

The World Needs an AIDS Vaccine

Recent modeling analyses for low- and middle-income countries show:

While critically important, existing tools are unlikely to end HIV/AIDS

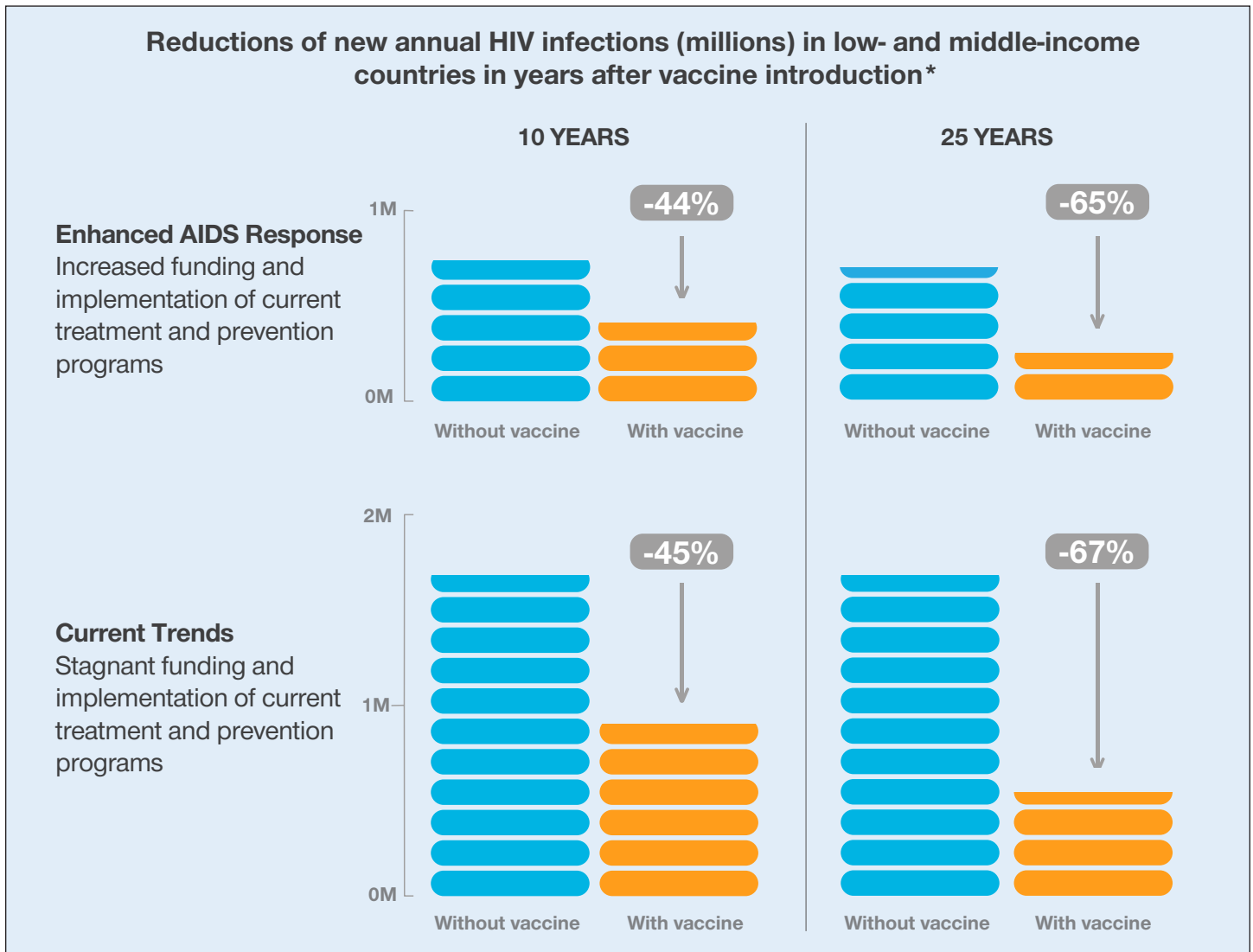
- Even with strongly increased funding and implementation of current treatment and prevention programs, hundreds of thousands of people will be newly infected with HIV annually, for decades to come.

A vaccine is essential to conclusively and sustainably end AIDS

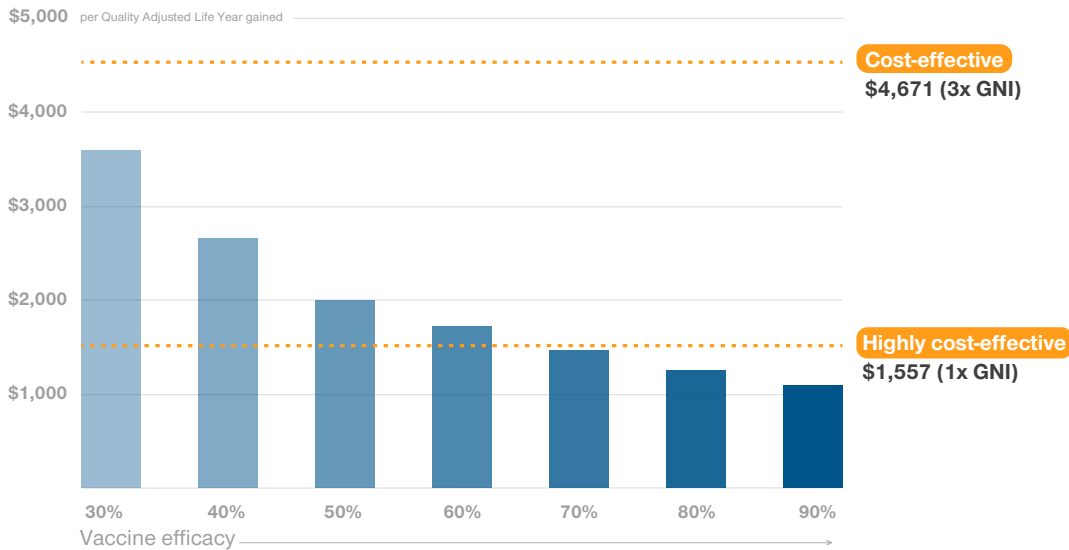
- A 70% efficacious and well-adopted vaccine as part of a comprehensive HIV/AIDS response could prevent the majority of annual new HIV infections.
- A vaccine’s impact would be even stronger should the funding and implementation of existing prevention and treatment programs fail to increase to the aspired levels.

AIDS vaccine research and development is a smart public health investment

- A well-adopted vaccine of at least 60% efficacy would be highly cost-effective in cost ranges comparable to other recent vaccines even if implementation of current treatment and prevention programs is significantly increased.
- A vaccine could save money over time by reducing the number of people needing treatment.



Cost per Quality-Adjusted Life Year gained in low-income countries through AIDS vaccination (US\$20 per regimen), by efficacy, when added to improved and more fully resourced HIV/AIDS programs†



† Cumulative 2027-2070, discounted at 3% per year

2.1 million people worldwide contracted HIV and 1.1 million died of AIDS in 2015. Major investments in current treatment and prevention programs have not reduced new annual HIV infections over the past five years.

Almost two-thirds of all new HIV infections and AIDS-related deaths worldwide occur in Sub-Saharan Africa.

AIDS is the #1 killer of adolescents in Africa and the #2 killer of adolescents globally.

AIDS is the #1 killer of women of reproductive age in Sub-Saharan Africa, where three girls become infected for every two boys.

Disproportionately high HIV infection rates occur in men who have sex with men, transgender people, sex workers and mobile communities.

An AIDS vaccine could be given prior to exposure to HIV, confidentially and without requiring partner consent – and thus protect people lacking access to basic health care, not or insufficiently adhering to treatment and prevention options, and suffering from gender violence and stigmatization.

Sources:

Joint United Nations Programme on HIV/AIDS (UNAIDS). *Global AIDS Update 2016 Global Aids Update*. May 2016.

Harmon TM, et al. (2016) "Exploring the Potential Health Impact and Cost-Effectiveness of AIDS Vaccine within a Comprehensive HIV/AIDS Response in Low- and Middle-Income Countries." *PLoS ONE* 11(1): e0146387. doi:10.1371/journal.pone.0146387

United Nations Population Division. Age composition - Population by Age Groups - Both Sexes. 2016.

**The data shown illustrate the potential impact on new HIV infections in the year 2070 of an illustrative vaccine introduced in 2027 with an assumed efficacy of 70%, not representative of any specific candidate in development. Coverage in generalized epidemics: routine vaccination of 10 years old: 70%; catch-up vaccination of 11-14 years old: 60%; 15-17 years old: 55%; 18-49 years old: 50%; coverage in high risk populations in concentrated epidemics: 50%*

Modeling Project by IAVI, AVAC and Avenir Health – made possible by the generous support of the American people through the United States Agency for International Development (USAID)



IAVI gratefully acknowledges the generous support provided by the following major donors

Bill & Melinda Gates Foundation | Broadway Cares/Equity Fights AIDS | The City of New York, Economic Development Corporation | EMMES Corporation | European Union | Foundation for the National Institutes of Health | The Gilead Foundation | GlaxoSmithKline | Google Inc. | Government of Japan | The Hearst Foundations | Irish Aid, Department of Foreign Affairs and Trade | James B. Pendleton Charitable Trust | Korean Women against AIDS | Ministry of Foreign Affairs of Denmark | Ministry of Foreign Affairs of The Netherlands | Ministry of Science & Technology, Government of India | National Institute of Allergy and Infectious Diseases | Norwegian Ministry of Foreign Affairs | Robert Wood Johnson Foundation | The Starr Foundation | U.K. Department for International Development | The U.S. President's Emergency Plan for AIDS Relief through the U.S. Agency for International Development | The World Bank
And many other generous individuals from around the world



As of January 2017