

Global pipeline of products for neglected diseases



Ongoing need

Lack of essential health technologies

- No HIV/AIDS vaccine
- TB treatment lasts 6–30 months, TB vaccine is 100 years old
- No suitable treatments for leishmaniasis, mycetoma, and river blindness
- New disease threats continue to emerge



1 billion
PEOPLE AFFECTED BY
NEGLECTED DISEASES GLOBALLY

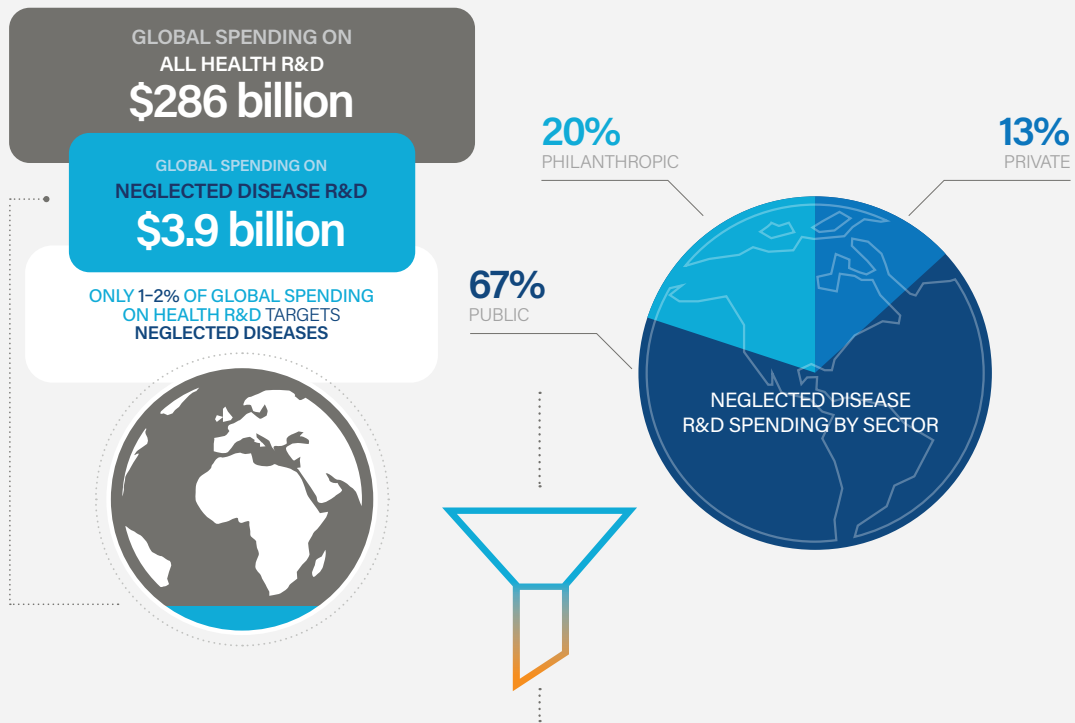
218 million

WOMEN HAVE UNMET NEED
FOR MODERN FAMILY PLANNING

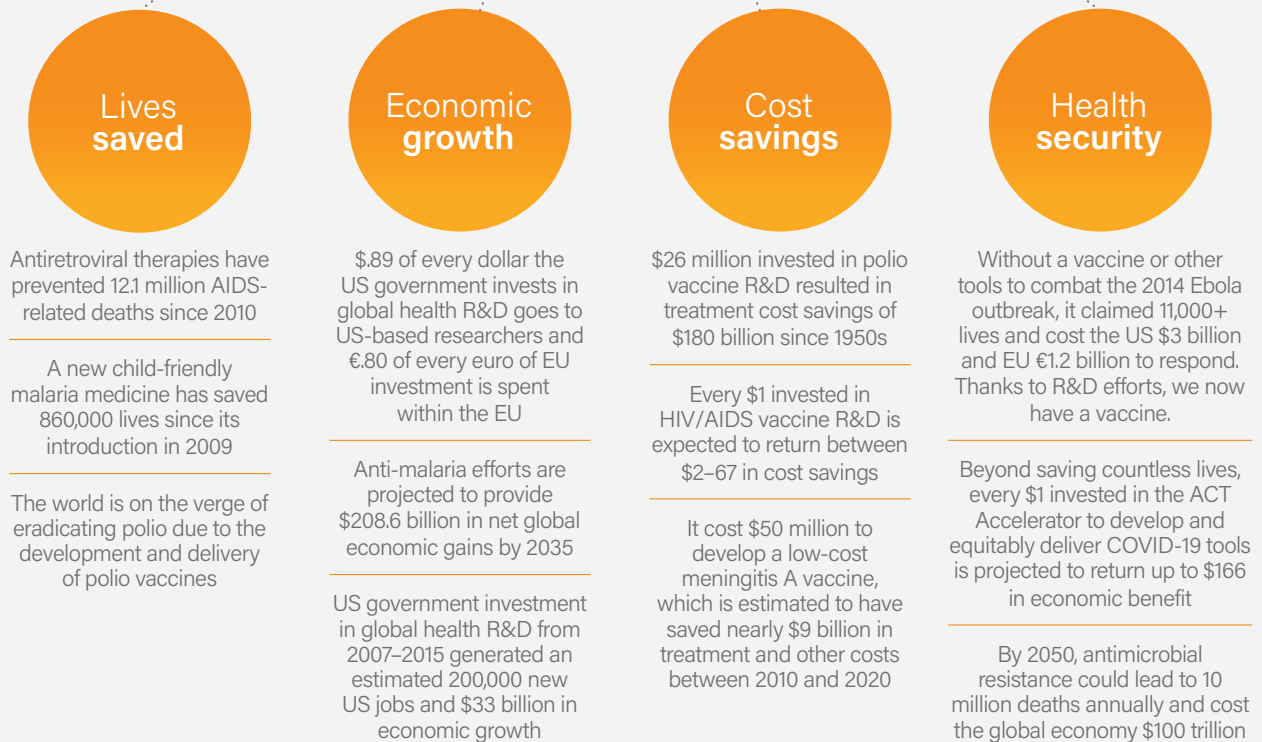
6 million

ANNUAL DEATHS WORLDWIDE
FROM NEGLECTED DISEASES

Funding for neglected disease R&D



The return on investment of global health R&D



Critical US role in global health R&D

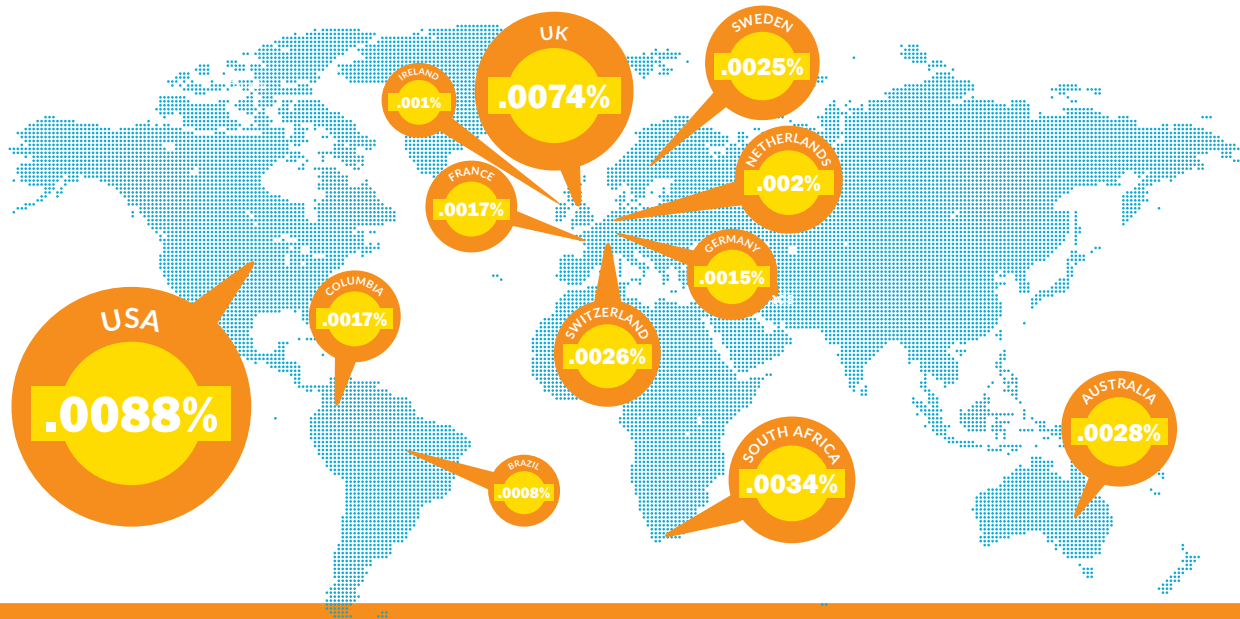
51%
of new global health products approved since 2000 were supported by the US government

40%
of late-stage products in the global health pipeline were supported by the US government

<.01%
of US GDP is spent annually on global health R&D

Top public funders of neglected disease R&D

(Investment as a percent of GDP)



While the US leads the world in funding for neglected disease R&D, these investments still account for less than .01% of US GDP



Infographic Data Sources

Global pipeline for neglected diseases

All data: Policy Cures Research. R&D Pipeline Tracker. 2019. Available from: <https://www.pipeline.policycuresresearch.org>.

Funding for neglected disease R&D

R&D \$286 billion global spending on all health R&D: Rottingen, J-E, Regmi, S, Eide, M et al. Mapping of available health research and development data: what's there, what's missing and what role is there for a global observatory. *Lancet*. 2013; 383:1286–1307. [Data is for total global spending on health R&D in 2009 purchasing power parity-adjusted dollars, inflation adjusted to 2019 dollars.]

\$3.9 billion global spending on neglected disease R&D/Neglected disease R&D by sector: Chapman N, Doubell A, et al. *Neglected Disease Research and Development: Where to Now?*. G-FINDER | 2020. Sydney: Policy Cures Research; 2021.

Return on investment in global health R&D

Antiretroviral therapies have prevented 12.1 million AIDS-related deaths: UNAIDS. *Seizing the moment: Tackling entrenched inequalities to end pandemics*. Geneva: UNAIDS; 2020.

A new child-friendly malaria medicine has saved 860,000 lives: Medicines for Malaria Venture webpage. Homepage – Achievements. <https://www.mmv.org/>. Accessed April 5, 2021.

\$.89 of every US dollar: Policy Cures Research, Global Health Technologies Coalition. *Return on innovation: Why global health R&D is a smart investment for the United States*. Sydney: Policy Cures Research; 2017.

€.80 of every euro: Policy Cures, Deutsche Stiftung Weltbevölkerung. *Saving lives: Making the case for European investment in poverty-related and neglected disease R&D*. Sydney: Policy Cures; 2016.

Anti-malaria efforts are projected to provide: Purdy M, Robinson M, Wei K, Rublin D. *The economic case for combating malaria*. *American Journal of Tropical Medicine and Hygiene*, 2013; 89(5):819–23.

US government investment in global health R&D from 2007–2015: Policy Cures Research, Global Health Technologies Coalition. *Return on innovation: Why global health R&D is a smart investment for the United States*. Sydney: Policy Cures Research; 2017.

\$26 million invested in polio vaccine R&D: Thompson KM, Tebbens RJ *Retrospective cost-effectiveness analyses for polio vaccination in the United States*. *Risk Anal*. 2006; 26(6):1423–40.

Every \$1 invested in HIV vaccine R&D: Hecht R, Jamison DT. *Vaccine research and development assessment paper In: Lomborg B, ed. Rethink HIV: smarter ways to invest in ending HIV in sub-Saharan Africa*. New York: Cambridge University Press, 2012; 299–320.

Meningitis A vaccine estimated to have saved nearly \$9 billion: Ozawa S, Clark S, Portnoy A, et al. *Estimated economic impact of vaccinations in 73 low- and middle-income countries, 2001–2020*. *Bulletin of the World Health Organization*. 2017; 95(9): 629-638.

The 2014 Ebola epidemic cost the US \$3 billion: *Cost of the Ebola Epidemic | Ebola Hemorrhagic Fever | US Centers for Disease Control and Prevention [Internet]*, [cited 2017 Mar 22]. Available from: <https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/cost-of-ebola.html>.

The 2014 Ebola epidemic cost the EU \$1.2 billion: *EU response to the Ebola outbreak | European Commission [Internet]*, [cited 2017 July 9]. Available from: https://ec.europa.eu/europeaid/regions/africa/west-africa/ebola-response_en.

Every \$1 invested in the ACT Accelerator: Adhanom Ghebreyesus, Tedros. "WHO Director-General's opening remarks at the High-Level Finance Ministers' Meeting for the ACT Accelerator." 29 Jan 2021.

By 2050, antimicrobial resistance could lead to 10 million deaths: *Review on Antimicrobial Resistance*. *Antimicrobial Resistance: Tackling a Crisis for the Health and Wealth of Nations*. 2014.

Ongoing need

1 billion people affected by neglected diseases: World Health Organization (WHO). *Investing to Overcome the Global Impact of Neglected Tropical Diseases: Third WHO Report on Neglected Tropical Diseases*. Geneva: WHO; 2015.

6 million annual deaths from neglected diseases: Institute for Health Metrics and Evaluation (IHME). *Global Burden of Disease Study 2010 (GBD 2010) Results by Cause and by Region 1990–2010*. 2013.

218 million women have unmet family planning needs: *Adding it Up: Investing in Contraception and Maternal and Newborn Health, 2019*. New York: Guttmacher Institute, 2019.

Critical US role in global health R&D

All data: Policy Cures Research, Global Health Technologies Coalition. *Return on innovation: Why global health R&D is a smart investment for the United States*. Sydney: Policy Cures Research; 2017.

Top public funders of neglected disease R&D

Calculated based on 2019 neglected diseases investment data from: Policy Cures Research. G-FINDER data portal. Sydney: Policy Cures Research; 2020. <https://www.policycuresresearch.org/g-finder/>.