

What has global health R&D achieved?

Research and development (R&D) has been the bedrock of progress in global health. From near eradication of polio, to improved life expectancy for those living with HIV/AIDS, to remarkable declines in child mortality, new health technologies have been key to achieving tremendous gains in global health over the last several decades.

4.2
MILLION

fewer child deaths in 2013 compared to 1990, thanks to **bed nets, antiretroviral therapy, rotavirus and pneumococcal vaccines**, and other **health innovations**

7.8
MILLION

lives saved through **antiretroviral therapy** since 2000

POLIO

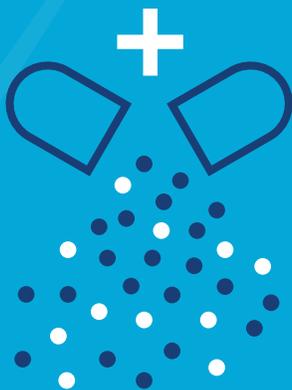
within reach thanks to **polio vaccines**

2-3
MILLION

lives saved annually by **vaccines**

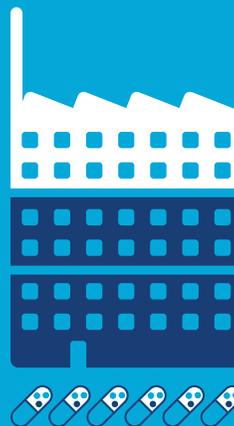
American leadership has been vital

American investment and world-class scientific leadership has been **indispensable** to developing new lifesaving global health technologies. US government support has helped advance:



42
new global health technologies since 2000

1/2
of all new products approved



128
promising products in late-stage development

40%
of all late-stage tools in the pipeline



Delivering a historic drop in meningitis cases

The US government, including the National Institutes of Health (NIH), Centers for Disease Control and Prevention, US Agency for International Development (USAID), and Food and Drug Administration (FDA), supported the development and rollout of MenAfriVac®—a **low-cost meningitis A vaccine** that has virtually eliminated the disease from vaccinated areas. In just seven years, the vaccine has **prevented 673,000 cases of meningitis A** and **378,000 deaths** and **saved 63,000 children from lifelong disability**. By 2020, this low-cost vaccine—which cost \$50 million to develop—is predicted to save **US\$9 billion dollars** in treatment costs.

Advancing an AIDS-free generation

US leadership in HIV/AIDS research has delivered groundbreaking innovations that have put an AIDS-free generation within reach for the first time in history. NIH researchers first identified the HIV virus as the cause of AIDS and advanced innovations, including **the first blood test for HIV, antiretroviral treatments (ARVs)**, and strategies to **prevent mother-to-child transmission**. Partnerships with **USAID** and **FDA** through the President's Emergency Plan for AIDS Relief (PEPFAR) supported the global rollout of ARVs and other treatment and prevention tools. Since 1995, an estimated **14.4 million life years have been gained** through NIH-supported HIV/AIDS therapies. Through PEPFAR, more than **11 million people are receiving lifesaving treatment**.



Leveraging investments to save moms and babies

USAID's Saving Lives at Birth Grand Challenge has leveraged \$20 million in US government funding to **attract more than \$110 million in additional funding from outside donors and the private sector** to advance more than **100 new technologies and interventions** to help mothers and newborns survive during the first hours of life. Innovations developed through the program have already **reached more than 1.5 million mothers and newborns**.

Combatting emerging diseases through partnership

Financial support from the Defense Advanced Research Projects Agency at the Department of Defense for early-stage research and the Biomedical Advanced Research and Development Authority at the Department of Health and Human Services for later-stage development **incentivized industry** to adapt technologies already in development to advance treatments and vaccines for infectious diseases, including a **new drug for Chikungunya** and a **Zika vaccine candidate**.

