle-income countries. These institutions include governmental bodies, NGOS, and international organizations.

Health focus areas: The health focus areas assessed in this report are malaria; HIV/AIDS; tuberculosis; reproductive, maternal, newborn, and child health; non-communicable diseases; other infectious diseases; and health systems strengthening (HSS) and sector-wide approaches (SWAPS). “Other DAH” refers to resources that target issues outside these focus areas, and “unallocable” captures the resources that we do not have information to assign.

Program areas: Within health focus areas, program areas describe the nature of the activity for which funds are being used. For example, program areas related to tuberculosis include diagnosis, drug resistance, human resources, and treatment.

Development assistance for health for COVID-19: Resources intended to improve COVID-19 health outcomes in low- and middle-income countries by development organizations through health interventions focused on country-level coordination, supply chain and logistics support, and treatment; COVID-19 DAH also covers spending for infection prevention and personal protective equipment, as well as vaccine research and development. Note that our estimates of DAH for COVID-19 exclude investments in humanitarian responses and economic stabilization programs.

Figure 4, which compares spending, population, and disability-adjusted life years across World Bank income groups in 2019, illustrates the degree to which inequality shapes health spending globally. Even though high-income countries make up the smallest percentage of the global population (15.8%), they are nonetheless responsible for 79.4% (79.3–79.5) of the world’s health spending.

In addition, Figure 4 shows how the proportion of disability-adjusted life years, or years of healthy life lost, due to more than 350 diseases and injuries according to the Global Burden of Disease 2019 study,⁴ corresponds with population. In 2019, DALYs were highest in lower-middle-income countries (43.5%), while upper-middle-income countries made up 29.6% of DALYs, high-income countries 14.1%, and low-income countries 12.7% of total DALYs.

FIGURE 4 Health spending, population, and disability-adjusted life years by World Bank income group, 2019

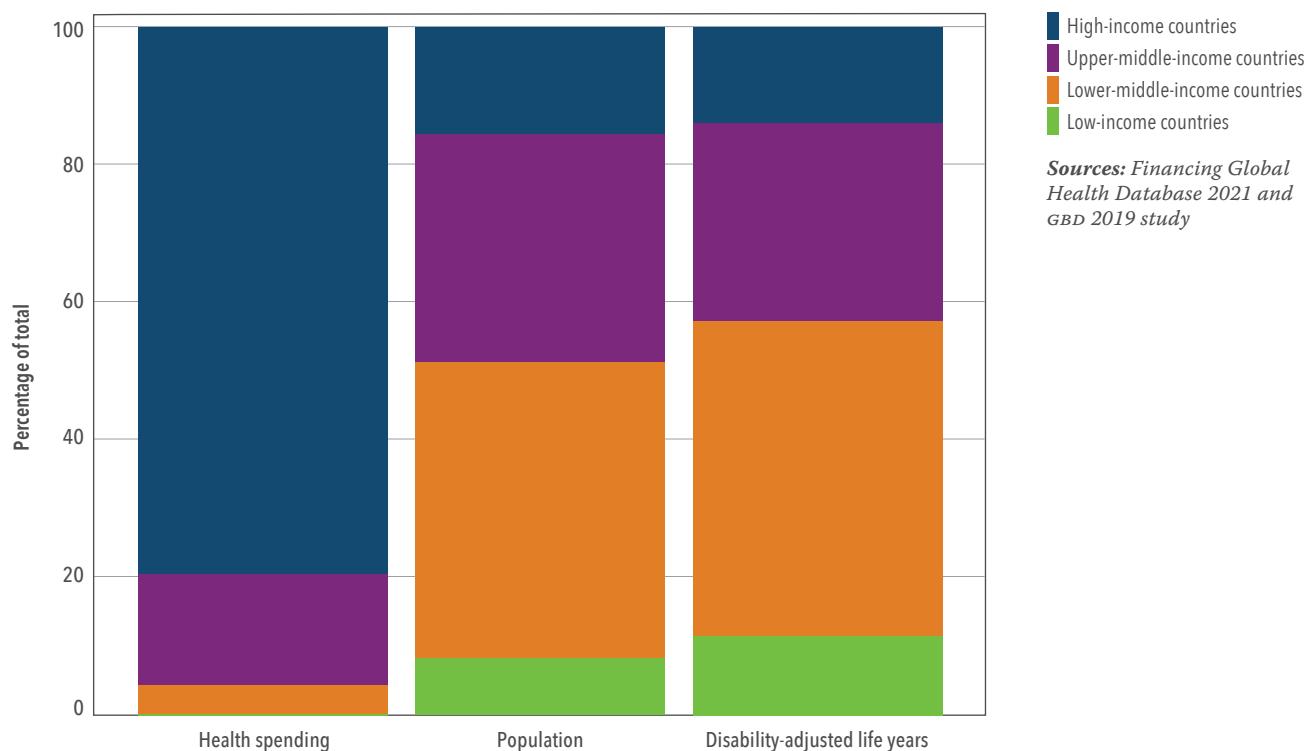
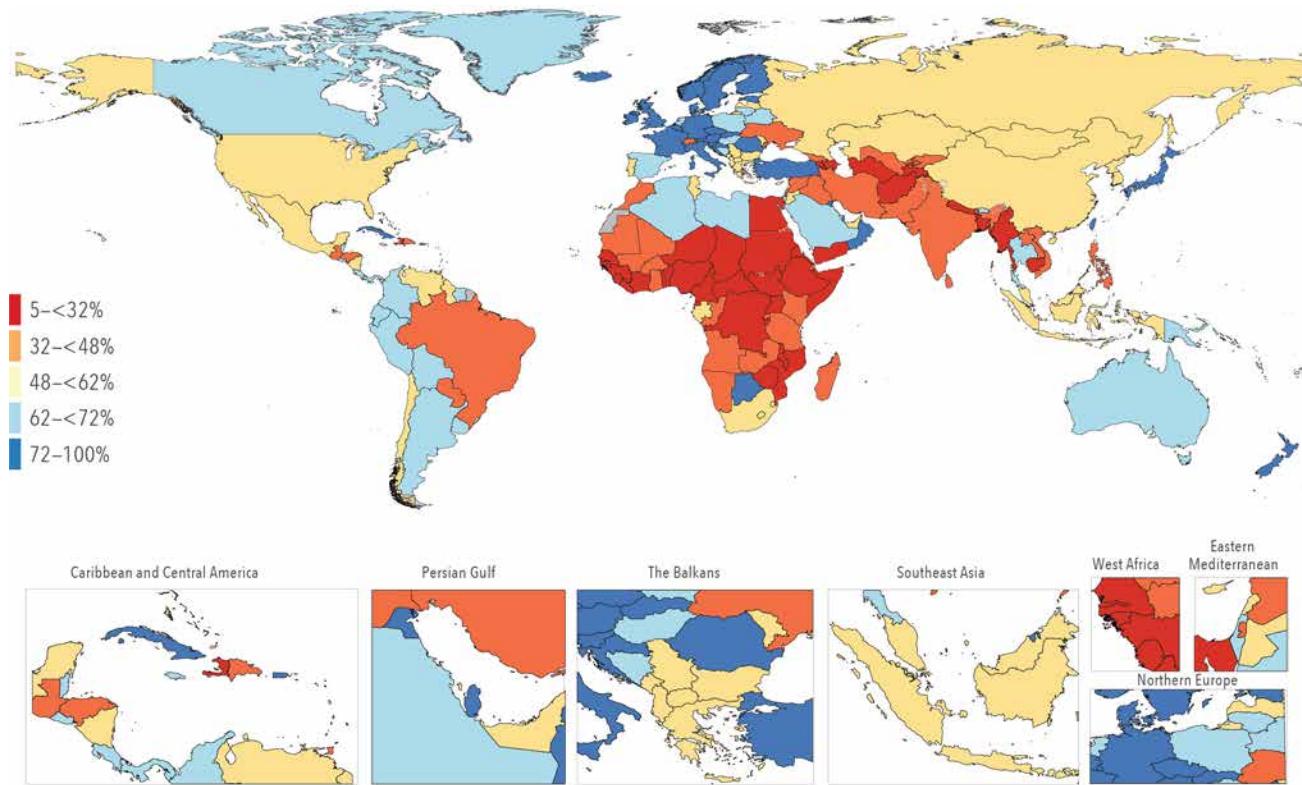


Figure 5 shows 2019 government health spending as a percentage of overall health spending; looking at government health spending in this way can provide insights as to which countries are on the path to financial risk protection.

Generally, the higher the percentage of government spending on health is (especially versus out-of-pocket spending), the more a health system can be said to protect against financial risk. And as countries become less dependent on donor funding and out-of-pocket spending – which can be catastrophic for individuals – the closer they move to universal health coverage (UHC).

While ensuring broad access to health services is a key aspect of achieving UHC, it is not the only factor to consider. Patient access to care at the expense of household welfare, or at the risk of being pushed into poverty, is at odds with the very idea of UHC. Financial risk protection, through government health and private health financing, can increase UHC and reduce the chances of medical impoverishment.^{6–8}

FIGURE 5 Government health spending as a fraction of total health spending, 2019



Development assistance for health through 2021

In 2021, DAH was an estimated \$67.4 billion, an increase of 8.6% over the 2020 total of \$62.1 billion.^{***} Though the increase in overall DAH between 2020 and 2021 was relatively large compared to historical trends, it is much smaller than the unprecedented 2019–2020 increase of 43.9%. Excluding DAH for COVID-19, 2021 DAH was \$45.6 billion, a 0.9% decrease from the 2020 non-COVID-19 total.

Though DAH only made up approximately 0.5% of total spending on health in 2019, it is important for a number of reasons. Notably, many low-income and lower-middle-income countries rely on DAH to support their health systems and to relieve the burden of specific health conditions. For example, according to the Global Burden of Disease 2019 study,⁴ malaria was the fifth-highest cause of disease burden in low-income

***2021 estimates presented are forecasts, while the 2020 numbers are observed.

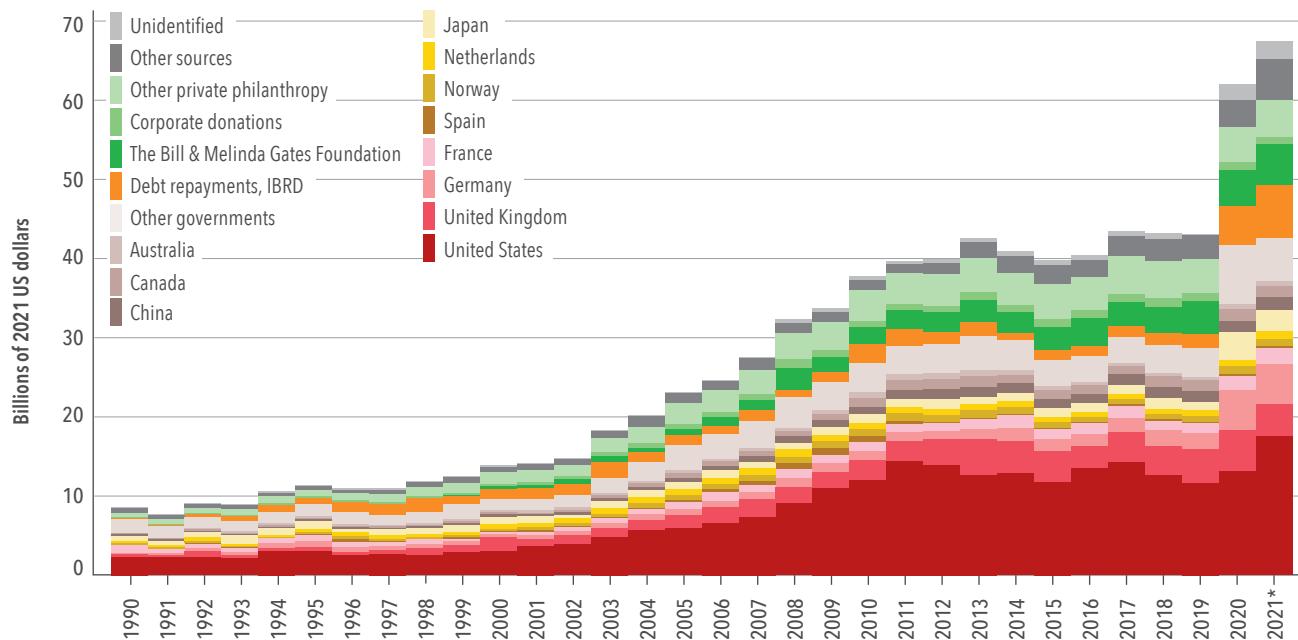
countries,[†] which received \$0.9 billion in DAH for malaria.

Overall, in low-income countries, DAH accounted for 27.7% of spending in 2019, versus 2.4% in lower-middle-income countries.

Figure 6 illustrates the dramatic jump in DAH driven by COVID-19. Between 2019 and 2020, DAH grew 43.9%, and between 2020 and 2021, it grew 8.6%. DAH has never increased the way it did over the past two years. If the increase between 2019 and 2020 had not occurred, the 2020–2021 increase in DAH would still have been remarkable.

[†] Cause Level 3, age-standardized rate. For information about GBD cause levels, please visit <https://www.healthdata.org/node/7849>.

FIGURE 6 Development assistance for health and COVID-19 by source of funding, 1990–2021



*2021 estimates are preliminary.

IBRD = International Bank for Reconstruction and Development.

“Other sources” captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

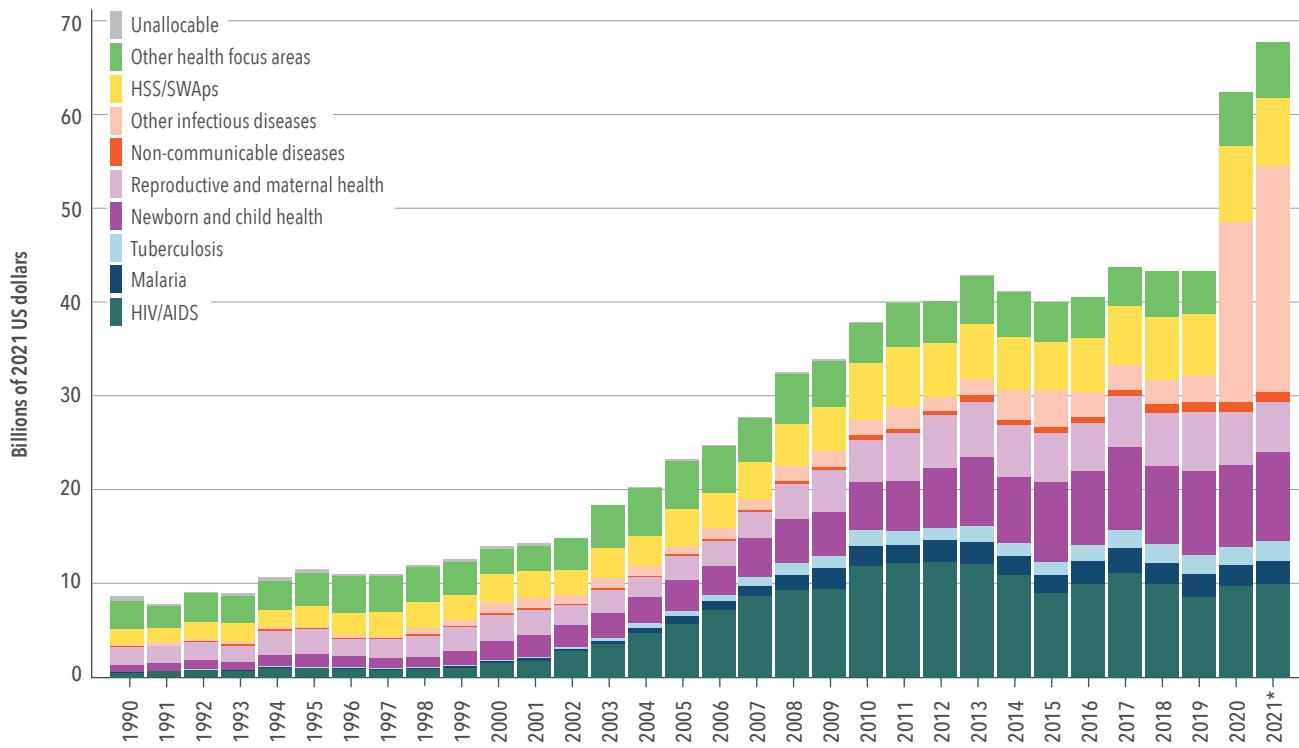
Funding for which we have no source information is designated as “Unidentified.”

Examining the sources of DAH reveals which are most responsible for the COVID-19-driven increase; for example, DAH for COVID from Japan went up more than 200% between 2019 and 2020. By dollars, DAH from the US for COVID-19 increased \$4.5 billion between 2020 and 2021.

Figures 8 and 9 offer two additional views of DAH between 1990 and 2021, by health focus area and disbursing entity; as in Figure 7, both figures show the rise in DAH between 2019 and 2020 due to COVID-19, and then the relatively large increase in DAH between 2020 and 2021.

By health focus area, the other infectious diseases category (under which COVID-19 is grouped) saw the biggest increase, growing 26.1% between 2020 and 2021. DAH for malaria saw the second-highest growth between 2020 and 2021, going up 13.6%.

FIGURE 7 Development assistance for health by health focus area, 1990–2021



*2021 estimates are preliminary.

“Other health focus areas” captures development assistance for health for which we have health focus area information but which is not identified as being allocated to any of the health focus areas listed. Health assistance for which we have no health focus area information is designated as “Unallocable.”

HSS/SWAPs = Health systems strengthening and sector-wide approaches

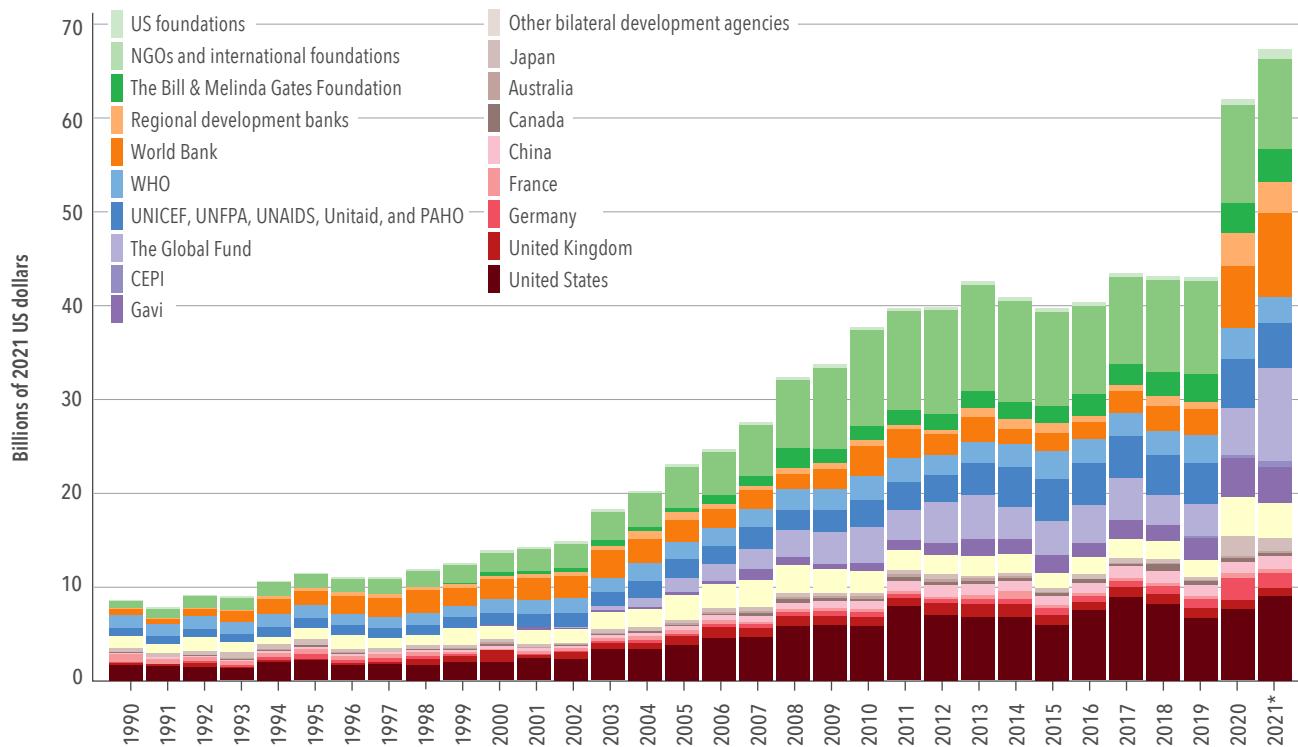
By disbursing entity, DAH disbursed through the World Bank grew 36.3% between 2020 and 2021, and DAH flowing through non-governmental organizations went up 14.1%. Gavi, the Vaccine Alliance, which co-leads COVAX, the international partnership that has worked to speed vaccine development and distribution, disbursed \$3.9 million in DAH in 2021, a decrease of 7.5% since 2020.

The diagram in Figure 9 maps the flow of our 2021 development assistance for health for COVID-19 estimates: it shows how DAH for COVID-19 flowed from source to channel to program area. This high-level view of where spending originated, how it was disbursed, and the program areas targeted illustrates the ways sources and channels have approached combating the pandemic.

Leading sources of DAH for COVID-19 include the US at \$5.2 billion, as well as Germany and Japan, which contributed nearly equal amounts of DAH for COVID-19, at \$1.8 and \$1.5 billion, respectively.

In terms of channels, the World Bank disbursed the most DAH for COVID-19 (an estimated \$5.6 billion), followed by the Global Fund (\$5.1 billion) and regional development banks as a group (\$2.4 billion). By program area, the most DAH for COVID-19 was directed at vaccine procurement and distribution (\$9.9 billion), followed by country-level coordination

FIGURE 8 Development assistance for health by channel of assistance, 1990–2021



*2021 estimates are preliminary.

CEPI = Coalition for Epidemic Preparedness Innovations

Gavi = Gavi, the Vaccine Alliance

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

"Other bilateral development agencies" include Austria, Belgium, Denmark, Finland, Greece, Ireland, Italy, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the European Commission, and EEA. "Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

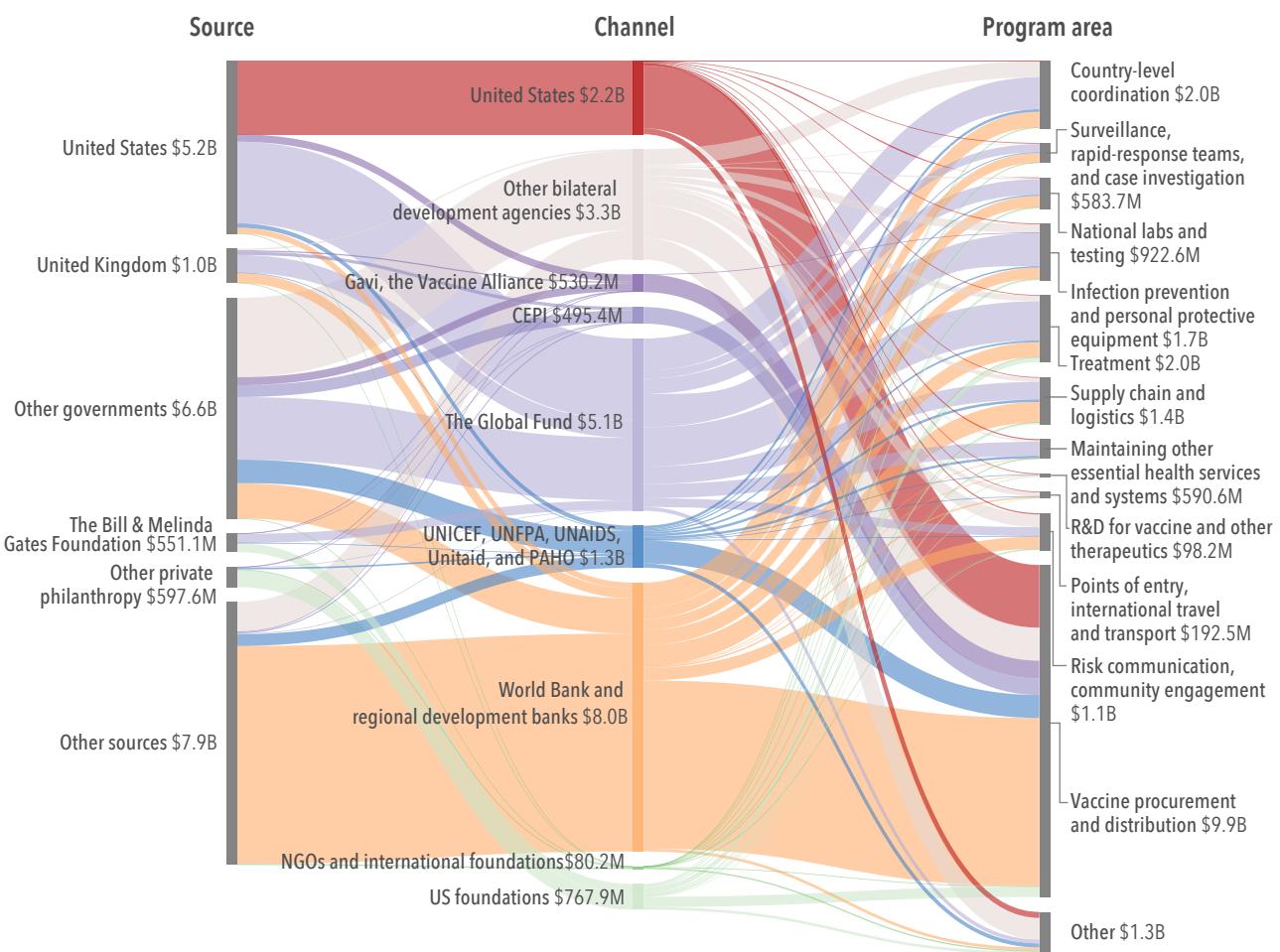
programs (\$2.0 billion) and spending on treatment (\$2.0 billion).

A close look at Figure 9 shows how some types of DAH for COVID-19 have been directed through specific channels. For example, 27.0% of spending that flowed through Japan's bilateral agencies went toward country-level coordination. Notably, a substantial percentage of COVID-19 resources across a wide variety of program areas flowed through the Global Fund, showing how quickly the organization was able to adapt to a changing DAH landscape.

Figures 11 and 12 show the annual rate of change in DAH by source and channel, respectively, for the periods 2000–2015 (the Millennium Development Goals [MDG] era), 2015–2019 (the Sustainable Development Goals [SDG] era), and 2019–2021 (which may come to be known as the COVID era).

As shown in Figure 10, between 2000 and 2015, most sources of DAH increased, except for DAH from Spain, which decreased 3.6% annually. Total DAH increased at an annualized rate of 7.3% between 2000 and 2015. The period from 2015 to 2019 tells a similar story, though for different sources.

FIGURE 9 Flows of development assistance for health for COVID-19 from source to channel to program area, 2021



“Other sources” captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as “Unidentified.”

“Other governments” include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d’Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

“Other bilateral development agencies” include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

“Regional development banks” include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

“Other” captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGO = Non-governmental organizations

PAHO = Pan American Health Organization

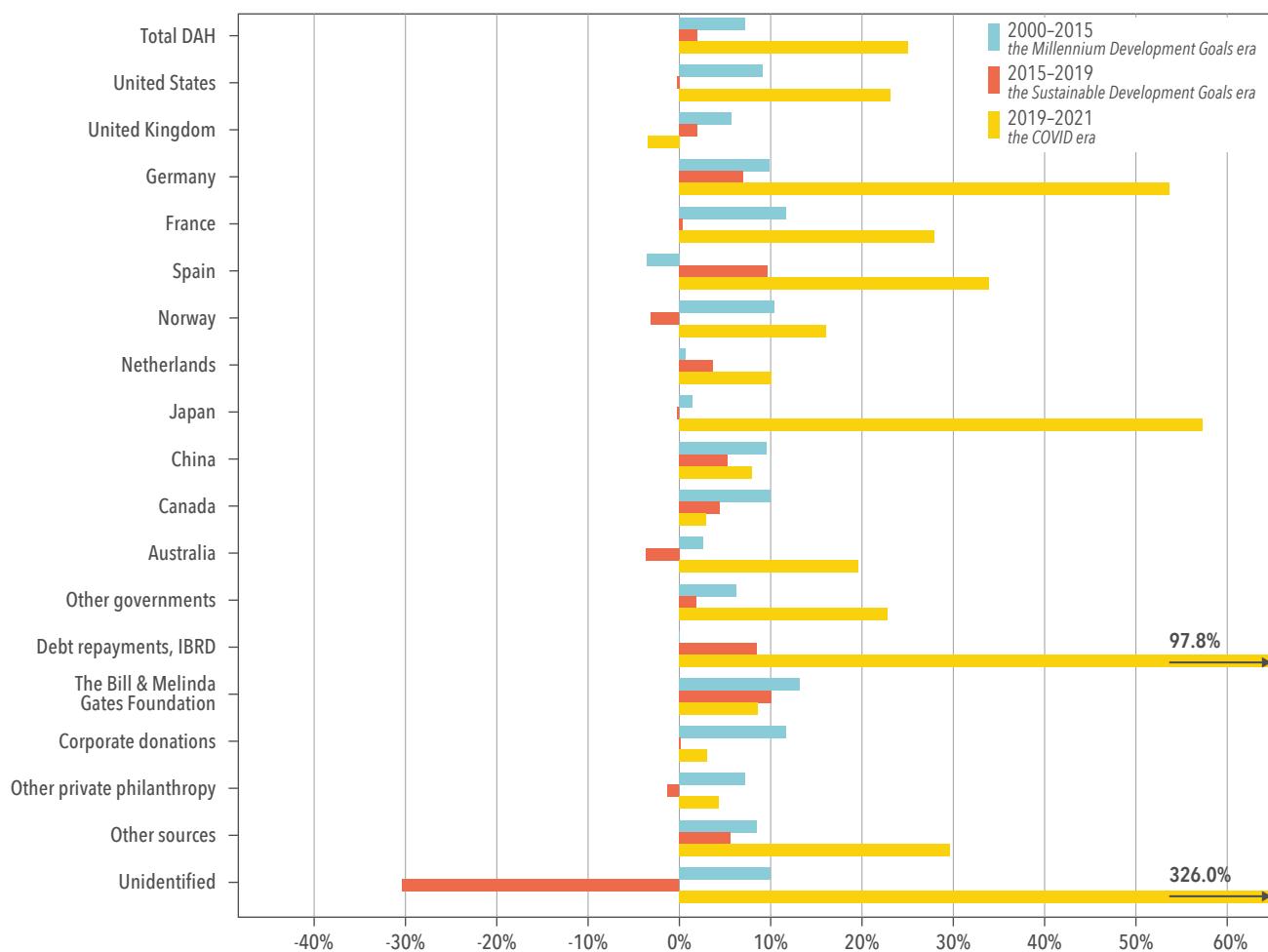
UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children’s Fund

WHO = World Health Organization

FIGURE 10 Annualized rate of change in development assistance for health disbursed by source, 2000-2015, 2015-2019, and 2019-2021*



*2021 estimates are preliminary.

"Other sources" captures development assistance for health from sources such as net investment income, revenue adjustments, and unallocable, which do not fall into one of the listed source categories.

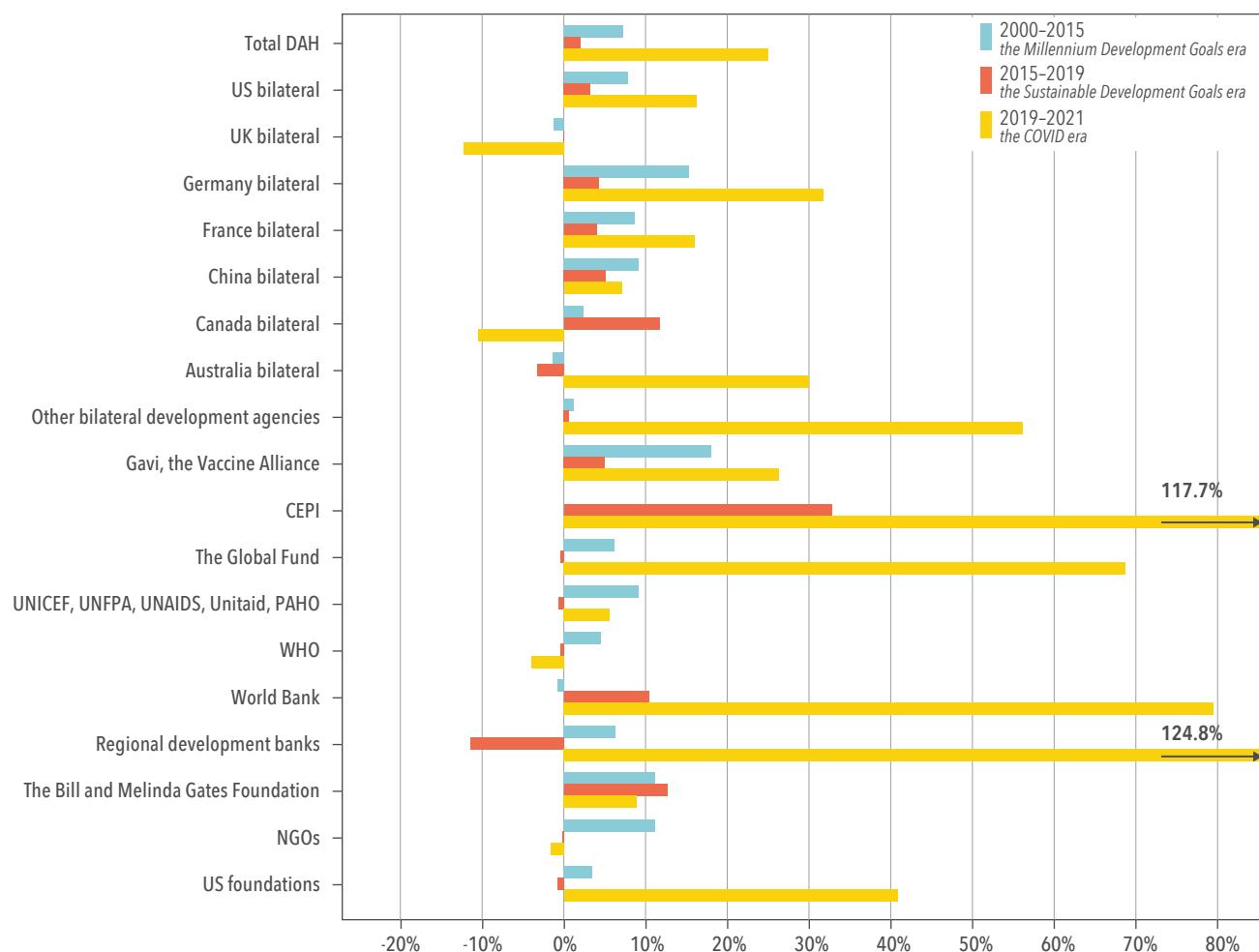
IBRD = International Bank for Reconstruction and Development

During this period, DAH from the US (-0.2%), Norway (-3.1%), and private philanthropy (excluding the Bill & Melinda Gates Foundation) (-1.2%) decreased, while all other sources increased. Indeed, a number of sources of DAH saw large increases between 2015 and 2019, such as DAH funded by the Bill & Melinda Gates Foundation (10.1%) and Spain (9.6%).

Between 2019 and 2021, of the groupings shown in Figure 10, the only source of DAH that declined was the United Kingdom (-3.5%). Indeed, during the COVID-19 era of development spending, a number of sources of DAH grew immensely. For example, DAH from Japan and Germany increased 57.4% and 53.8%, respectively.

Figure 11 shows that between 2000 and 2015, channels of DAH increased across nearly all channels tracked, save for UK bilateral DAH (-1.3%), bilateral DAH from Australia (-1.4%), and World Bank DAH (-0.7%). And for the

FIGURE 11 Annualized rate of change in development assistance for health disbursed by channel, 2000–2015, 2015–2019, and 2019–2021*



*2021 estimates are preliminary.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

CEPI data start from 2018 onward; 2018–2019 (SDG era). The Global Fund data start from 2002–2015 (MDG era).

“Regional development banks” include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

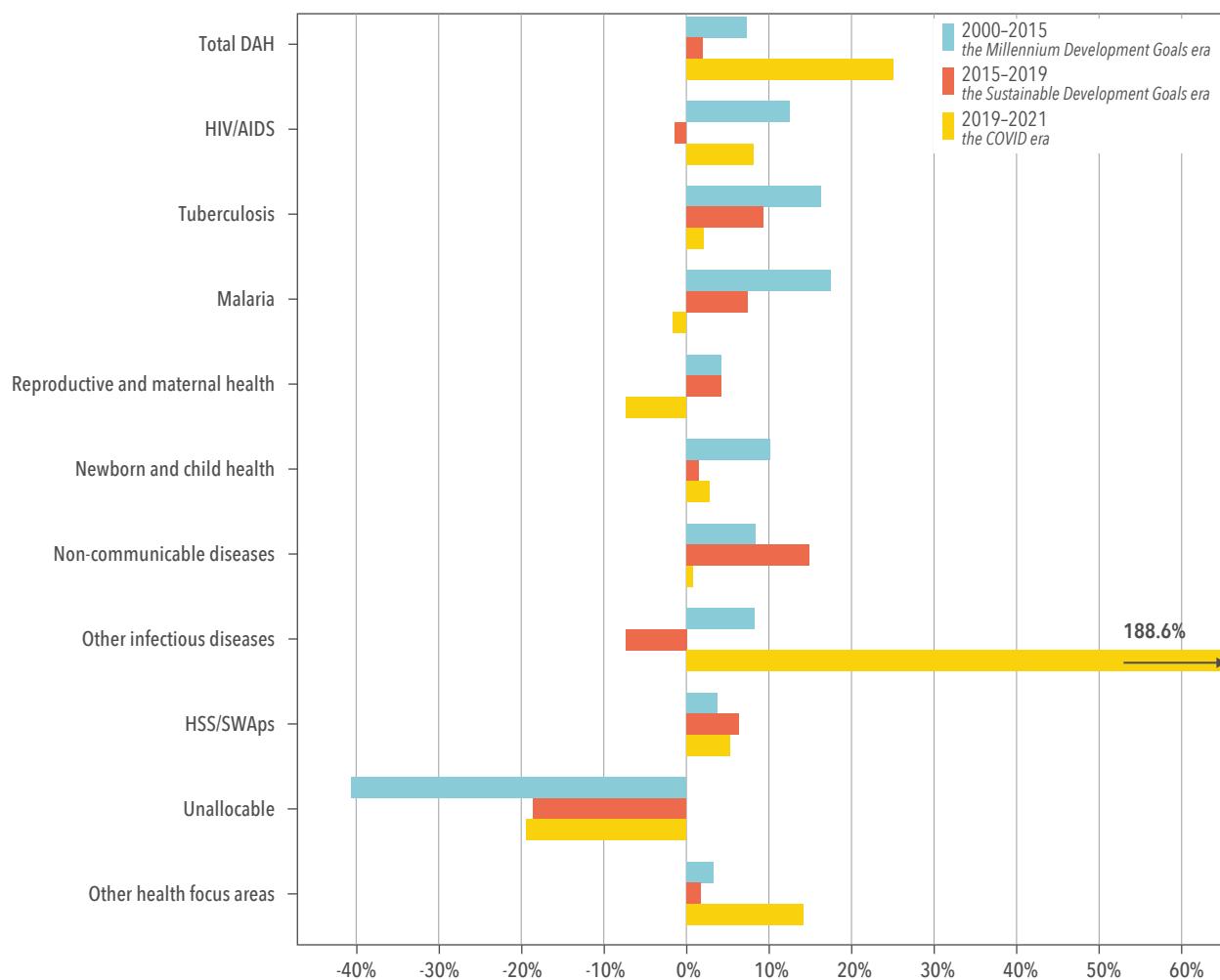
period between 2015 and 2019, bilateral DAH from Australia declined 3.3%, while DAH flowing through regional development banks decreased 11.4%. The period 2019–2021 tells a different story: of all channels tracked, the vast majority saw increases.

In both Figures 11 and 12, the impact of the pandemic is clear; in fact, spending on COVID-19 skews several annualized rates for the period between 2015 and 2020. Without the COVID-driven increase in DAH, for example, DAH from sources like corporate donations might have declined

during this period.

Figure 12 presents another view of the annualized rate of change in DAH: by health focus areas. Again, the periods 2000–2015, 2015–2019, and 2019–2021 are shown. During both the MDG and SDG eras, DAH increased across most health focus areas tracked; exceptions include spending on HIV/AIDS and other infectious diseases, which declined 1.4% and 7.4%, respectively, during the SDG era. The latter is particularly interesting given that COVID-19 falls under the other infectious diseases grouping of health

FIGURE 12 Annualized rate of change in development assistance for health disbursed, by health focus area, 2000-2015, 2015-2019, and 2019-2021*



*2021 estimates are preliminary.

HSS/SWAPS = Health systems strengthening and sector-wide approaches

CEPI data start from 2018 onward; 2018–2019 (SDG era). The Global Fund data start from 2002–2015 (MDG era).

“Other health focus areas” captures development assistance for health for which we have health focus area information but which is not identified as being allocated to any of the health focus areas listed. Health assistance for which we have no health focus area information is designated as “Unallocable.”

“Regional development banks” include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

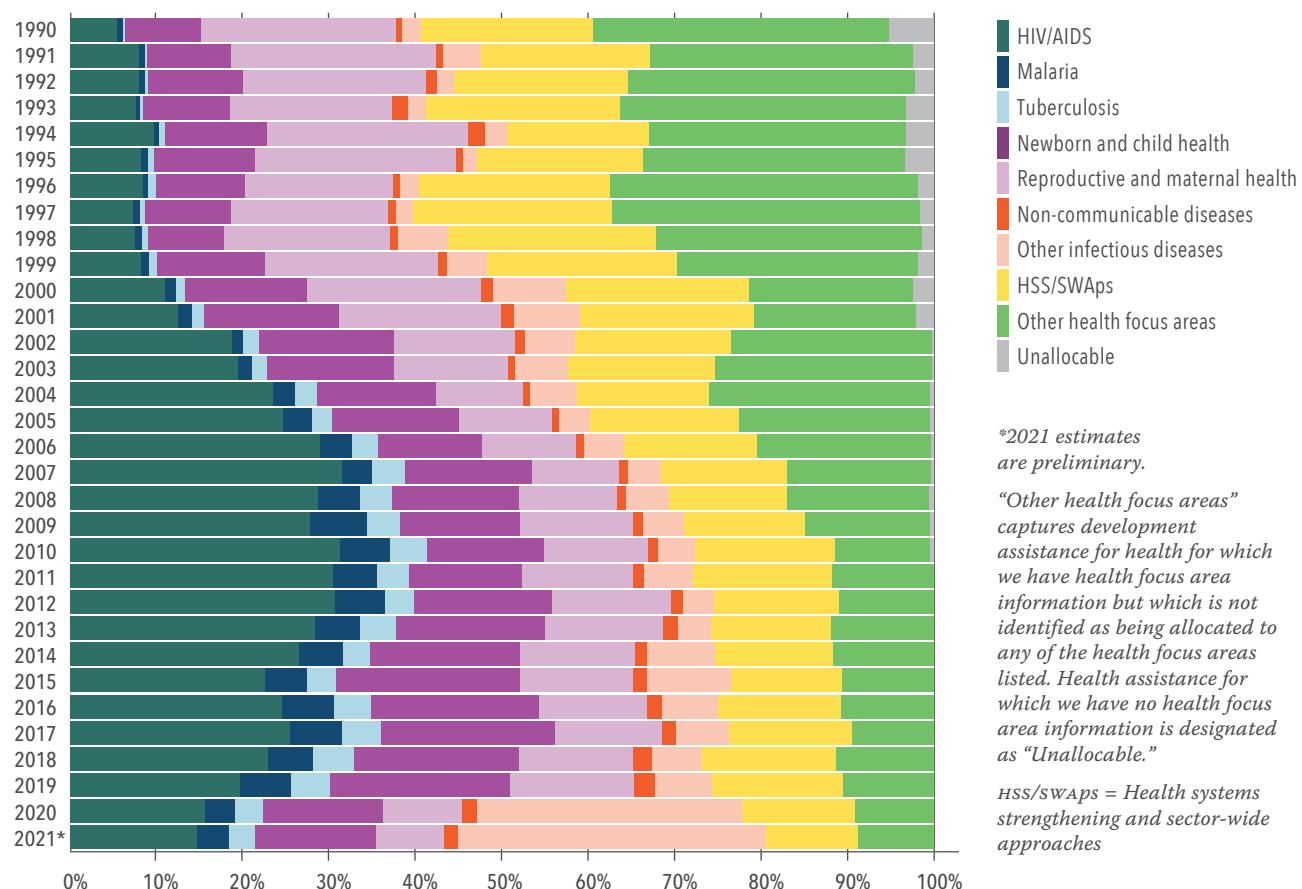
focus areas.

Particularly notable, then, is the change in other infectious diseases DAH between 2019 and 2021, when it grew 188.6%. Also regrettably notable are the health focus areas that saw projected declines in DAH between 2019 and 2021, or during the period when the world was focused on COVID-19. It can be argued that spending on malaria, as well as reproductive and maternal health, could be more robust given the widespread disease burden caused by both health focus areas.

A question going forward is whether the overall rise in DAH driven by COVID-19 will be sustained, or whether development assistance for health will continue to plateau or even decline.

The degree to which COVID-19 drove the growth in other infectious diseases DAH is underscored by Figure 13, which shows the share of DAH by health focus area between 1990 and 2021. For example, in 1990, other infectious diseases DAH constituted 2.2% of DAH; in 2021, it was 35.6%. What's more, other infectious diseases DAH has grown since the start of the pandemic: in 2020 it was \$19.0 billion, and we project it was an estimated \$24.0 billion in 2021, an increase of 26.1%. Meanwhile, as noted above, preliminary estimates suggest that several health focus areas have seen declines, but it is too early to tell whether those declines are the result of COVID-19 – either funds reallocated to fight the pandemic, or other eco-

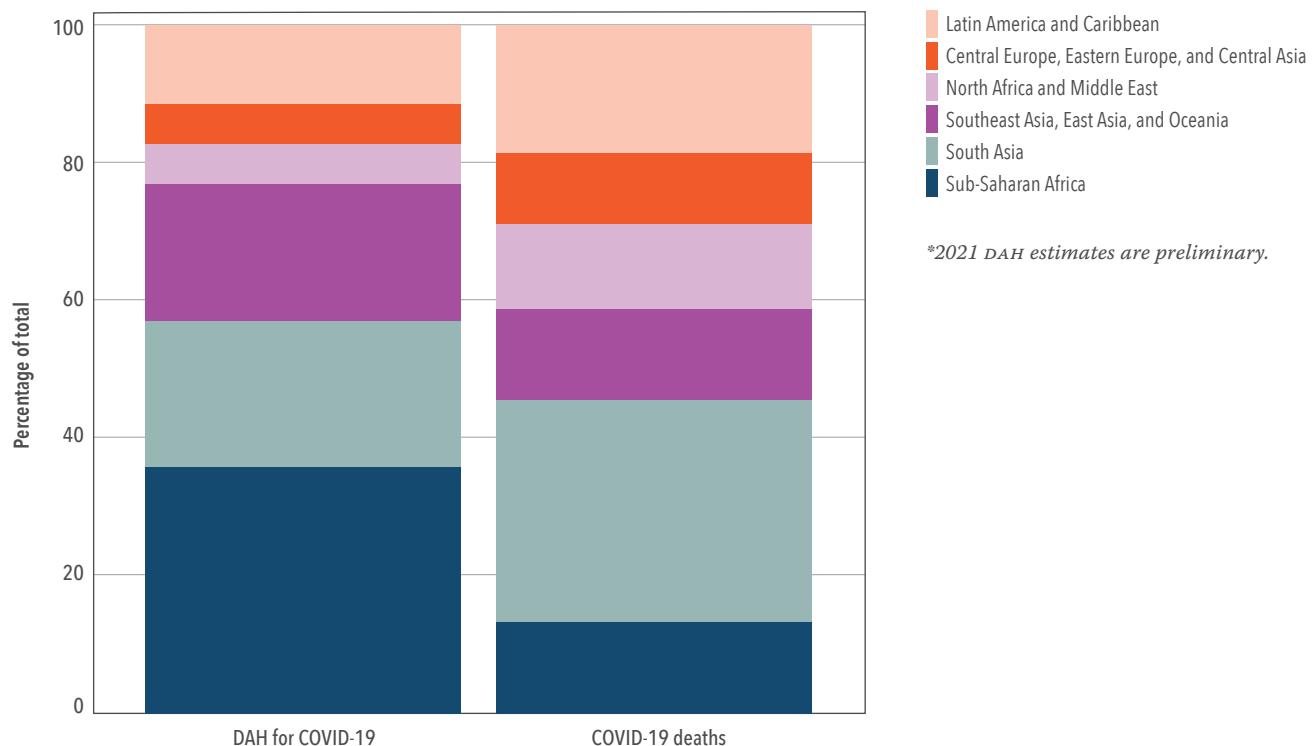
FIGURE 13 The share of development assistance for health allocated by health focus area, 1990–2021



nomic effects of COVID-19.

Figure 14 offers a view of how COVID-19 spending compares to deaths from COVID-19 between 2020 and 2021, by Global Burden of Disease super-region. For example, sub-Saharan Africa has received 33.6% of DAH for COVID-19, but only 13.5% of COVID-19 deaths have occurred in the region. Meanwhile, the South Asia super-region – which comprises five middle-income countries – has seen 36.3% of the world’s COVID-19 deaths but received only 21.8% of DAH for COVID-19.

FIGURE 14 Development assistance for health targeting COVID-19 and deaths from COVID-19, 2020–2021*



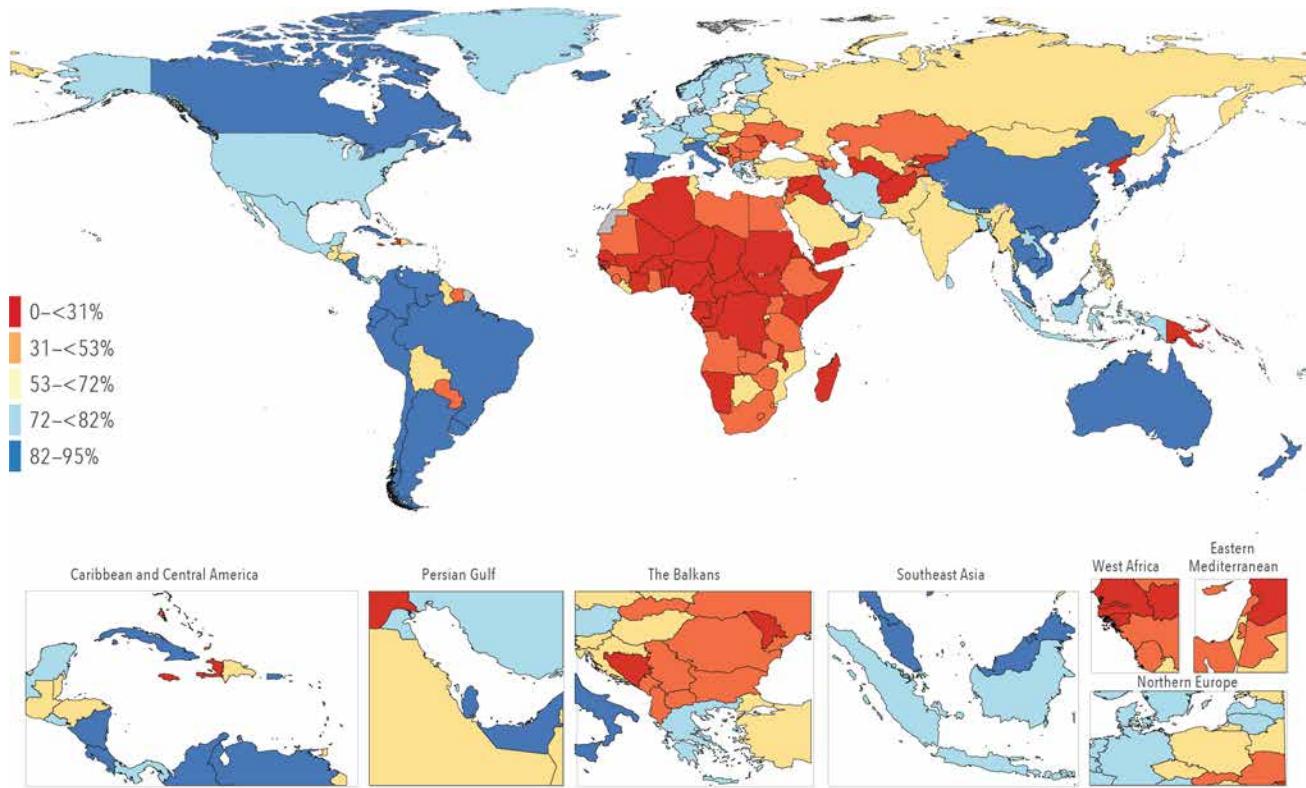
*2021 DAH estimates are preliminary.

While it’s certainly welcome news that sub-Saharan Africa has so far seen relatively few COVID-19 deaths, the region’s fight against COVID-19 is likely far from over, if only because vaccination coverage in the region is low compared to much of the world. As Figure 15 illustrates, global COVID-19 vaccine coverage is far from being equal.

In fact, this view of vaccine coverage roughly corresponds to a map of the parts of the world that receive the most DAH: where vaccine coverage is lowest, DAH is often highest. For example, as of August 2022, vaccine coverage in Western Europe as a region was 80.8%, but it was 25.3% in sub-Saharan Africa.

Figure 16 disaggregates 2020–2021 development assistance for COVID-19 into four categories: program area, source of funding, channel, and Global Burden of Disease super-region; this figure shows at a high level which program areas and regions received the most DAH for COVID-19, and then the sources and channels that funding flowed from and through,

FIGURE 15 Global COVID-19 vaccine coverage, August 2022

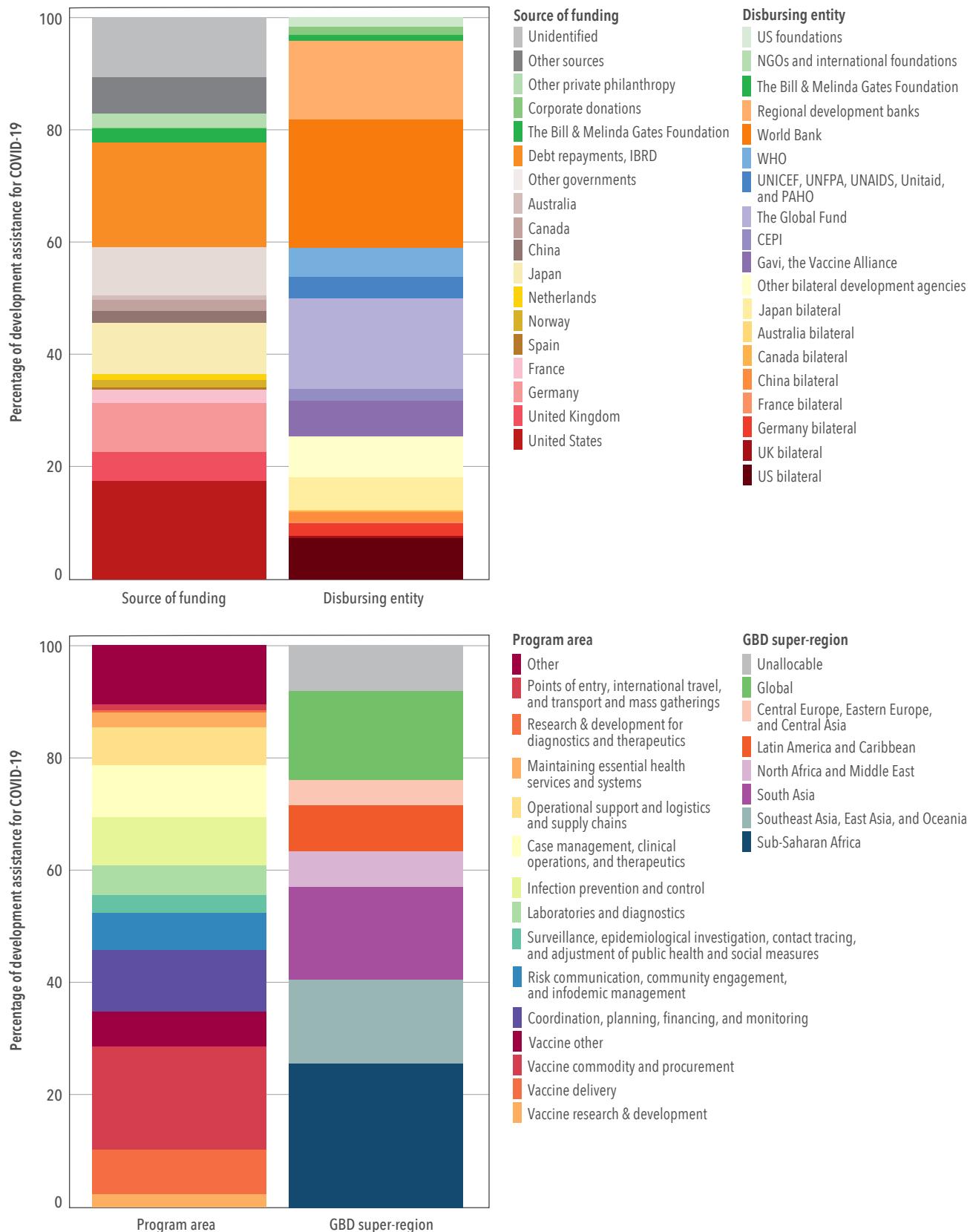


Source: IHME COVID team

respectively.

The largest two program areas of DAH for COVID-19 in 2020–2021 were “vaccine commodity and procurement” and “coordination, planning, financing, and monitoring,” while the largest source of DAH for COVID-19 was the US. The two largest disbursing entities were the World Bank and the Global Fund, and the regions that received the most DAH for COVID-19 were sub-Saharan Africa (notably, also the largest region for DAH overall) and South Asia.

FIGURE 16 Percentage of development assistance for health for COVID-19, 2020–2021



PART TWO:

Meeting tomorrow's challenges

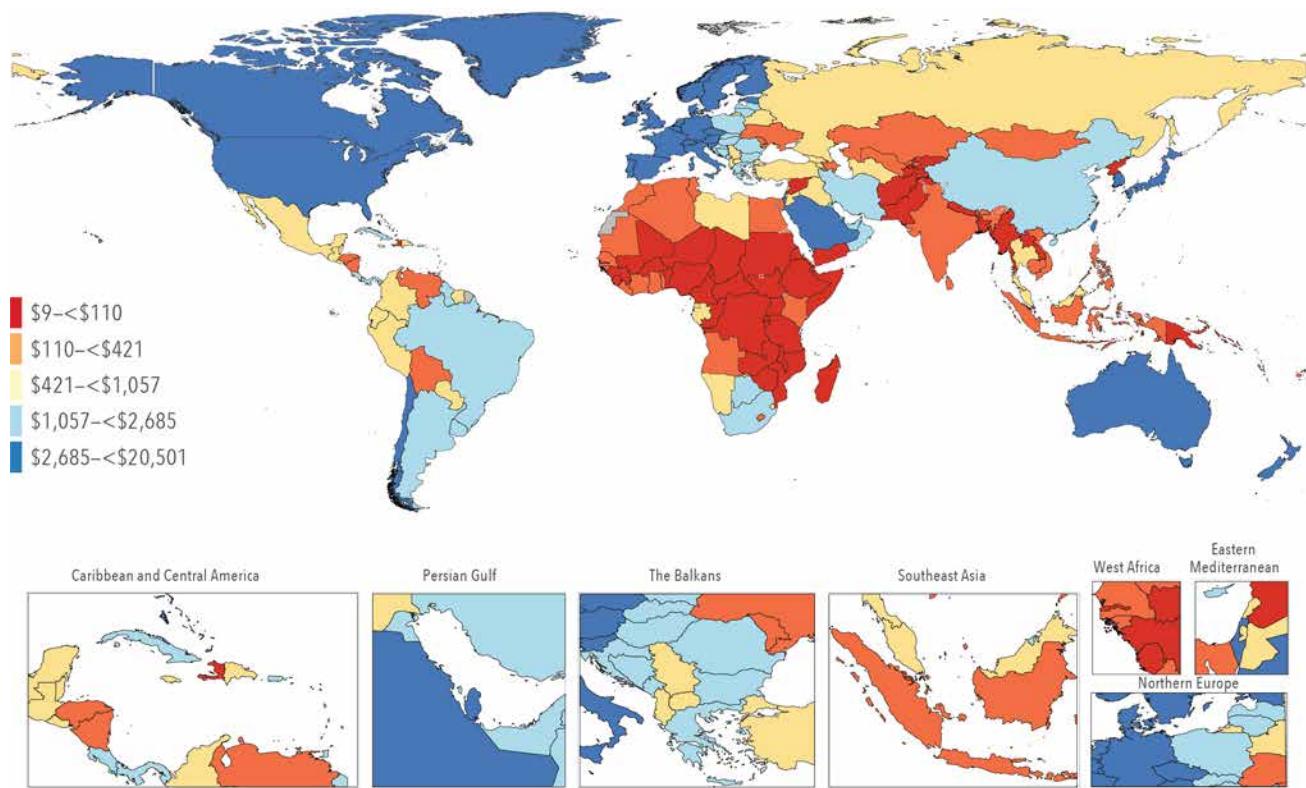
Future spending on health

By 2050, global spending on health is projected to grow 84.8% (76.9–93.0), from an estimated \$9.2 trillion (9.1–9.3) in 2019 to \$16.9 trillion (16.1–17.8).

By type of health spending, global government spending is projected to grow 72.0% (63.9–80.2) between 2019 and 2050, out-of-pocket spending 28.7% (28.0–29.4), prepaid private spending 168.4% (140.7–196.9), and DAH 61.6% (47.5–87.5).

Many of those increases, however, will be driven by spending in high-income countries. By World Bank income group, spending on health in high-income countries makes up 69.2% (65.2–72.6) of the total health spending increase from 2019 to 2050, while upper-middle-income spending is projected to contribute to 23.6% (20.4–27.2) of the increase, lower-middle-income 6.7% (6.0–7.5), and low-income only 0.6% (0.5–0.7).

FIGURE 17 Forecasted total health spending per person, 2050



Bins were determined by assigning all countries to evenly distributed quintiles.

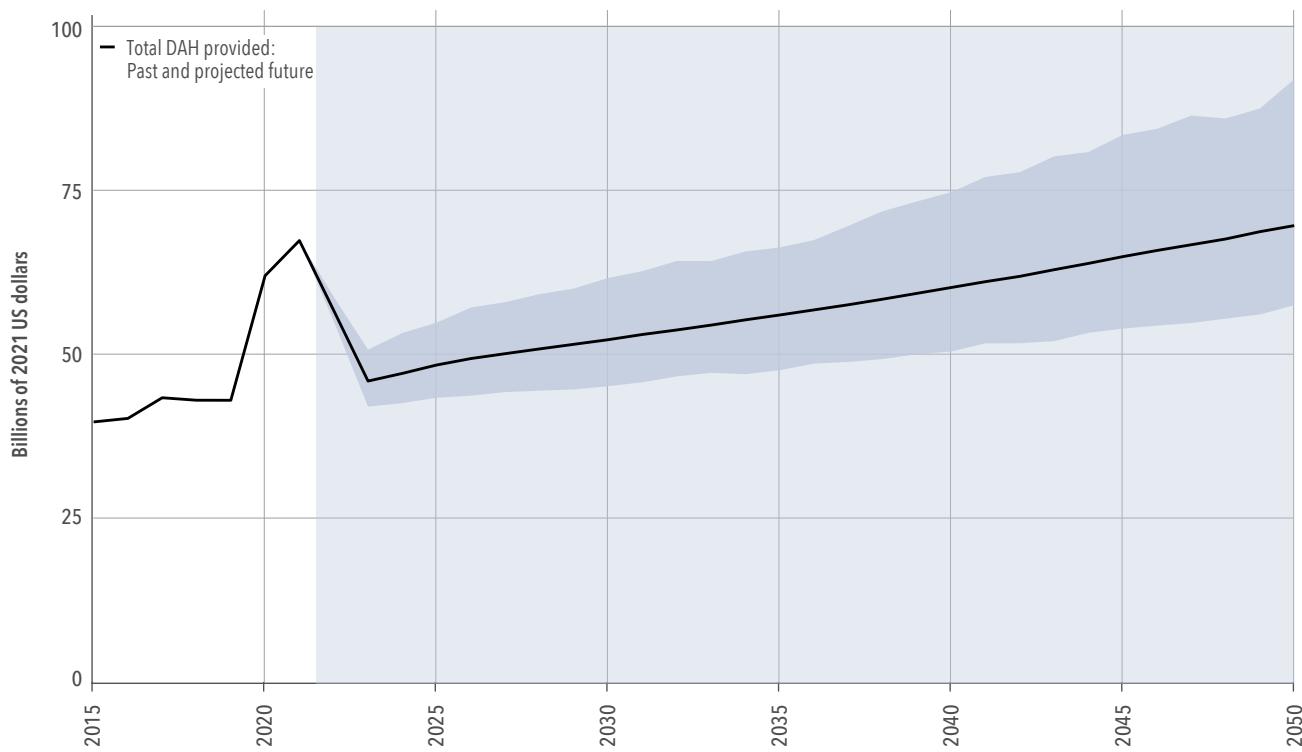
In 2050, we project that the top three countries by per person spending will be the US (\$20,501 [18,479–22,512]), Switzerland (\$16,580 [14,718–18,497]), and Bermuda (\$14,546 [11,310–18,552]).

The lowest three countries by per person spending in 2050 are projected to be Somalia (\$9 [5–16]), Eritrea (\$27 [22–34]), and South Sudan (\$29 [25–36]), all of which face a number of challenges – including poverty, political turmoil, and either active conflicts or a long history of conflict. All three countries are also in sub-Saharan Africa; indeed, many of the countries with the lowest projected per person spending across the globe can be found in sub-Saharan Africa.

Several countries with high projections of 2050 spending will likely see their populations begin to plateau and/or decline around the same time.⁹ Many of the poorest countries in the world will be growing, while the richest countries – where much of the world’s spending on health will remain concentrated – will be shrinking. For example, according to the Global Burden of Disease forecasts,⁹ Switzerland’s population is projected to peak in 2049 and then decline by 2100 to its mid-2010s level. Eritrea, in comparison, will see its population peak around 2060 and then end the century with a population of roughly 7 million – over 500,000 people more than the country’s current population.

However, spending on health is not projected to adjust accordingly to the expected increase in low-income and lower-middle-income country

FIGURE 18 Forecasted development assistance for health, 2015–2050



*2021 estimates are preliminary.

Shaded area represents forecasted values. Shaded region around black line represents 95% uncertainty intervals.

populations: we estimate that after the sharp increase in DAH due to COVID-19, development assistance for health will increase 12.3% between 2020 and 2050. Indeed, there are already signs that some donors may be responding to the ongoing economic crisis caused by COVID-19 (and exacerbated by the war in Ukraine) by cutting aid and support for DAH. For example, there are reports that the UK government has begun freezing some forms of foreign aid.¹⁰

Meanwhile, the population of sub-Saharan Africa is expected to grow from roughly 1.2 billion in 2022 to 2.1 billion in 2050,⁹ which could put additional pressure on the region's already taxed health systems. The health focus areas that DAH has in the past been effective at reducing the burden of – such as malaria and tuberculosis – continue to cause needless suffering and death in the area, so a decline in DAH could be catastrophic to the well-being of the region.

Funding for pandemic preparedness and response

Just over two years before COVID-19 began, the World Bank released a report¹¹ on pandemic preparedness that would prove to be prophetic. The conclusion of the May 2017 report, *From Panic and Neglect to Investing in Health Security: Financing Pandemic Preparedness at a National Level*, begins with this paragraph:

“We know that it is only a matter of time before the next pandemic hits us. We also know that there is a good chance that it will be severe. It may mean death on a slow fuse, spreading insidiously through populations, unrecognized for years, like HIV in the 1980s. Or it may strike people down with stark violence and lightning speed, plunging national economies abruptly into chaos, like Ebola in West Africa in 2014-15. Whatever its mode of attack, the next large-scale, lethal pandemic is at most only decades away.”

As it turned out, the COVID-19 pandemic was only two years away. The cost of pandemic inaction has been enormous: COVID-19’s estimated reported death toll as of mid-December 2022 was 7.2 million people, while its estimated total death toll is 17.8 million.¹² The pandemic has also cost the world economy tens of trillions of dollars and pushed almost 100 million people into poverty,¹³ and its long-term effects – health-related and otherwise – will likely be felt for decades.

A positive story of COVID-19 has been the huge increase in development assistance for health for PPR: between 2019 and 2020, DAH for pandemic preparedness and response grew an unforeseen 119.8%. Prior to the onset of the pandemic, the largest annualized rate of change observed in pandemic preparedness between 1990 and 2019 was 7.9%.

Breakdowns of DAH for PPR between 1990 and 2021, by source of funding and channel, respectively, are shown in Figures 19 and 20. Both figures illustrate the many years of slow growth in pandemic preparedness funding from 1990 to 2019, followed by the sudden, dramatic rise in spending (following the trend of spending increasing after a major outbreak or epidemic) driven by DAH for COVID-19 in 2020 and 2021. Though DAH for pandemic preparedness was \$786.6 million in 2021 – 25.1% less than the 2020 total of \$1.0 billion – that still constitutes an increase of 64.8% over

the 2019 total.

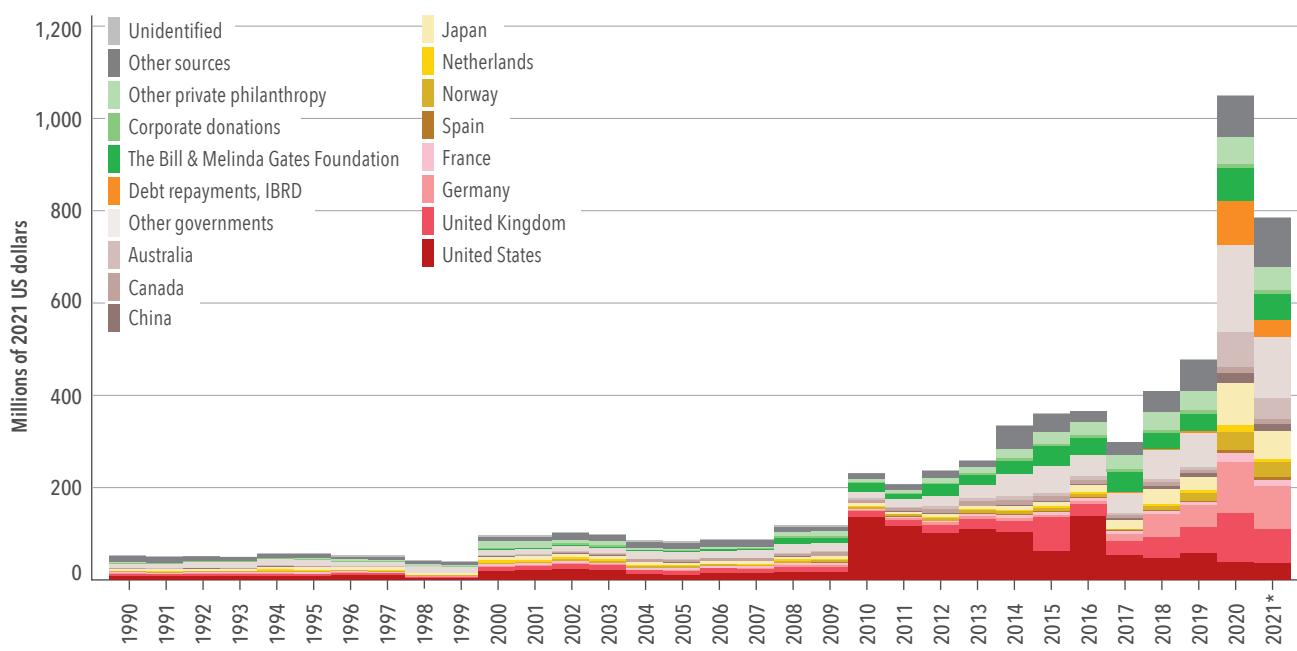
Of note as well are the increase in US support for DAH for PPR in 2010, a following spike in 2016, and then a drop from the high in 2016 that has persisted; while the US strongly supported the response to COVID-19, the country's support for pandemic preparedness has been more limited.

The Bill & Melinda Gates Foundation's increased role in DAH for PPR (as both a source of funding and as a channel), is also shown. Overall, in 2021, the individual largest sources of DAH for pandemic response were Germany, the United Kingdom, and Japan, while WHO was by far the largest channel in this sphere, disbursing 62.2% of 2021 DAH for pandemic response.

Whether overall pandemic preparedness support remains at or near its current levels after COVID-19's acute phase has passed remains an open question and will likely continue to be a topic of much discussion.

But support for PPR DAH will likely go down if the pandemic's burden continues to decline. Of course, some will argue that funding now devoted

FIGURE 19 Development assistance for pandemic preparedness and response by source of funding, 1990–2021



*2021 estimates are preliminary.

IBRD = International Bank for Reconstruction and Development.

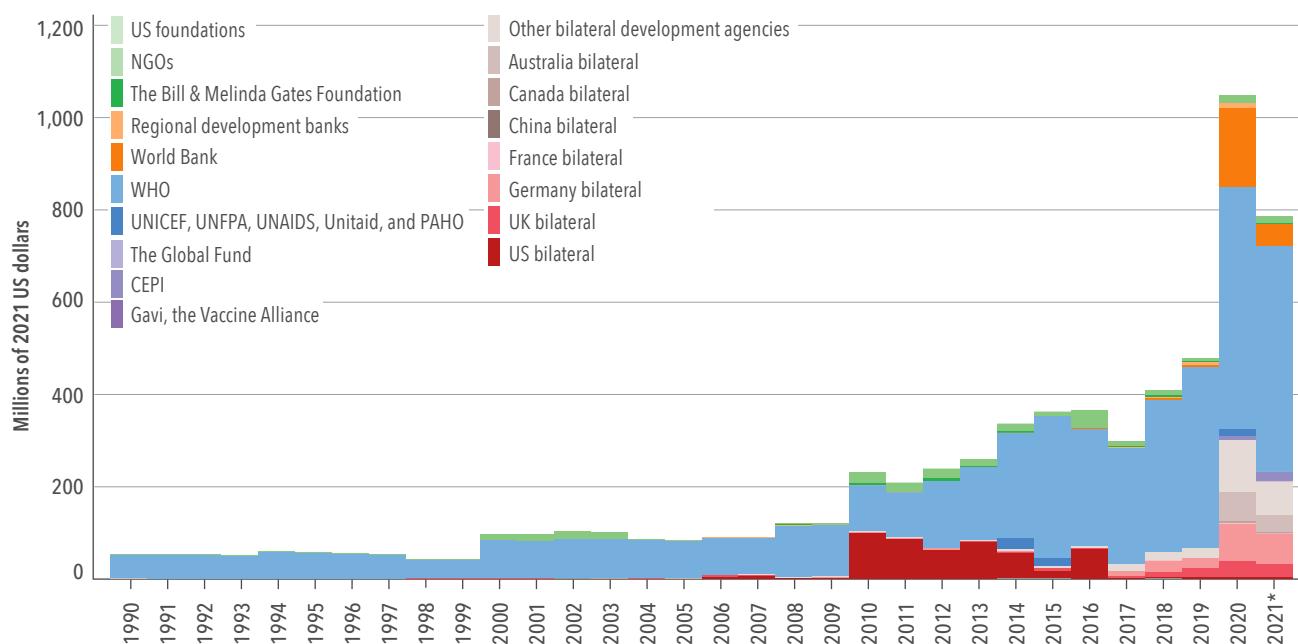
"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Funding for which we have no source information is designated as "Unidentified."

to fighting COVID-19 should be reallocated to other health focus areas once the acute period of the pandemic has fully passed, but that does not necessarily mean pandemic preparedness should cease to be a priority.

Should DAH for pandemic preparedness decline too much – for example,

FIGURE 20 Development assistance for pandemic preparedness and response by disbursing entity, 1990–2021



*2021 estimates are preliminary.

CEPI = Coalition for Epidemic Preparedness Innovations

Global Fund = The Global Fund to Fight AIDS, Tuberculosis and Malaria

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

"Other bilateral development agencies" include Austria, Belgium, Denmark, Finland, Greece, Ireland, Italy, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the European Commission, and EEA.

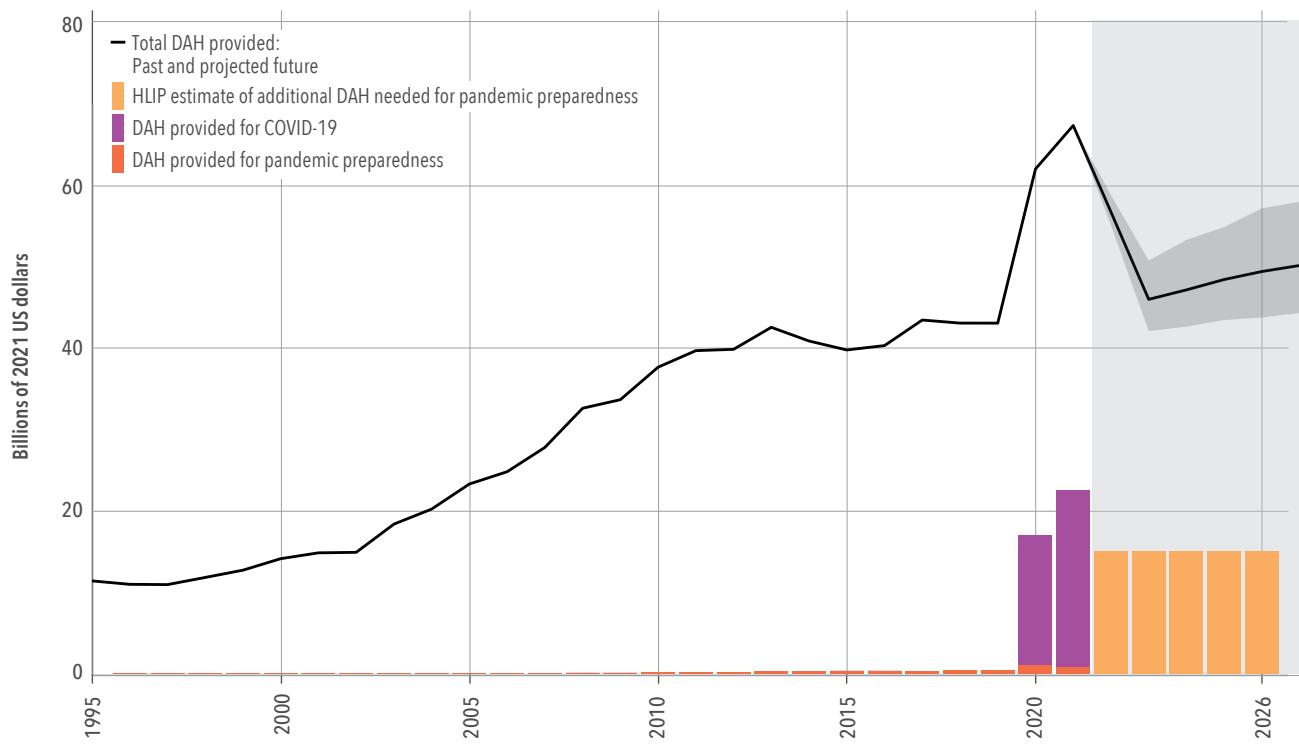
"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

to its 2000s-era average of \$97.8 million – then the world runs the risk of experiencing another pandemic. To quote the 2017 World Bank report again, “we know by now that the world will see another pandemic in the not-too-distant future; that random mutations occur often enough in microbes that help them survive and adapt; that new pathogens will inevitably find a way to break through our defenses; and that there is the increased potential for intentional or accidental release of a synthesized agent.” Every expert commentary and every analysis in recent years tells us that the costs of inaction are immense.

How much support for pandemic preparedness is needed? Figure 21 attempts to answer this question. According to the G20 HLIP on pandemic preparedness,¹³ between 2022 and 2026, a total of \$75 billion (\$15 billion per year) in additional funding for pandemic preparedness is needed to prevent the next pandemic. This would represent an annual increase of 1,807% over total pandemic preparedness spending in 2021, but 6.5% less than development assistance for health for COVID-19 in 2020, and 31.2% less than DAH for COVID-19 in 2021.

The world should be spending more to prevent future pandemics. By devoting additional resources to pandemic preparedness, the global

FIGURE 21 Development assistance for pandemic preparedness and COVID-19, 1995–2026



*2021 estimates are preliminary.

HLIP = High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response

Shaded area represents forecasted values. Shaded region around black line represents 95% uncertainty intervals.

community could be more adequately prepared for the next pandemic – which could help avoid the steep economic costs associated with fighting a pandemic, while potentially saving millions of lives. As the HLIP report notes, “scaling up pandemic preparedness cannot wait until COVID-19 is over. The threat of future pandemics is already with us.”

Perhaps just as importantly, the more health systems are prepared for the shock of a pandemic, the more they can address other health issues and events. For example, at the beginning of COVID-19, shortages of personal protective equipment and intensive care unit (ICU) beds (and the equipment found in ICUs) led to more deaths than would have occurred had local systems been adequately prepared for the onset of COVID-19. Moreover, experience with other outbreaks – such as Ebola in West African countries – helped those countries manage COVID-19.¹⁴ Finally, by helping ensure that hospitals and health systems can deal with the surge of patients associated with a pandemic, DAH for pandemic preparedness can strengthen them and improve health outcomes overall.

Conclusion

Many challenges

The last few years have certainly been challenging. The turbulence brought on by the pandemic – both due to its impacts on health, and because of the crises caused directly and indirectly by the disruption of COVID-19 – cannot be stressed often or strongly enough. COVID-19 is the first major pandemic since the 1918 influenza pandemic, and it has arguably been more of a jolt to the global order, advances in medical treatment and vaccines notwithstanding, because the world is now much more connected than it was in 1918.

Now, with COVID-19 transforming from a pandemic to an endemic illness, along with many other worries on the horizon (including the war in Ukraine, challenging economic conditions and the specter of a global recession, and climate change), financing global health is as challenging and as critical as ever. Though the most immediate, COVID-19 is hardly the only disease that needs fighting, and that development assistance for health for some health focus areas – like DAH for reproductive and maternal health – seems to have declined during the COVID-19 period (2019–2021) is cause for concern.

Still, the past few years have not been without their positive stories. The jump in DAH driven by COVID-19, the global distribution (however unequal) of safe and effective COVID-19 vaccines in record time, the continued development of drugs to prevent HIV infection,¹⁵ and the development of the first malaria vaccine – all of these things occurred *during* the pandemic. The world has much to be proud of and perhaps to feel optimistic about the future of global health.

Nonetheless, there remains the danger that once the pandemic's worst is truly past, the world will turn its attention away from global health, specifically away from DAH. The pandemic underscored the importance of development assistance for health to countries that rely on DAH. For example, countries in sub-Saharan Africa have long depended on DAH; between 2000 and 2021, 19.9% of global DAH per capita went to countries in the region.

So as the COVID-19 crisis becomes less acute, instead of refocusing their attention and resources on areas outside of health, donors should instead look to COVID-19 as a direct example of the importance of global health in a highly connected world. The improvement of COVID-19 outcomes should be seen as a chance to focus spending toward areas that continue to cause burden (NCDs, malaria, child and newborn health), as well as toward preventing the next pandemic.

But also, many opportunities

In September 2022, at the Global Fund’s Seventh Replenishment conference, President Biden gave a short summary of the impact spending on health can have:¹⁶ “for every dollar to fight these diseases [HIV, TB, and malaria], we expect \$31 in health gains and economic returns, which also advances our progress toward meeting the goal of the Sustainable Development Agenda.” Though estimates of the return on investment associated with global health spending differ,¹⁷ President Biden’s point stands: it is more prudent to prevent a crisis than wait until a crisis occurs to address it. And spending on health (ahead of crises) begets improvements in health, which can help reduce spending on health overall.

COVID-19 has taught the world a number of hard lessons, one of the most important being the wide impact collective action and timely, targeted spending on health can have. The death toll from COVID-19 will forever be far too high, but without the huge, global increase in spending on health, as well as the many stories of coordination that arose during the pandemic, COVID-19’s toll would surely have been higher.

This is hardly the pandemic’s only positive story. In 2020, when much of the world was in lockdown, significant reductions in air pollution were noted, as well as decreases in motor vehicle accidents.¹⁸ And there are the positive health outcomes that came out of the pandemic: the aforementioned rapid development and deployment of millions of vaccine doses; the marked improvement in daily deaths and infections from COVID-19, particularly since the spring of 2021; and the outcomes that *did not* occur as a result of COVID-19.

Specifically, at the beginning of the pandemic there were fears that when COVID-19 made its way to low-income countries with fewer hospital resources, there would be widespread suffering and death. Instead, as far we can tell, that has not happened. While total deaths from COVID-19 in regions like sub-Saharan Africa are certainly far higher than reported deaths from COVID-19,¹⁹ the fact remains that the region has likely suffered less from the pandemic than many other parts of the world. Exactly why remains something of a mystery.

The rapid growth of DAH during COVID-19 is a positive sign, and one on which it makes sense to end *Financing Global Health 2021*. While much of the increase in DAH between 2019 and 2021 can be attributed to the release of emergency funds that the donor community was able to vastly (and speedily) ramp up, spending on health during the pandemic suggests that where there is a will to increase spending, there is a way. This could prove to be key in the debate over pandemic preparedness and how much donors should contribute to health in the future.

Therefore, a key challenge facing the global health community going forward is maintaining the same sense of urgency after COVID-19 passes. The pandemic has shown us what we can achieve by working together. Let’s continue to do so.

Global health financing focus area profiles

Financing Global Health 2021's global health financing focus area profiles expand upon the main report by offering detailed DAH data and information on seven health focus areas:

- COVID-19
- HIV/AIDS
- Tuberculosis
- Malaria
- Other infectious diseases
- Reproductive, maternal, newborn, and child health
- NCDs

COVID-19

A respiratory disease caused by the SARS-CoV-2 virus, COVID-19 was first detected in late 2019. Since its origin, COVID-19 has spread across the globe, causing more than 15.0 billion infections worldwide and an estimated 17.8 million deaths through mid-December 2022.¹

Generally spread by close contact between individuals, COVID-19 can also be spread via airborne transmission and, less frequently, through contact with contaminated surfaces. While most people who get COVID-19 recover (some never exhibiting symptoms), roughly 12.3% of those who do get COVID-19 can become seriously ill, requiring hospitalization and/or intensive care. Older individuals with comorbidities like cardiac issues, diabetes, and cancer are at the most risk for severe COVID-19.

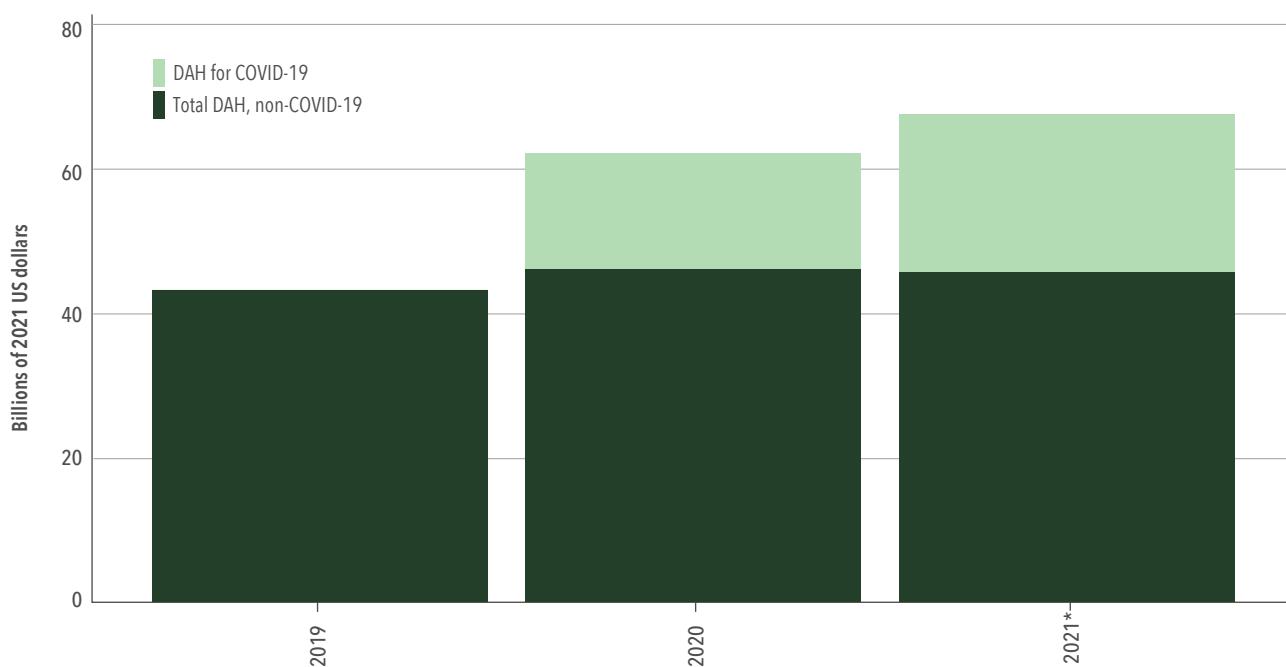
In addition to the toll it has taken on global health, the lockdowns and other restrictions imposed to slow the spread of COVID-19 have had a severe economic

impact. Between 2019 and 2020, the world economy shrank an estimated 4.3%, while the surge of infections and deaths caused by the Omicron variant in late 2021 and early 2022 slowed the global economic recovery.²⁰

However, COVID-19 has also led to a surge in government spending, including a huge increase in development assistance for health; an estimated \$16.0 billion was directed toward COVID-19 in 2020, and in 2021, DAH for COVID-19 was an estimated \$21.8 billion. Overall, DAH for COVID-19 led to a 56.3% increase in total DAH between 2019 and 2021: in 2019, total DAH was \$43.1 billion, while in 2021, it was \$67.4 billion.

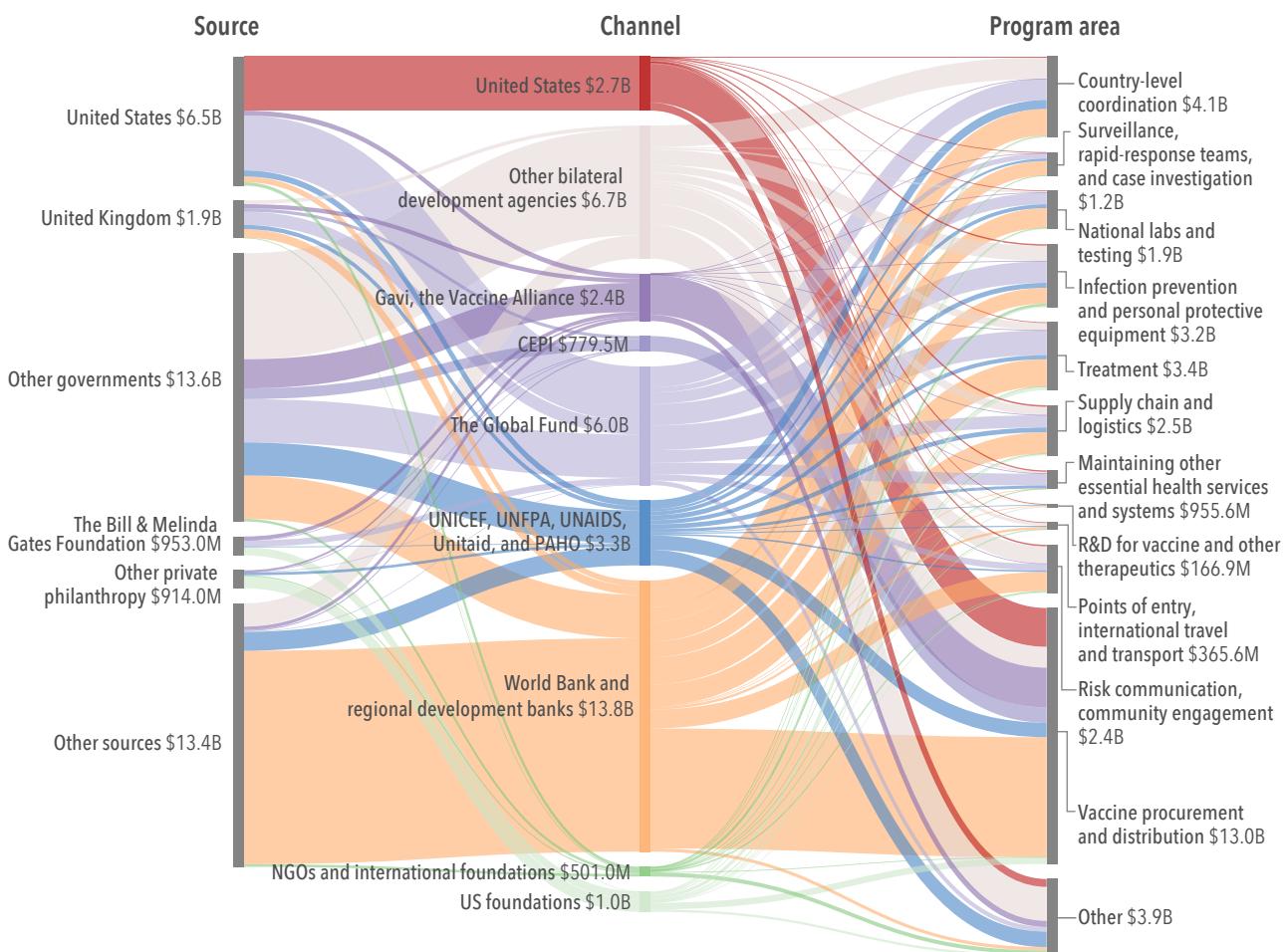
The COVID-19 profile illustrates the sources, disbursement channels, and program areas to which COVID-19 DAH was allocated. Figure A shows how DAH for COVID-19 drove the overall growth of DAH between 2019 and 2021, while Figure B illustrates how DAH for COVID-19 flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for COVID-19, 2020–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for COVID-19 from source to channel to program area, 2020–2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

HIV/AIDS

The human immunodeficiency virus, or HIV, is the virus that can cause AIDS, or acquired immunodeficiency syndrome; if left untreated, HIV/AIDS can lead to life-threatening infections and health conditions.

Though there are now effective anti-retroviral treatments for HIV/AIDS, when the disease first appeared in the 1980s it led to a widespread public health crisis.

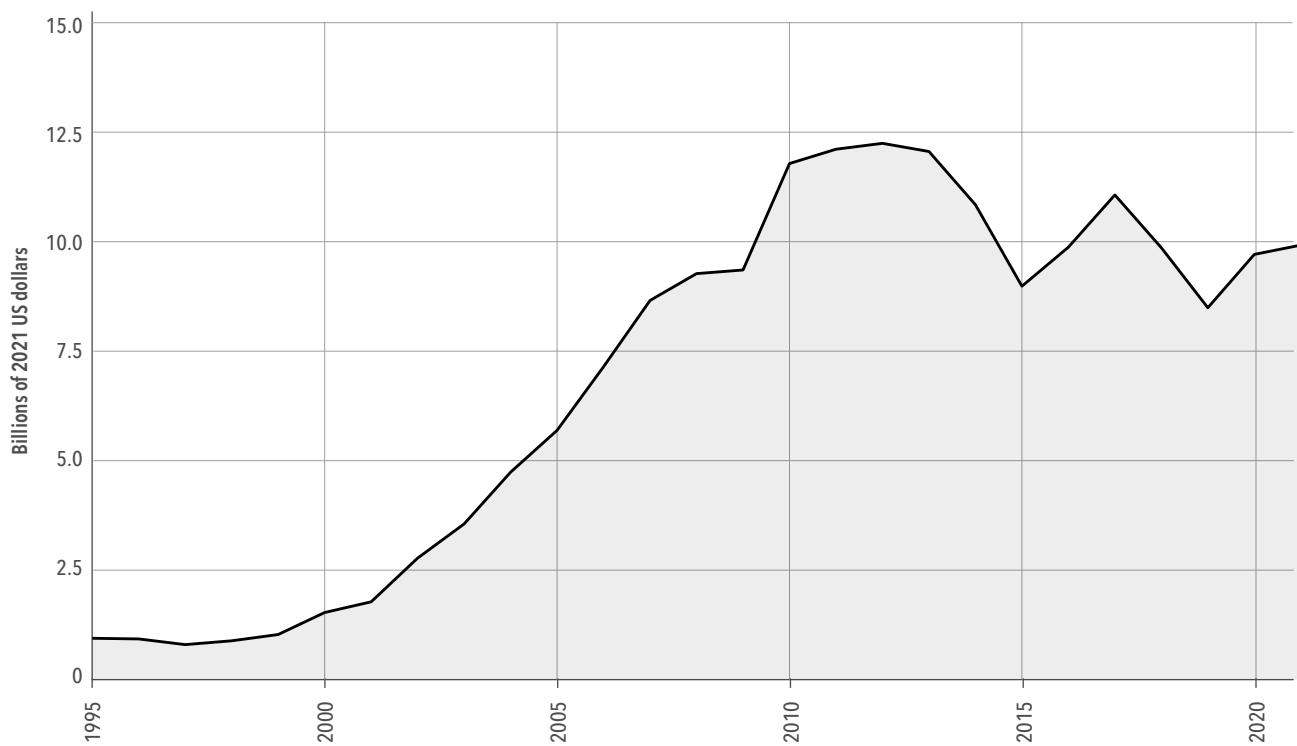
Since the start of the HIV/AIDS epidemic, more than 30 million people have died from AIDS-related illnesses.²¹

In 2021, DAH for HIV/AIDS was \$9.9 billion, a 2.2% increase from the 2020 DAH total. Though DAH for HIV/AIDS has increased since 2019, it remains lower than

the 2017–2018 average of \$10.5 billion. In 2019, in low-income and lower-middle-income countries, a total of \$3.8 billion was spent on HIV/AIDS, which was 45.4% of total DAH for HIV/AIDS. For context, DAH for HIV/AIDS was \$8.5 billion, 19.7% of the 2019 DAH total.

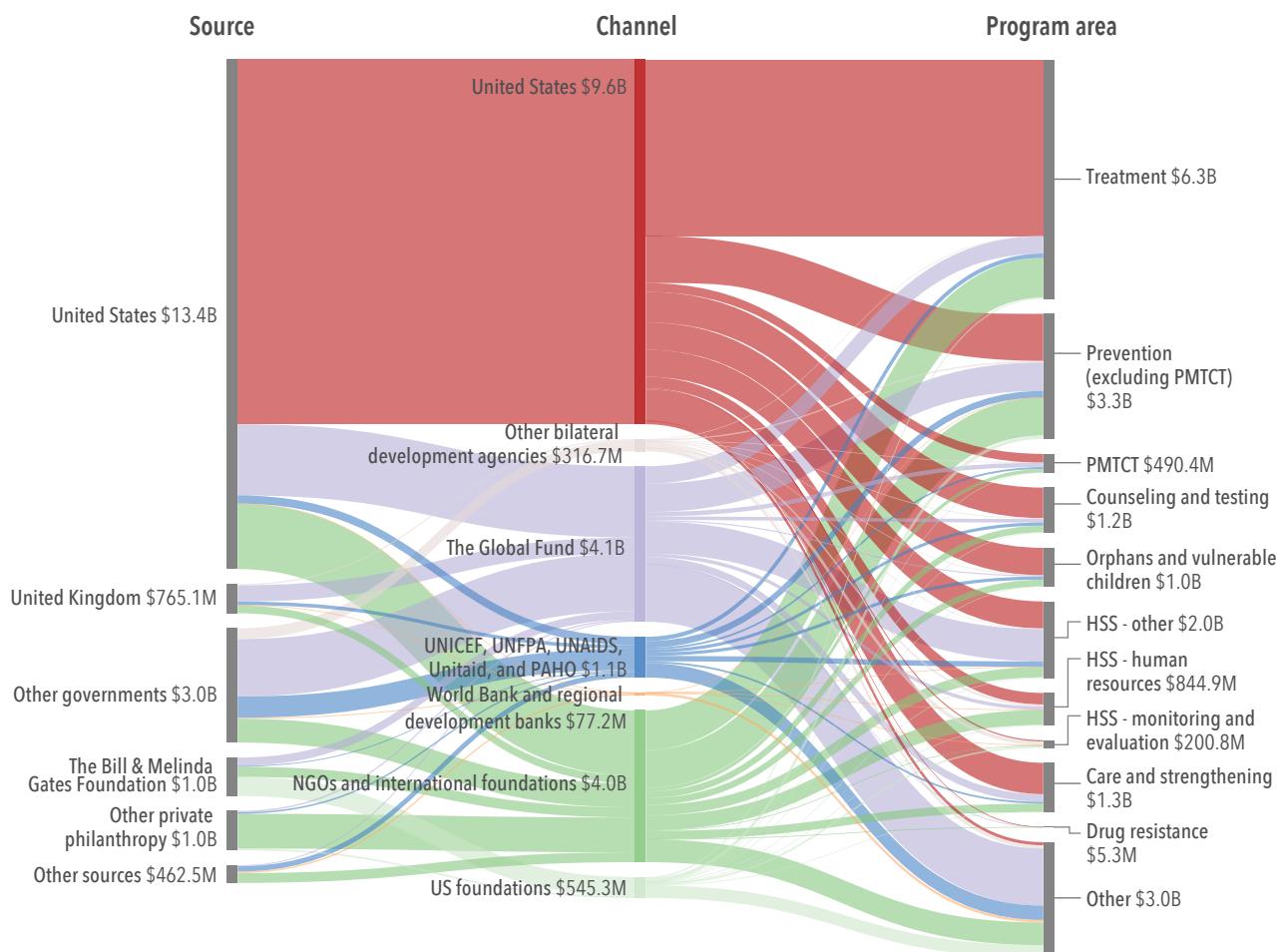
The HIV/AIDS profile illustrates the sources, disbursement channels, and program areas to which HIV/AIDS DAH was allocated. Figure A gives a high-level view of DAH for HIV/AIDS between 1995 and 2021, while Figure B illustrates how DAH for HIV/AIDS flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for HIV/AIDS, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for HIV/AIDS from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

PMTCT = Prevention of mother-to-child transmission

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

Tuberculosis

Caused by the bacterium *Mycobacterium tuberculosis*, tuberculosis is a highly contagious infectious disease that generally affects the lungs. While many cases of tuberculosis do not progress to active disease, those that do can be fatal. Tuberculosis is a leading killer of people with HIV, and “a major cause of deaths related to antimicrobial resistance,” according to the World Health Organization.²² By number of deaths, much of the world’s tuberculosis burden is in countries like India, Indonesia, Pakistan, and the Democratic Republic of the Congo.⁴

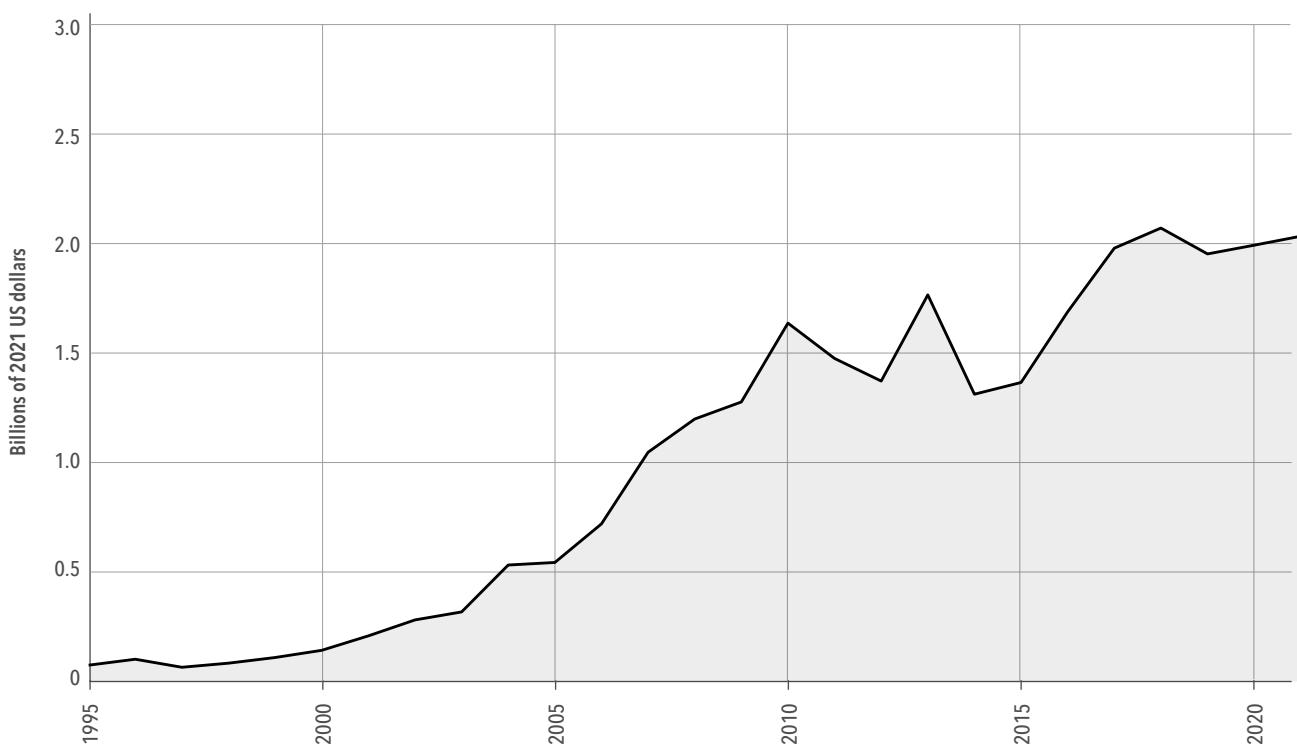
Tuberculosis outcomes have improved since 1990. For example, the age-standardized rate of tuberculosis deaths in China in 1990 was 20.2 per 100,000, and in 2019 it was 2.0. Ethiopia’s age-standardized rate of deaths due to tuberculosis was 317.3 in 1990 (then the

leading cause of death in Ethiopia), and by 2019 it had gone down to 60.9 per 100,000.⁴

In 2021 – the most recent year for which we estimate development assistance for health by health focus area – a total of \$1.3 billion was spent on tuberculosis in low-income and lower-middle-income countries, which was 65.0% of total 2020 DAH for tuberculosis. In 2021, a total of \$2.0 billion was allocated for DAH for tuberculosis, an increase of 2.1% from 2020.

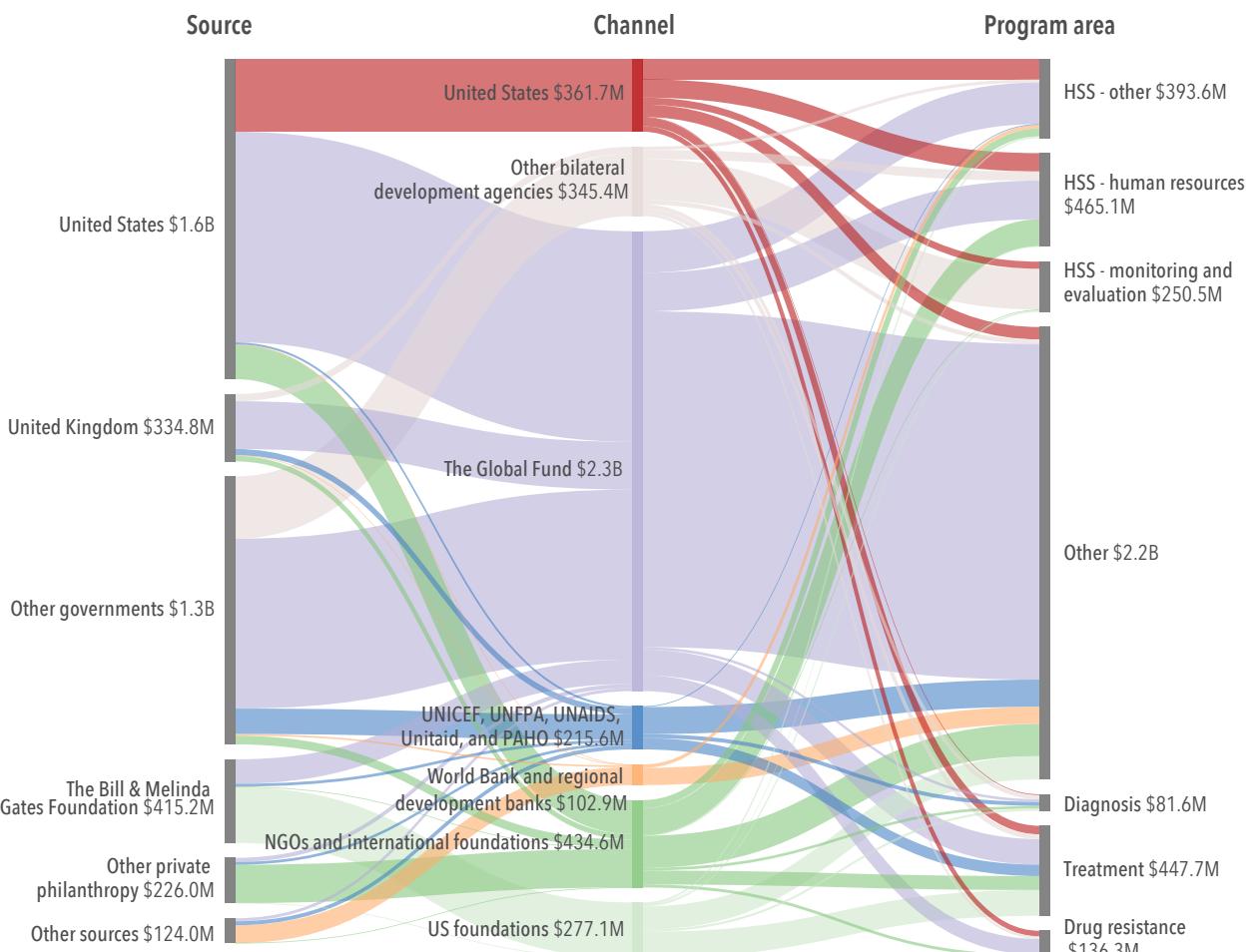
The tuberculosis profile illustrates the sources, disbursement channels, and program areas to which tuberculosis DAH was allocated. Figure A gives a high-level view of DAH for tuberculosis between 1995 and 2021, while Figure B illustrates how DAH for tuberculosis flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for tuberculosis, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for tuberculosis from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOs = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

Malaria

Transmitted by mosquitoes, malaria is a disease caused by parasites of the *Plasmodium* group, two of which – *P. falciparum* and *P. vivax* – pose the greatest threat to humans. Malaria's symptoms include flu-like symptoms (chills, fever), vomiting, diarrhea, and jaundice,²³ and if left untreated, malaria can lead to acute illness and death.

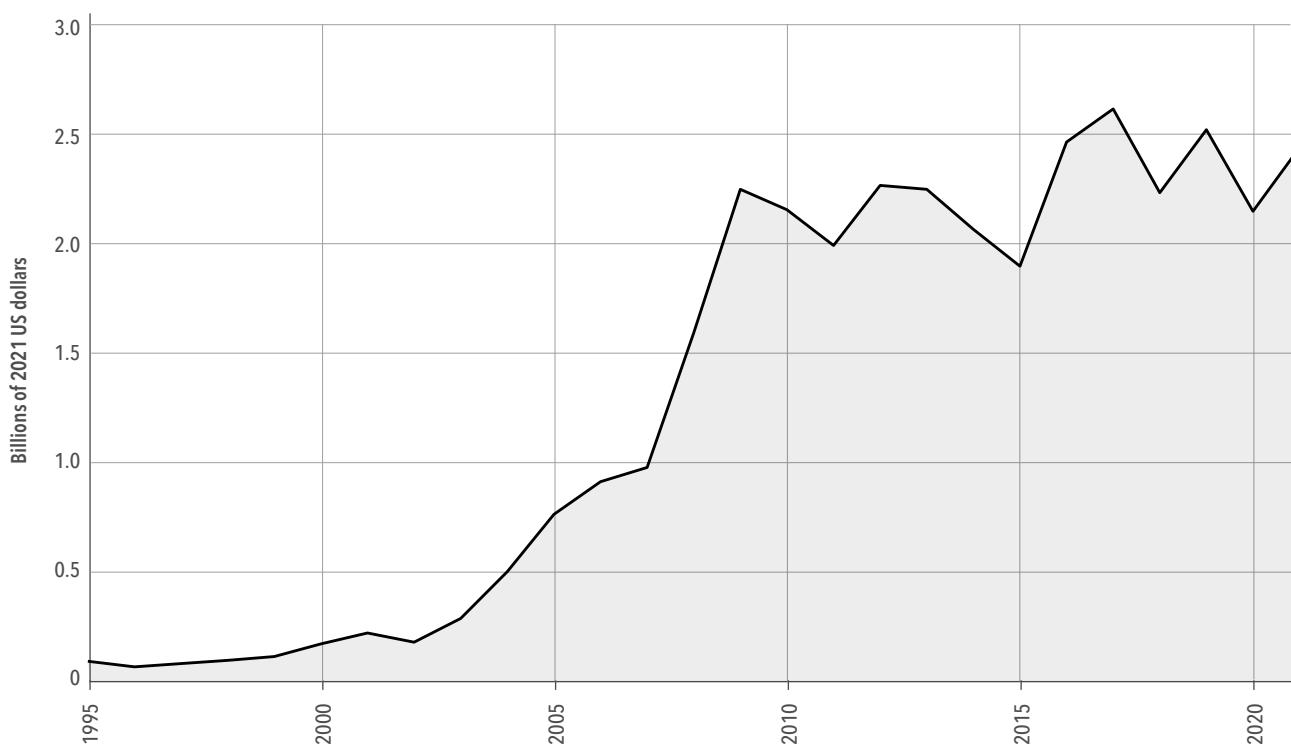
According to the Global Burden of Disease 2019 study,⁴ in 2019 most global malaria burden remained in sub-Saharan Africa, with the highest age-standardized rates of disability-adjusted life years (DALYs) in Sierra Leone, Côte d'Ivoire, and Burkina Faso. The most malaria deaths were in Nigeria (nearly 200,000) and the Democratic Republic of the Congo (over 55,000). However, these numbers obscure the tremendous progress in the fight against malaria: in 1990, there were almost 850,000 deaths from malaria globally, but by

2019, that number had dropped to roughly 650,000. And a malaria vaccine is expected to be distributed widely in 2023.²⁴

There was a total of \$2.4 billion in DAH for malaria in 2021. In comparison, a total of \$4.3 billion (comprising government spending, prepaid private spending, out-of-pocket spending, and DAH) was spent on malaria across malaria-endemic countries in 2017, the latest year for which we estimate total spending by health focus area; 38.8% of total spending on malaria was DAH.

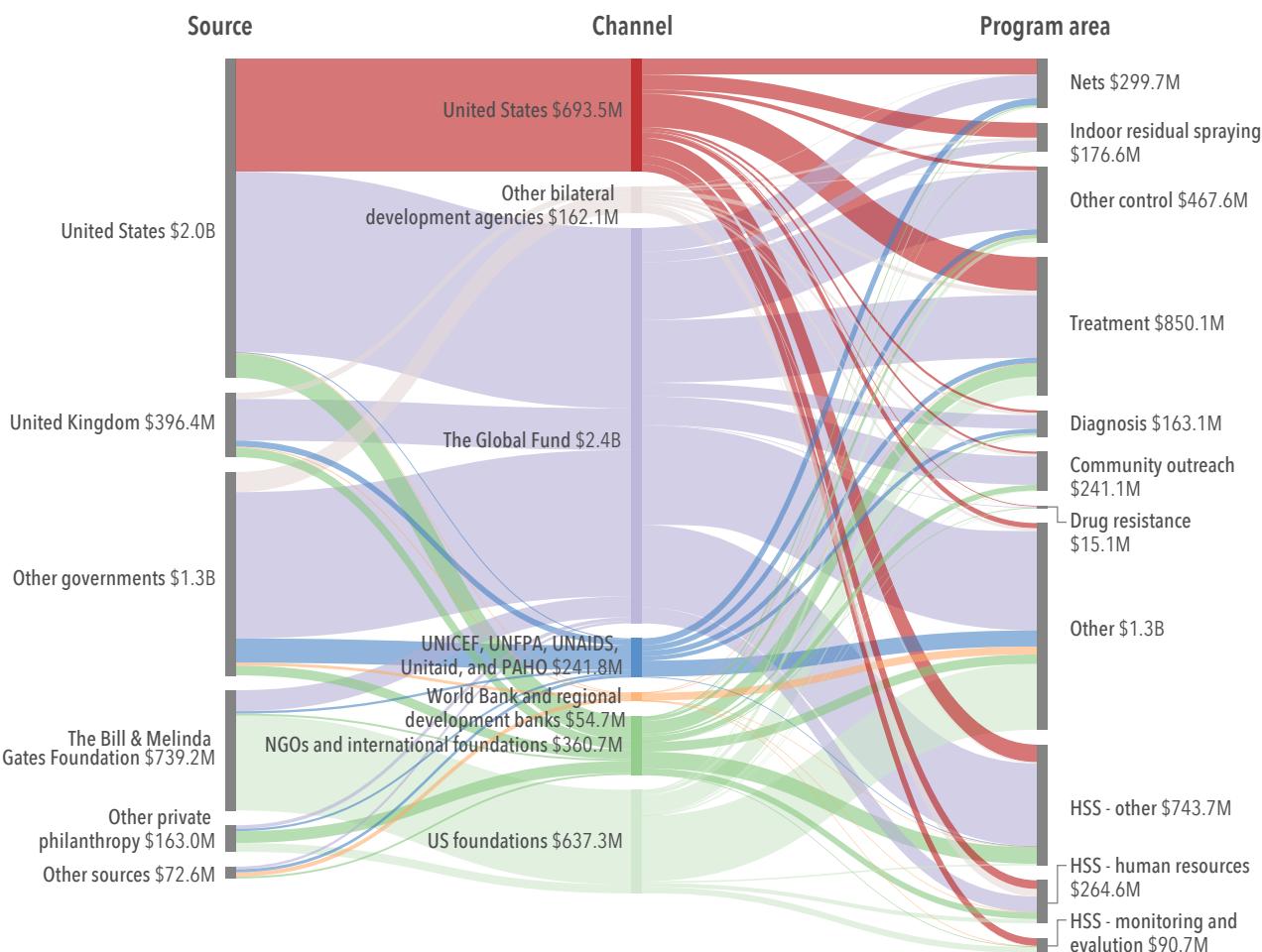
The malaria profile illustrates the sources, disbursement channels, and program areas to which malaria DAH was allocated. Figure A gives a high-level view of DAH for malaria between 1995 and 2021, while Figure B illustrates how DAH for malaria flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for malaria, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for malaria from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOs = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

Other infectious diseases

Financing Global Health's other infectious diseases group refers to all infectious diseases other than HIV/AIDS, tuberculosis, malaria, and childhood diseases covered under our reproductive, maternal, neonatal, and child health spending category. Note that the other infectious diseases group includes COVID-19, hence the 733.1% rise in other infectious disease DAH between 2019 and 2021.

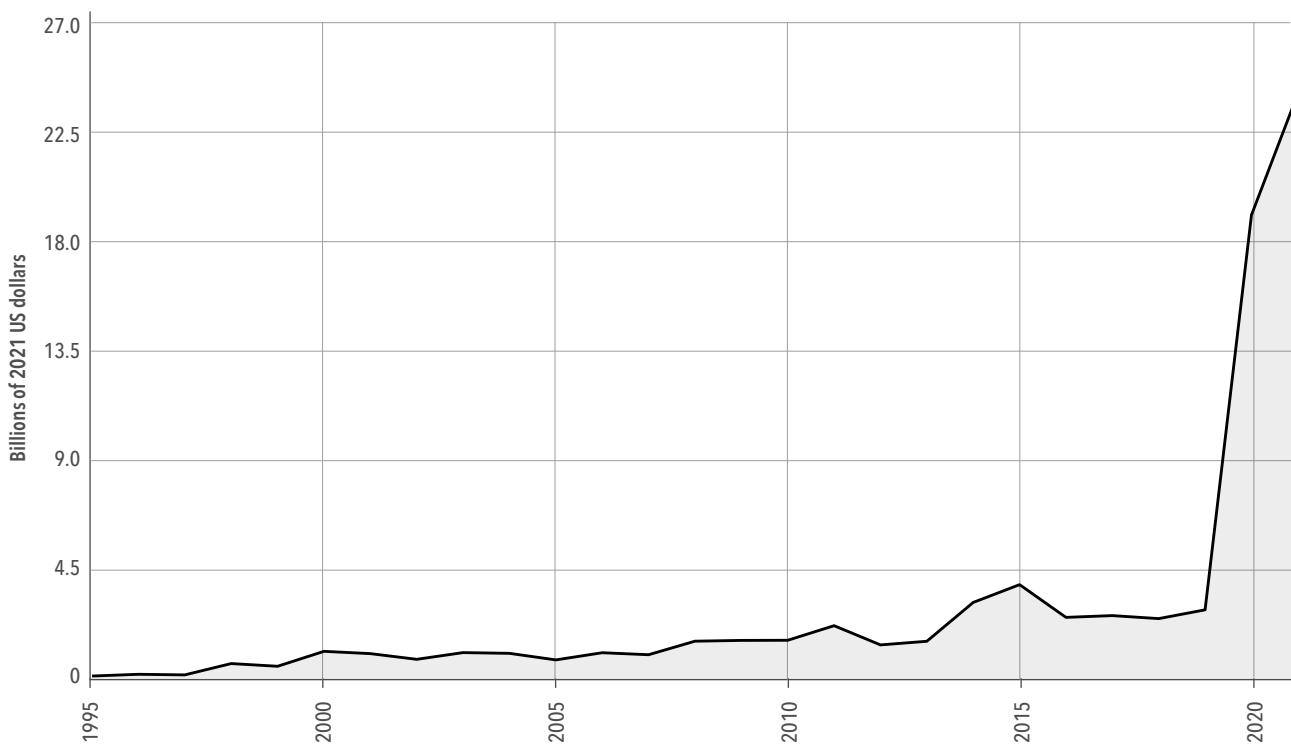
COVID-19 notwithstanding, the burden of this group of diseases has gone down over the past two decades – according to the Global Burden of Disease 2019 study,⁴ as a category, other infectious diseases caused roughly 0.7 million deaths in 2019, down from 2.2 million in 1990. But where the burden of infectious diseases is felt has not changed. In 1990, sub-Saharan Africa had the most other infectious disease burden, and South Asia the second-most; in the 2019, the regions' order was unchanged, despite the dramatic

decrease in other infectious disease burden in both regions.

The other infectious diseases profile illustrates the sources, disbursement channels, and program areas to which other infectious diseases DAH was allocated. Figure A gives a high-level view of DAH for other infectious diseases between 1995 and 2021, while Figure B illustrates how DAH for other infectious diseases flowed from source to channel to program area in 2020–2021.

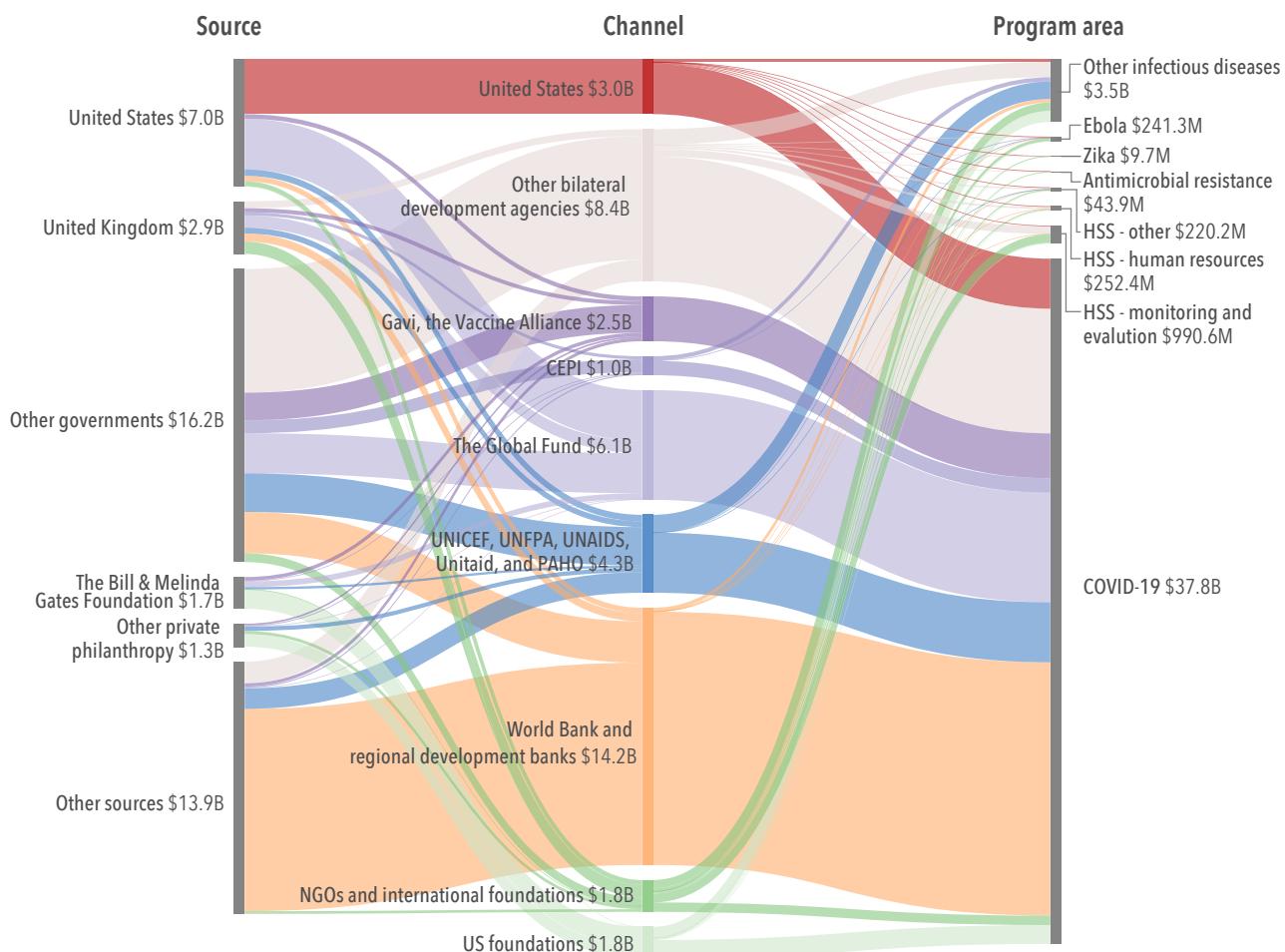
The increase in spending between 2019 and 2021 includes rises in the percentage of other infectious diseases DAH by some sources. For example, in 2019, Japan was responsible for 3.2% of other infectious diseases DAH, while in 2021, Japan accounted for 6.5%. For additional context, 9.2% (\$2.2 billion) of 2021 other infectious diseases spending was unrelated to COVID-19, a decrease of 26.3% under the 2020 total.

FIGURE A Development assistance for health for other infectious diseases, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for other infectious diseases from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

Reproductive, maternal, newborn, and child health

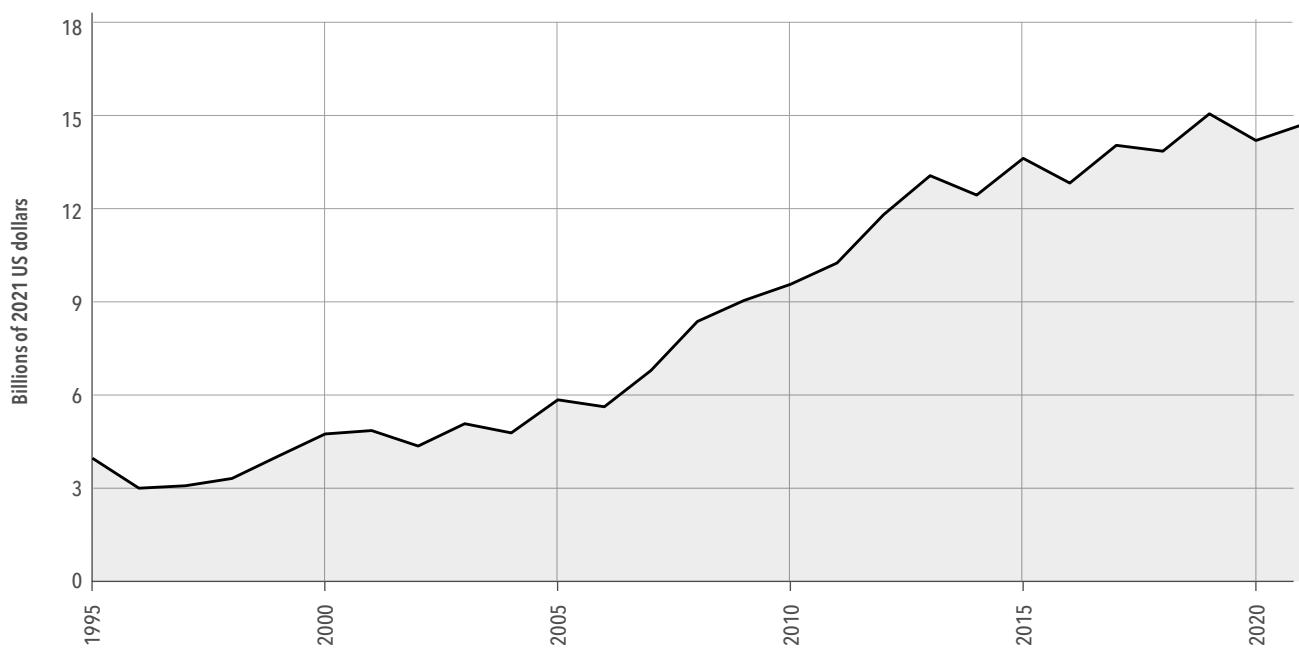
The reproductive, maternal, newborn, and child health category encompasses maternal disorders like maternal hemorrhage and ectopic pregnancy, neonatal sepsis and jaundice, and vaccine-related funding. Taken together, the burden of maternal and neonatal disorders is most felt in sub-Saharan Africa (with Pakistan also experiencing a high rate of DALYs due to maternal and neonatal disorders), according to the Global Burden of Disease 2019 study.⁴ As a group, maternal and neonatal disorders caused over 2 million deaths in 2019.

By cause, neonatal preterm birth and neonatal encephalopathy caused the most burden in 2019, leading to over 660,000 and 560,000 global deaths, respectively. But strides have been made over the past few decades: since 1990, the global, all-ages rate of deaths due to neonatal preterm birth has gone down 63.9%, and deaths caused by maternal hemorrhage have gone down 51.1%, from 95,100 in 1990 to 46,500 in 2019.⁴

An estimated \$14.8 billion in DAH went to reproductive, maternal, newborn, and child health in 2021, a decrease of 2.3% since 2019. By region, sub-Saharan Africa was the largest recipient of development assistance for reproductive, maternal, newborn, and child health in 2019, receiving \$4.4 billion, or 28.8% of 2019 DAH.

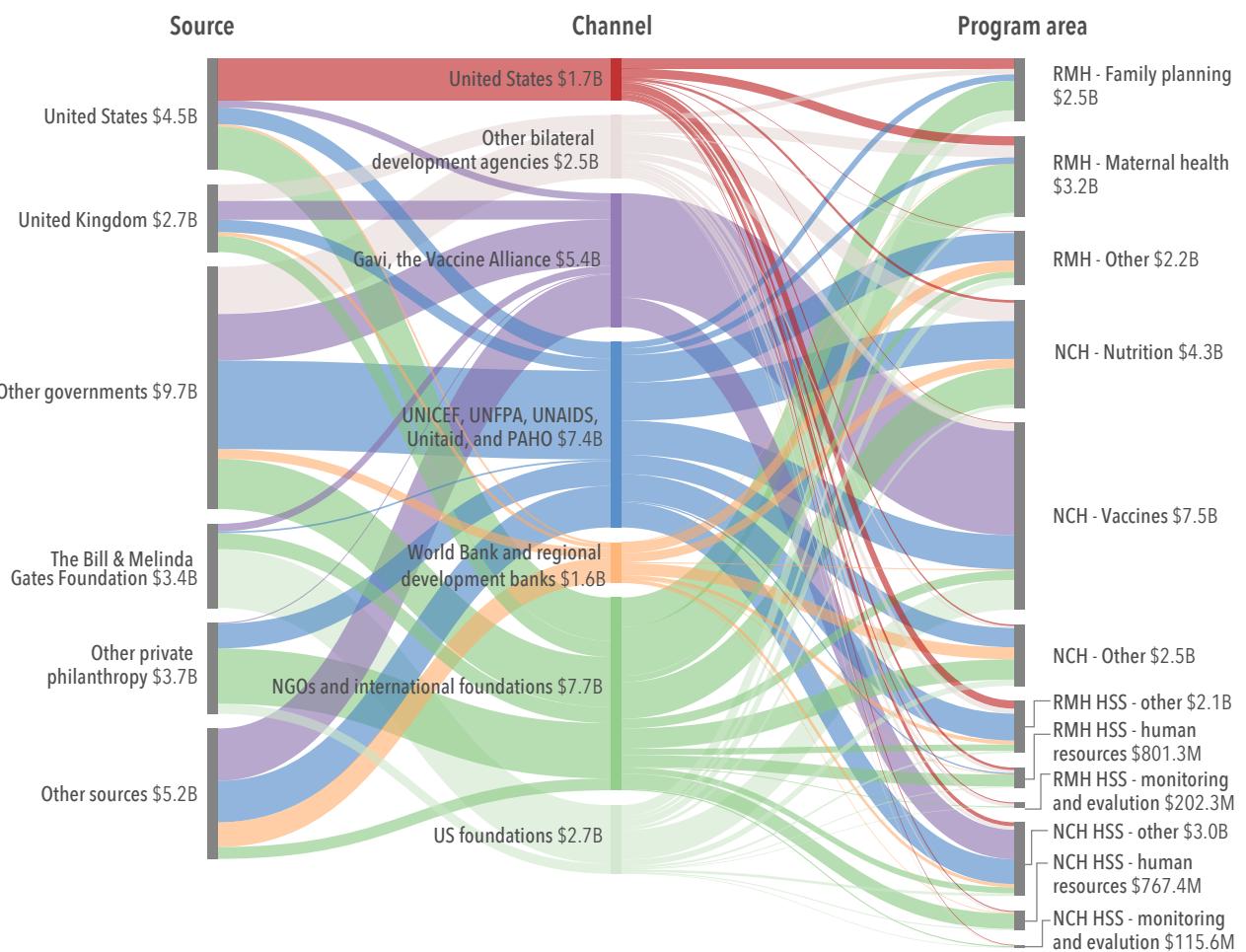
The reproductive, maternal, newborn, and child health profile illustrates the sources, disbursement channels, and program areas reproductive, maternal, newborn, and child health DAH was allocated to. Figure A gives a high-level view of DAH for reproductive, maternal, newborn, and child health between 1995 and 2021, while Figure B illustrates how DAH for reproductive, maternal, newborn, and child health flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for reproductive, maternal, newborn, and child health, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for reproductive, maternal, newborn, and child health from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as *"Unidentified."*

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

Non-communicable diseases

Non-communicable diseases (NCDs) are defined as conditions that are not transmissible from person to person; NCDs are chronic diseases, and behaviors like smoking and overuse of alcohol can increase the chance of developing one. NCDs include cardiovascular diseases, chronic respiratory diseases, and cancers.

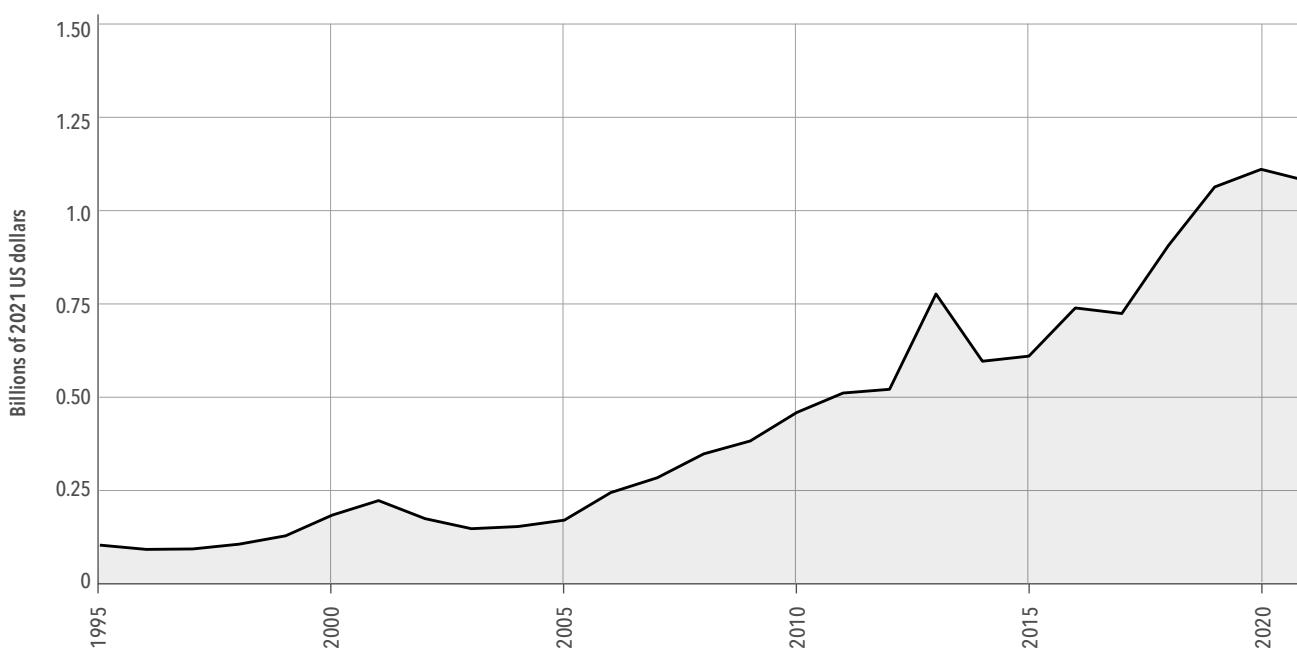
As a group, NCDs were the leading cause of disease burden globally in 2019, causing nearly three times as many deaths (more than 42 million) as communicable, maternal, neonatal, and nutritional diseases – plus injuries – combined. The leading types of NCDs include ischemic heart disease, stroke, and chronic obstructive pulmonary disease; NCD risk can be mitigated by modifying certain risk factors, like smoking.²⁵ Globally, NCD burden is highest in many middle-income countries. For example, 31.5% of 2019 deaths in Russia were attributable to ischemic heart disease, and 18.3% to stroke. Moreover, the past 30 years have been marked by a shift away from communicable diseases (COVID-19 notwithstanding) and toward non-communicable

disease burden.⁴

Though NCD-related DAH has grown over the past 30 years, spending on NCDs has not necessarily kept pace with the burden the group of conditions causes. A total of about \$1.1 billion was directed toward NCD DAH in 2021, reflecting little change over the 2020 total. Between 1990 and 2021, total NCD DAH grew 1,889.2%, while overall DAH grew 688.4%. Meanwhile, between 1990 and 2019, as a portion of total DALYs, NCDs grew 47.9%. For reference, between 1990 and 2019, the percentage of deaths attributable to NCDs grew almost 31%. In 1990, NCDs caused 56.8% of global deaths, while in 2019 NCDs caused 74.4% of global deaths.

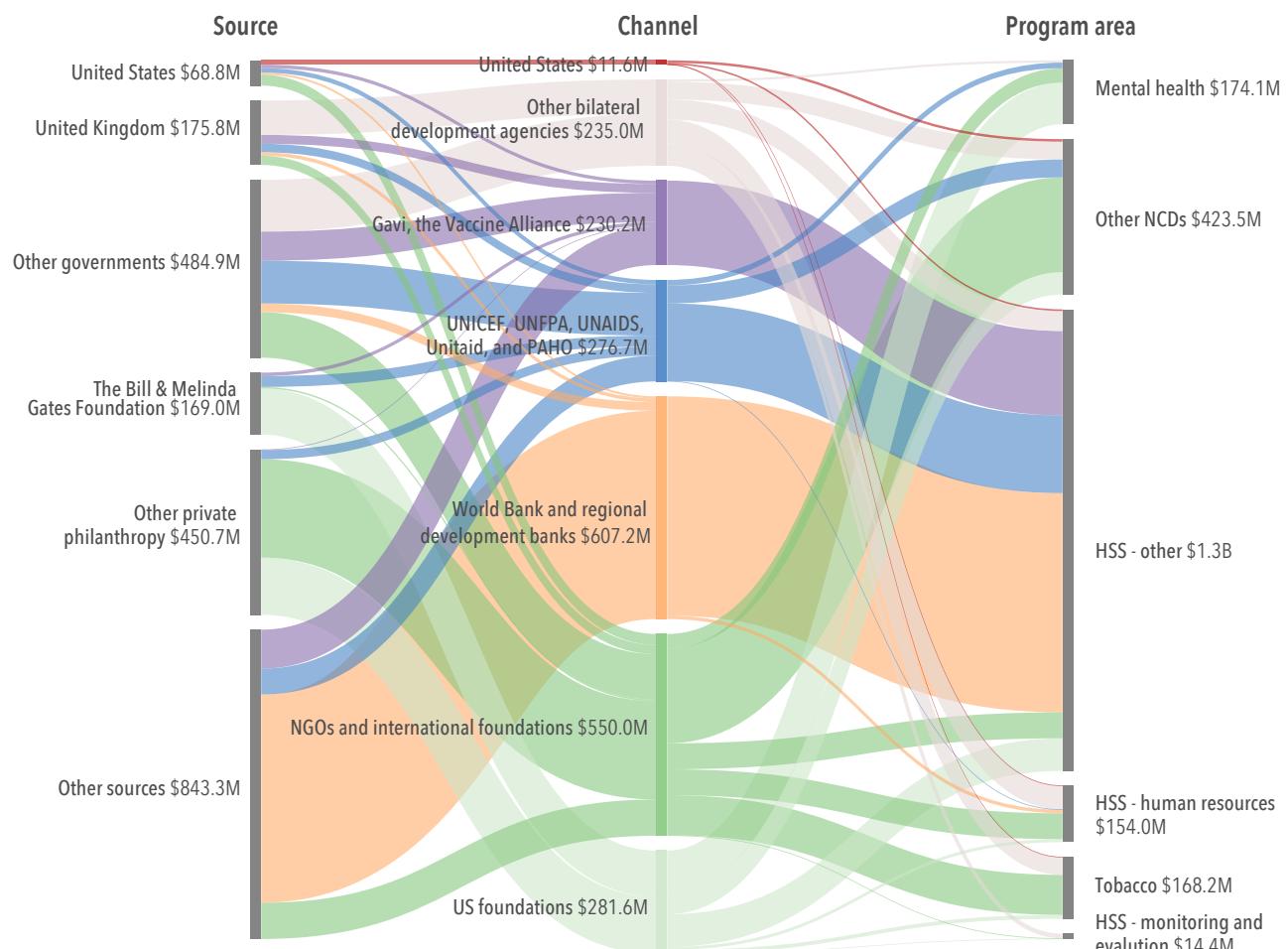
The NCDs profile illustrates the sources, disbursement channels, and program areas to which NCDs DAH was allocated. Figure A gives a high-level view of DAH for NCDs between 1995 and 2021, while Figure B illustrates how DAH for NCDs flowed from source to channel to program area in 2020–2021.

FIGURE A Development assistance for health for non-communicable diseases, 1995–2021*



*2021 estimates are preliminary.

FIGURE B Flows of development assistance for health for non-communicable diseases from source to channel to program area, 2020-2021



"Other sources" captures development assistance for health for which we have source information but which is not identified as originating within any of the sources listed.

Health assistance for which we have no source information is designated as "Unidentified."

"Other governments" include Afghanistan, Angola, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belgium, Bhutan, Brazil, Brunei, Bulgaria, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Côte d'Ivoire, Croatia, Czechia, Democratic Republic of the Congo, Denmark, Egypt, Estonia, Ethiopia, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kenya, Kuwait, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Malta, Monaco, Myanmar, New Zealand, Nigeria, Norway, Oman, Pakistan, Palestine, Peru, Poland, Portugal, Qatar, Romania, Russia, São Tomé and Príncipe, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, South Sudan, Spain, Sudan, Sweden, Switzerland, Syria, Taiwan (province of China), Thailand, the Netherlands, Togo, Turkey, Uganda, Ukraine, United Arab Emirates, Yemen, and Zimbabwe.

"Other bilateral development agencies" include Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South Korea, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Arab Emirates, the United Kingdom, the European Commission, and EEA.

"Regional development banks" include the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.

"Other" captures development assistance for health for which we have program area information but which is not identified as being allocated to any of the program areas listed.

CEPI = Coalition for Epidemic Preparedness Innovations

NGOS = Non-governmental organizations

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations Children's Fund

WHO = World Health Organization

References

1. IHME | COVID-19 Projections. Institute for Health Metrics and Evaluation. <https://covid19.healthdata.org/> (accessed Dec 16, 2022).
2. COVID-19 vaccine tracker and landscape. <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines> (accessed Oct 14, 2022).
3. COVID-19 Map [Internet]. Johns Hopkins Coronavirus Resource Center. [cited 2022 Oct 18]. Available from: <https://coronavirus.jhu.edu/map.html>.
4. GBD Compare. Institute for Health Metrics and Evaluation. <http://vizhub.healthdata.org/gbd-compare> (accessed Oct 14, 2022).
5. Weighing the Cost of the Pandemic. Institute for Progress. <https://progress.institute/weighing-the-cost-of-the-pandemic/> (accessed Oct 14, 2022).
6. Saksena P, Hsu J, Evans DB. Financial Risk Protection and Universal Health Coverage: Evidence and Measurement Challenges. *PLoS Med* 2014; 11: e1001701.
7. Liu K, Subramanian SV, Lu C. Assessing national and subnational inequalities in medical care utilization and financial risk protection in Rwanda. *Int J Equity Health* 2019; 18: 51.
8. Zeng W, Lannes L, Mutasa R. Utilization of Health Care and Burden of Out-of-Pocket Health Expenditure in Zimbabwe: Results from a National Household Survey. *Health Syst Reform* 2018; 4: 300–12.
9. Vollset SE, Goren E, Yuan CW, Cao J, Smith AE, Hsiao T, et al. Fertility, mortality, migration, and population scenarios for 195 countries and territories from 2017 to 2100: a forecasting analysis for the Global Burden of Disease Study. *The Lancet*. 2020 Oct 17;396(10258):1285–306.
10. UK Foreign Aid Payments Paused Until Autumn Due to Overspending Concerns - Bloomberg. <https://www.bloomberg.com/news/articles/2022-08-16/uk-pauses-overseas-aid-payments-amid-concerns-about-over-spending> (accessed Oct 14, 2022).
11. Preparedness, International Working Group on Financing. "From Panic and Neglect to Investing in Health Security: Financing Pandemic Preparedness at a National Level." Washington, DC: World Bank, May 2017. <https://doi.org/10.1596/26761>.
12. COVID-19 leaves a legacy of rising poverty and widening inequality. <https://blogs.worldbank.org/developmenttalk/covid-19-leaves-legacy-rising-poverty-and-widening-in-equality> (accessed Oct 14, 2022).
13. G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response. A Global Deal for our Pandemic Age. June 2021. Available from <https://pandemic-financing.org/wp-content/uploads/2021/07/G20-HLIP-Report.pdf>.
14. Toward better pandemic preparedness. IMF. <https://www.imf.org/en/Publications/fandd/issues/2021/12/Pandemic-preparedness-Patel-Sridhar> (accessed Oct 14, 2022).
15. WHO recommends long-acting cabotegravir for HIV prevention. <https://www.who.int/news/item/28-07-2022-who-recommends-long-acting-cabotegravir-for-hiv-prevention> (accessed Oct 14, 2022).
16. House TW. Remarks by President Biden at the Global Fund's Seventh Replenishment Conference. The White House. 2022; published online Sept 21. <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/09/21/remarks-by-president-biden-at-the-global-funds-seventh-replenishment-conference/> (accessed Oct 14, 2022.)
17. A healthy return. <https://www.who.int/about/funding/invest-in-who/investment-case-2.0> (accessed Oct 14, 2022).
18. Nelson B. The positive effects of covid-19. *BMJ* 2020; 369: m1785.
19. Wang H, Paulson KR, Pease SA, et al. Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21. *The Lancet* 2022; 399: 1513–36.
20. Global-Economic-Prospects-January-2021-Highlights-Chapter-1. <https://thedocs.worldbank.org/en/doc/930531599838746942-0050022020/Global-Economic-Prospects-January-2021-Highlights-Chapter-1> (accessed Oct 14, 2022).
21. Global HIV & AIDS statistics — Fact sheet. <https://www.unaids.org/en/resources/fact-sheet> (accessed Oct 14, 2022).
22. Factsheet Global TB report 2021. <https://www.who.int/publications/m/item/factsheet-global-tb-report-2021> (accessed Oct 14, 2022).
23. Malaria. <https://medlineplus.gov/malaria.html> (accessed Oct 14, 2022).
24. New malaria vaccine is world-changing, say scientists. BBC News. 2022; published online Sept 8. <https://www.bbc.com/news/health-62797776> (accessed Oct 14, 2022).
25. Noncommunicable diseases. <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases> (accessed Oct 14, 2022).

Methods

Overview

Financing Global Health 2021 reports estimates based on the most reliable and up-to-date data available as of June 2022. Drawing upon data from spending accounts, budgets, and other estimates from a broad set of sources, we employed statistical models and accounting methods to produce our estimates. This section briefly outlines our processes. For detailed information on the input data and methodology, please refer to our online Methods Annex, available at <https://bit.ly/fgh2021methods>.

Additional information on methods can also be found in a paper published in 2023 by the Global Burden of Disease Health Financing Collaborator Network in *The Lancet Global Health*, “Global investments in pandemic preparedness and COVID-19: tracking development assistance and domestic spending on health, 1990–2026.” [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(23\)00007-4/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(23)00007-4/fulltext)

Development assistance for health

IHME compiled financing data from the sources and disbursing entities discussed in this report. The goal was to track disbursements through international development agencies that aimed to maintain or improve health in low- and middle-income countries from 1990 through 2021. In addition to data from international databases such as the Organisation for Economic Co-operation and Development’s Creditor Reporting System, we extracted and harmonized commitment and disbursement data from development project records, annual budgets, annual financial statements, and revenue statements from a broad set of development agencies, including multilateral and bilateral aid agencies, public-private partnerships, NGOs, and private foundations.

Furthermore, for several disbursing agencies, direct correspondence with agencies led to better understanding of the data or to the acquisition of more granular, more reliable, or more timely data. Some organizations were not able to report on disbursements for the previous year because agencies’ accounting processes can be lengthy. We therefore relied on budgets, revenues, commitments, and appropriations, as well as macroeconomic data to estimate disbursements for organizations without up-to-date spending information, and these were used to model the most recent year’s disbursements. This method led to the development of “preliminary estimates” of DAH by source, channel, and health focus area for 2021. We do not report DAH estimates by recipient for 2021 because preliminary estimates were not made by recipient.

Global health agencies frequently transfer funds among themselves. Since these funding flows are often reported by both the entity from which funds

originate and the recipient agency, double-counting occurs in the data. Including disbursements from both agencies would lead to an overestimation of disbursements. In order to avoid double-counting, we used revenue data to assess the source of all funds and remove resources that were passed between development agencies before being disbursed. For our accounting purposes, the source of the funds is where the funds originated, while the channel is the last disbursing agency that we track to disburse the resources. Because each data source provides different categories and different information about what focus areas were targeted by their disbursements, project-specific sector and theme codes and keyword searches of project titles and descriptions were used to classify funding. All DAH from the Joint United Nations Programme on HIV/AIDS (UNAIDS) was considered funding for HIV/AIDS and tuberculosis. Funding from UNICEF was classified as DAH for reproductive, maternal, newborn, and child health, HIV/AIDS, and Ebola. For projects that span two or more health focus areas, funding was divided according to weights based on the number of keywords associated with each health focus area. DAH estimates were reported in 2021 US dollars.

We developed a separate methodology for estimating DAH for COVID-19 because much of the project-level data used as input for the historical DAH estimates (described above) do not extend through 2021 and therefore do not include resources disbursed in response to COVID-19 in 2021. We extracted project data on commitments and disbursements from a diverse set of databases, including the UNOCHA Financial Tracking Service and the International Aid Transparency Initiative. For other development channels, we obtained information about COVID-19 commitments and disbursements through correspondence or from their respective online databases.

Domestic health spending and total health spending

We extracted and adjusted health spending data from the World Health Organization Global Health Expenditure Database to estimate total health spending and health spending by source. Extracted data included transfers from government domestic revenue (allocated to health purposes), social insurance contributions, compulsory prepayment, voluntary prepayment, other domestic revenue from households, corporations, and nonprofit institutions serving the household, and GDP. We extracted spending estimates in current local currency and converted them into 2021 US dollars. We used a spatiotemporal Gaussian process regression model (ST-GPR) to estimate health spending across time, country, and spending category.

Additionally, we developed a method to prioritize data from the Global Health Expenditure Database that had the most credible sources and with the best documentation for our ST-GPR modeling to prevent data with unclear sources or imputation methods from influencing our ST-GPR estimation. Our method used a natural language processing model to evaluate and assign a weight based on the information describing the source and methods used to estimate data points in the Global Health Expenditure Database. Weights were based upon metadata completeness, documented source information, and documented methods for estimation. While we

included all available data in the ST-GPR model, data with the most reputable sources and most complete documentation influenced the model the most. We aggregated DAH measured in 2021 US dollars, government health spending, prepaid private health spending, and out-of-pocket health spending to estimate total health spending.

Future health spending

Our forecasted estimates include GDP, general government spending (across all sectors); government, out-of-pocket, and prepaid private health spending; and total DAH provided and received from 2020 to 2030 and 2050. We used ensemble models to estimate per person GDP, government spending, DAH, and government, out-of-pocket, and prepaid private health spending through 2050, our reference scenario.

Supplementary data are available via the Global Health Data Exchange (GHDx):

- Development Assistance for Health Database 1990-2021
(<https://ghdx.healthdata.org/record/ihme-data/development-assistance-health-database-1990-2021>)
- Development Assistance for Health on COVID Database 2000-2021
(<https://ghdx.healthdata.org/record/ihme-data/development-assistance-health-covid-2020-2021>)
- Global Expected Health Spending Database 2020-2050
(<https://ghdx.healthdata.org/record/ihme-data/global-expected-health-spending-2020-2050>)
- Global Health Spending Database 1995-2019
(<https://ghdx.healthdata.org/record/ihme-data/global-health-spending-1995-2019>)
- Gross Domestic Product Per Capita 1960-2050
(<https://ghdx.healthdata.org/record/ihme-data/global-gdp-per-capita-1960-2050-fgh-2021>)



INSTITUTE FOR HEALTH METRICS AND EVALUATION
Hans Rosling Center for Population Health
3980 15th Avenue NE
Box 351616
Seattle, WA 98195-1616
USA

Telephone: +1-206-897-2800
Fax: +1-206-897-2899

Email: engage@healthdata.org
www.healthdata.org