

Global health 2050: the path to halving premature death by mid-century

Policy brief: KEY MESSAGES

- Global Health 2050, the third report of the Lancet Commission on Investing in Health, concludes that countries that choose to do so could achieve the goal of “**50 by 50**”—a 50% reduction in the probability of premature death, i.e., death before age 70 years, by 2050
- The 50 by 50 goal can be reached by **focusing on 15 priority conditions**, eight related to infectious diseases and maternal health and seven related to non-communicable diseases and injuries
- **A modular approach to health-system strengthening** supports an initial tight focus on these 15 priority conditions and a gradual broadening of effort as the priority conditions are more fully addressed
- **Public financing of a short list of drugs and other commodities** can steer health systems towards delivering high-priority health interventions targeting these 15 conditions
- A **high level of tobacco taxation** is by far the most important intersectoral policy to help to achieve the 50 by 50 goal
- **There is an exceptionally high mortality risk from pandemics**, and in the next pandemic, while waiting for a vaccine to be developed, public health fundamentals, such as rapid action, case identification and isolation, and contact tracing and quarantine, will be key to averting mortality
- Development assistance for health can help **achieve 50 by 50 in two ways**: (i) direct support to countries with the least resources to help them to address the 15 priority conditions, and (ii) funding global public goods, such as developing new health technologies

INTRODUCTION

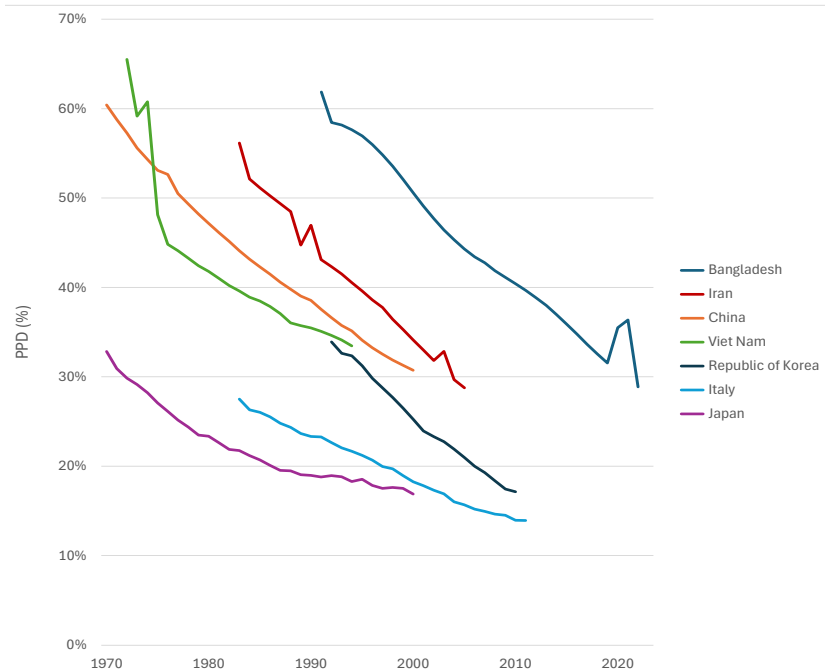
In the Global Health 2050 report (GH2050), the Lancet Commission on Investing in Health (CIH) provides a roadmap for countries at all income levels to achieve dramatic improvements in human welfare by mid-century (the panel on page 3 gives the history of the CIH). The report, available at globalhealth2050.org, comes at a time when global health faces many headwinds—from geopolitical tensions, ongoing and new conflicts, and increasingly manifest climate change to slowed progress towards universal health coverage (UHC), rising healthcare costs, and the ever-present risk of pandemics. GH2050 shows that even in the face of these challenges, there is a practical pathway for nations that choose to do so to sharply reduce premature death and morbidity by focusing resources on high priority conditions and scaling up financing to develop and deliver new health technologies. Written by an international team of 50 economists and global health experts, the report reached seven key conclusions.

WITH THE RIGHT HEALTH INVESTMENTS, COUNTRIES CAN HALVE THEIR PREMATURE DEATH BY 2050

By 2050, countries that choose to do so could reduce by 50% the probability of premature death (PPD) in their populations—defined as the probability of dying before age 70 years—from the levels in 2019, i.e., a pre-pandemic baseline. **GH2050 calls this goal “50 by 50,” a 50% reduction in PPD by 2050.** An important milestone on the way to this goal would be a 30% reduction in premature mortality by 2035, or “30 by 2035.”

There are two reasons to believe that halving the PPD from 2019 to 2050, i.e., in 31 years or less, is feasible. The first is historical experience. Since 1970, 37 countries halved their PPD in 31 years or less, including seven of the world's 30 most populous countries with varying levels of income and initial PPD: Bangladesh, China, Iran, Italy, Japan, South Korea, and Viet Nam (Figure 1). So, halving PPD in this time frame is feasible. Second, the development and diffusion of new medicines, vaccines, and diagnostics is likely to accelerate mortality decline.¹ For example, adoption of new health technologies is associated with a fall in the under-5 mortality rate of about 2% per year. Research conducted by CIH authors suggests that the current pipeline of candidate products for infectious diseases, emerging infectious diseases, and maternal health conditions will yield around 450 new product launches before 2050.²

Figure 1: High-population countries that halved the PPD in 31 years or less, 1970–2019



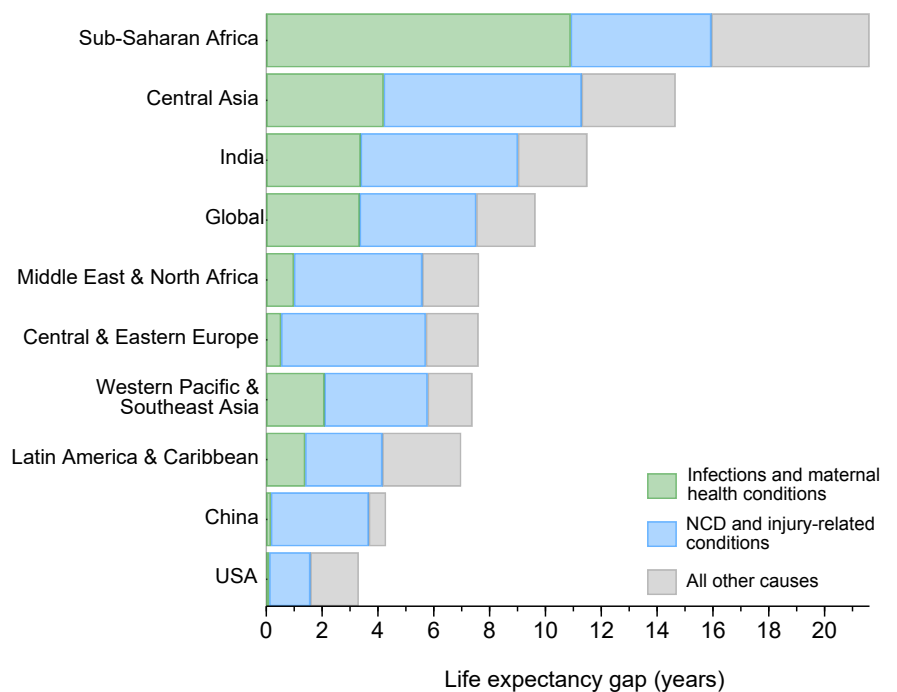
THE 50 BY 50 GOAL CAN BE REACHED BY FOCUSING ON 15 PRIORITY CONDITIONS

Rapid, sharp mortality declines and associated declines in morbidity can be achieved early on the pathway to full UHC. **The 50 by 50 goal can be reached through tackling 15 priority conditions, eight related to infectious diseases and maternal health and seven related to non-communicable diseases (NCDs) and injuries.** These 15 conditions account for a very large fraction of the life expectancy gaps between the highest-performing regions and other regions (Figure 2).

In countries that currently have a high PPD, tackling infectious diseases and maternal conditions is the highest priority. The seven clusters of NCDs and injuries among the 15 priority conditions are important in all countries, and addressing them will be central to achieving 50 by 50 in most countries with a currently low PPD.

GH2050 uses its own regional groupings. It creates a North Atlantic region made up of western European countries and Canada, which perform well on health indicators, and China, India, and the US are treated as a distinct regions due to their large population size. The figure shows the gap in life expectancy between this North Atlantic region and other regions. In 2019, life expectancy in the North Atlantic was 82 years. In sub-Saharan Africa, it was 60 years, i.e., a 22-year gap. Around three quarters of this gap was due to the 15 priority conditions, and over half the gap was due to the infectious and maternal conditions.

Figure 2: Gap in life expectancy compared with the North Atlantic region attributable to 15 priority conditions, 2019



A MODULAR APPROACH TO HEALTH SYSTEM STRENGTHENING (HSS) CAN BRING FOCUS TO THE UHC AGENDA

Only modest progress has been made globally towards UHC since the start of the Sustainable Development Goals era in 2015 and catastrophic health expenditure is becoming more common, GH2050 calls for a reset of the UHC and HSS agendas.

A more focused approach to HSS for primary care and first-level hospitals will be crucial to improving capacity to address all 15 conditions early on the pathway to UHC.

GH2050 reiterates early recommendations from the CIH that national governments maintain their focus on public financing of a core set of interventions that are fully prepaid and available to everyone, starting with the highest value for money interventions targeting the 15 priority conditions, i.e., progressive universalism. It packages these interventions into 19 modules, e.g., a childhood immunization module and a module on prevention and low-cost widely available treatments for cardiovascular disease. Adoption of this focused approach should also address major morbidities, such as psychiatric illness, that are not already covered by mortality-reducing interventions. It also proposes a new tool, modular cost-effectiveness analysis, to support planners in designing health benefits packages. The tool can be used in a two-step process: technical cost effectiveness analysis to assess how best to achieve module-specific goals (e.g., reductions in child mortality or cardiovascular mortality) and political assessment of trade-offs in investing in expanding module coverage.

COUNTRIES SHOULD PUBLICLY FINANCE A SHORT LIST OF KEY MEDICINES FOR THE 15 CONDITIONS

In many countries seeking reform, standard mechanisms of blanket budget transfers from ministries of finance to ministries of health have failed to successfully reorient systems towards priority interventions that improve health. This problem could be addressed by directing a substantial and increasing fraction of budget transfers towards making available and affordable the specific drugs, vaccines, diagnostics, and other commodities required for control of the 15 priority conditions.

GH2050 proposes a mechanism for doing this that it calls the Arrow mechanism, named for the late Kenneth Arrow, the Nobel Prize-winning economist and Global Health 2035 author who first developed the mechanism to be applied to malaria drugs.³ **Making drugs available and affordable will typically require four complementary components:**

Redirection of general budget transfers to line-item transfers (subsidies) for specific priority drugs

Centralized pooled procurement by government or perhaps internationally

Procurement in sufficient volumes to ensure availability when needed

Use and strengthening of existing supply chains, both public and private

Importantly, the Arrow mechanism would not only enable greater focus on improving specific health outcomes, it would also address the financial burdens placed on households by out-of-pocket expenditures on drugs.

GLOBAL HEALTH 2050: The evolution of the Commission on Investing in Health

In 1993, the World Bank published the influential World Development Report (WDR93), Investing in Health, under the leadership of the Bank's chief economist Lawrence Summers and health economist Dean Jamison. Aimed at finance ministers and aid donors, the report's central message was that targeted spending on cost-effective interventions for high-burden diseases could rapidly improve health outcomes, boost the economy, and improve human welfare.

Prompted by the 20th anniversary of WDR93, in 2013 the Lancet convened a Commission on Investing in Health (CIH), chaired by Summers and co-chaired by Jamison, and published its first report, Global Health 2035. The report pointed to the promise of an ambitious framework for achieving "grand convergence" by 2035—a universal reduction in deaths from infectious diseases and maternal conditions to levels seen in the best-performing countries. In 2018, timed with the 40th anniversary of the Declaration of Alma-Ata, the CIH published its second report (CIH 2.0), which assessed progress towards grand convergence and reflected on the future of the global push for UHC. Global Health 2050, the third report of the CIH (CIH 3.0), identifies opportunities for investment in health up to 2050 that can succeed in the face of many headwinds.

TOBACCO TAXATION IS THE SINGLE MOST IMPORTANT INTER-SECTORAL POLICY TO HELP REACH 50 BY 50

It is now common to hear that other risk factors are the new tobacco or the new smoking—such as “sugar is the new tobacco” or “sitting is the new smoking”—but we argue that tobacco is the new tobacco. Smoking remains the biggest avoidable cause of death in many populations worldwide.

Tobacco control is by far the most important intersectoral policy to help to achieve the 50 by 50 goal, in view of the number of deaths caused by tobacco and the established and improving capacity of governments to implement tobacco policy. **Imposing large excise taxes on tobacco effectively promotes smoking cessation, prevents initiation of smoking, and drives down tobacco use.**⁴ Despite wide experience with its successful use, tobacco taxation remains a policy tool that is still greatly underused. Raising taxes on tobacco can do more to reduce premature mortality than any other single health policy. A high level of tobacco taxation is also valuable in the short-to-medium term for public finance. Tobacco taxation should be accompanied by a package of other tobacco control policies.

THERE IS AN EXCEPTIONALLY HIGH MORTALITY RISK FROM FUTURE PANDEMICS

Background research conducted for the GH2050 report points to an exceptionally high mortality risk from pandemics.⁵ GH2050 estimates that there is a greater than 20% chance in the next 10 years of a pandemic that kills at least 25 million people—a magnitude similar to that of the COVID-19 pandemic. Expressing this risk in another way, on average, there would be 2.5 million pandemic-related deaths per year (with no deaths in most years). Of these deaths, 1.6 million would be expected to be from an influenza pandemic and 0.9 million from a coronavirus pandemic. To place the average 2.5 million deaths per year in context, it is roughly the same number of deaths that are occurring annually from HIV/AIDS, tuberculosis, and malaria combined and much higher than the number of annual climate change deaths projected in even very pessimistic scenarios in coming decades.

In the next pandemic, public health fundamentals will help to avert mortality while waiting for vaccine development and deployment. These fundamentals include rapid response, isolation of infected individuals, quarantine of people potentially exposed to infection, and social and financial support for people isolating or quarantining

THERE ARE TWO KEY WAYS THAT DEVELOPMENT ASSISTANCE FOR HEALTH CAN SUPPORT THE 50 BY 50 GOAL

GH2050 concludes that **development assistance for health should focus on two broad purposes.** The first is the provision of direct financial and technical support to countries with the least resources to help them to develop health systems to better control diseases. The second is the financing of global public goods, including reducing the development and spread of antimicrobial resistance, preventing and responding to pandemics, identifying and spreading best practices, and developing and deploying new health technologies. For both purposes, focusing efforts on the 15 priority conditions would best contribute to achieving the 50 by 50 goal.

CONCLUSION: THE CASE IS BETTER THAN EVER FOR INVESTING IN HEALTH

The 50 by 50 goal, with an interim milestone of a 30% reduction in the PPD by 2035, is a prize within reach.

The most efficient route is to focus resources against a narrow set of conditions and scale up financing to develop and deploy new health technologies. The analyses conducted by the Commission on Investing in Health have shown that the economic value of achievable mortality declines is high and is often a substantial fraction of the value of gains from economic growth itself. The case is better than ever for the value of investing in health for reducing mortality and morbidity, alleviating poverty, growing economies, and improving human welfare.

REFERENCES

1. Jamison DT, Murphy SM, Sandbu ME. Why has infant mortality decreased at such different rates in different countries? *J Health Econ* 2016; 48: 16–25.
2. Ogbuoji O, Schäferhoff M, Zimmerman A, Fawole A, Yamey G. Health and economic benefits of improving efficiencies in product development for neglected diseases, emerging infectious diseases, and maternal health. 2024. <https://centerforpolicyimpact.org/wpcontent/uploads/sites/18/2024/05/health-economics-benefits-ofimproving-efficiencies.pdf>
3. Arrow KJ. Saving a malaria program that saves lives. *New York Times*, Nov 13, 2012.
4. Bloomberg MR, Summers LH, Ahmed M. Health Taxes to save lives. Employing effective excise taxes on tobacco, alcohol, and sugary beverages. 2019. <https://www.tobacconomics.org/files/research/512/Health-Taxes-to-Save-Lives-Report.pdf>

The full report: globalhealth2050.org
Published in the *Lancet* on October 14, 2024

A 4-minute video summarizing the GH2050 report: globalhealth2050.org

The CIH 1.0 report: globalhealth2050.org/files/2024/03/global-health-2035-1.pdf

The CIH 2.0 report: globalhealth2050.org/files/2024/05/Alma-Ata-at-40-years-reflections-from-the-em-Lan.pdf