

As the only US agency with a mandate to focus on global health and development, the US Agency for International Development (USAID) is exceptionally well positioned to advance new global health products. USAID has a broad international footprint and deep understanding of the needs and cultures of local communities; with this expertise, the agency is able to advance tools that are appropriate, affordable, and accessible for widespread uptake in low-resource settings. Over its 60-year history, USAID has supported a range of game-changing innovations, including a sticker that indicates whether a vaccine vial has been unsafely exposed to heat; new rapid diagnostic tests that can be delivered at the point of care without electricity or laboratory equipment; and fruit-flavored, dissolvable tuberculosis medicines designed for children.

USAID specializes in supporting promising innovations through late-stage clinical and implementation research. It has several mechanisms for identifying, developing, introducing, and scaling these innovations, which often involve partnerships with nonprofits and private-sector organizations. For example, USAID directed more

than three-quarters of its research and development (R&D) funding over the last decade (\$699 million) to product development partnerships, a type of public-private partnership that combines the public, philanthropic, and private sectors to share resources, expertise, and investment. USAID investments in health R&D also strengthen local health systems and scientific capacity, equipping communities to contribute to research that benefits themselves, to advance their health goals, and creating a more equitable and inclusive research ecosystem.

As of late 2020, USAID had not been appropriated sufficient emergency supplemental COVID-19 funding to advance and roll out new tools designed to address COVID-19 in low-resource settings, despite its laudable success in advancing innovations during the West African Ebola epidemic and Zika outbreak. USAID has used funding from its regular accounts, including the Emergency Reserve Fund, the International Disaster Assistance account, and the Economic Support Fund, to provide upward of \$1.335 billion in bilateral relief to countries in need of COVID-19 assistance as of September 2020, far too little given the scale of the crisis faced by these nations.



Photo credit: USAID Maternal and Child Survival Program/Fernando Fidélis

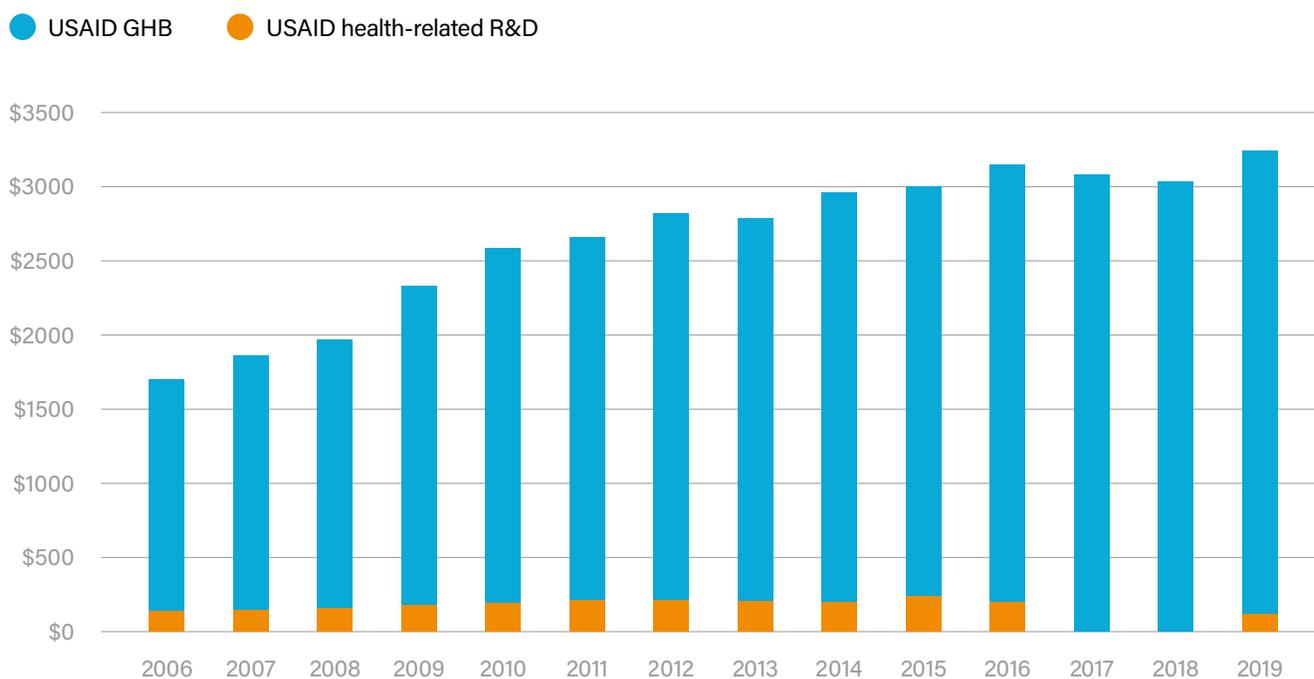
Policy recommendations

In the next four years, double funding for global health programs to meet the full spectrum of global health needs and allow for funding increases to innovation; establish voluntary minimum funding targets for R&D from these increases across global health funding lines.

Funding for global health programs at USAID grew significantly between 2006 and 2016, but in recent years it has leveled off. The need for global health funding has continued to grow, however, and has been further exacerbated by COVID-19. In concert with the global health community, the Global Health Technologies Coalition (GHTC) urges Congress to make bold investments in global health by committing to doubling appropriations for USAID's Global Health Bureau (GHB) by 2025.

In tandem with this funding increase, GHB leadership should establish voluntary minimum funding targets for R&D within each of its disease-area offices and programs. Though funding for GHB has increased since 2006, funding for product development and implementation research within GHB has remained relatively flat, even decreasing from fiscal years 2015 to 2019, according to GHTC's analysis of the agency's health-related R&D progress reports. Nevertheless, despite this relative decline in R&D spending, USAID has used this limited funding to advance dozens of successful global health products. Without USAID funding, many of these crucial but unprofitable products would not have received funding from elsewhere, stalling in the research pipeline. If R&D funding were increased proportionately with overall funding increases for global health, USAID could multiply the impact of its health programming, accelerating progress toward its long-standing global health goals.

Figure 1. USAID GHB health-related R&D funding as a proportion of total GHB funding.



Source: GHTC analysis based on 2006 to 2019 federal appropriations and available USAID R&D reports. USAID did not publicly disclose R&D spending in its 2017 report and did not publicly release a 2018 report.

Report program-level spending on R&D more regularly and transparently.

For fiscal years 2006 to 2016, USAID consistently published an annual public report on its health-related R&D strategy with comprehensive details on priorities, partnerships, and funding flows. In recent years, USAID has not consistently followed the 2017 congressional directive that its annual progress report on its health R&D strategy be made public. In addition, the overall length and level of detail in the reports has been progressively scaled back, often lacking details of funding by disease area, which greatly limits the transparency and accountability the report is designed to facilitate.

In 2019, the Global Health Innovation Act of 2017 (GHIA) was signed into law, requiring USAID to report annually to Congress on the development and use of global health innovations. Since then, USAID has produced only two GHIA-related reports, neither of which have been made public, reducing the utility and impact of such reporting. In the fiscal year 2021 appropriations joint explanatory statement, Congress reiterated its request that the USAID administrator produce a report on USAID's health-related R&D strategy, in line with the GHIA requirements. Regular and transparent reporting on USAID's global health R&D investments is needed to track how the agency is funding global health product development, to prevent unnecessary duplication of research across agencies, and to publicly demonstrate USAID's strength in health innovation for low-resource settings.

Establish a chief science and product development officer within the Global Health Bureau.

Global health R&D at USAID lacks high-level leadership and a clear focal point for external stakeholder engagement. With the exception of dedicated funding appropriated by Congress for microbicides and HIV vaccine research, the agency's R&D investment decisions are made independently across different programs and offices within GHB. This decentralization, in combination with limited public reporting, makes it difficult for external stakeholders to identify how to engage with the agency and leads to missed opportunities for shared learning. To establish a clear focal point for intra- and interagency coordination, USAID should create a chief science and product development officer position at the deputy assistant administrator level. The officeholder should engage with external stakeholders, ensure USAID is delivering on the agency's vision and strategy for R&D, and have direct oversight over the Center for Innovation and Impact, which sits within GHB and serves as a center of excellence for global health innovation.



Photo credit: USAID/Morgana Wingard



Photo credit: PATH/Gabe Biencycki

Create and robustly fund a standing Grand Challenge for global health security.

COVID-19 has again underscored differences between the health technology needs of low- and high-resource settings. During the Ebola and Zika emergencies, USAID funded the development of technologies designed specifically for low-resource communities to confront these threats through Grand Challenges, a prize-competition model pioneered by USAID and since replicated for other global health priorities, including maternal and child health and health supply chains. USAID typically works with external partners to co-finance and operate Grand Challenges, which to date have attracted thousands of ideas from innovators based around the world and built a robust pipeline of more than 150 new tools for global health problems.

Both the Ebola and Zika Grand Challenges yielded innovations that have been redeployed for COVID-19, demonstrating that global health innovations can translate to new disease areas. Still, new funding is needed to develop health technologies to combat COVID-19 and other emerging infectious diseases in low-resource settings; Congress should establish a standing global health security Grand Challenge program administered by USAID to source new innovative ideas and develop technologies needed for future health security threats. This program could follow the model of the multiyear Saving Lives at Birth Grand Challenge that developed innovations for maternal and child health.