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.

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Reductions of new annual HIV infections (millions) in low- and middle-income countries in years after vaccine introduction*

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<th>Without vaccine</th>
<th>With vaccine</th>
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<td><strong>Enhanced AIDS Response</strong></td>
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| Increased funding and implementation of current treatment and prevention programs | ![Graph](image)
| **Current Trends** |                 |             |
| Stagnant funding and implementation of current treatment and prevention programs | ![Graph](image)

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*Illustrative vaccine with an assumed efficacy of 70%, not representative of any specific candidate. Coverage in generalized epidemics: routine 10 years old 70%, catch-up 11-14 years old 60%, 15-17 years old 55%, 18-49 years old 50%. Coverage in concentrated epidemics: high-risk populations 50%.
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).

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

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:

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 women of reproductive age in Sub-Saharan Africa, where three girls become infected for every two boys.