The world needs an HIV vaccine

The only way to end the HIV epidemic is with an HIV vaccine. IAVI and partners are closer than ever to this goal.

AIDS isn’t over

Worldwide, 38 million people are living with HIV, and HIV/AIDS killed 690,000 people in 2019. Despite advances in treatment and prevention, about 1.7 million people contract HIV every year. Even worse, experts warn that these numbers could increase significantly due to demographic changes. We need new ways to stop HIV transmission and chief treatment these is a vaccine. That’s why IAVI is committed to developing a safe, effective HIV vaccine for global use.

We must prevent new HIV infections, but prevention isn’t reaching the most vulnerable

Although some highly effective HIV prevention tools are available, the epidemic continues. This is partly due to the challenges people face when trying to adhere to effective prevention options. But it’s also because key populations — men who have sex with men, people who inject drugs, sex workers, and adolescent girls and young women, who account for nearly half of all new infections — are less likely to access existing treatment and prevention services. We need to ensure that HIV prevention tools are accessible to those most in need. We also need new ways to stop the spread of HIV.

HIV treatment is not enough: It’s not widely enough available and it’s too expensive

- HIV treatment doesn’t reach everyone who needs it, and not everyone can adhere to regimens.
- More people require costly lifelong treatment every year — a huge burden on low-income countries.
- The spread of drug-resistant HIV strains could add to the cost of HIV treatment programs and, when treatments fail, result in more deaths.

Only a vaccine will end AIDS

- Vaccines typically provide long-lasting protection.
- Vaccines can be given broadly to a wide range of people, leading to community immunity.
- Vaccines could eliminate adherence and stigma problems associated with HIV treatment.
- Vaccines will likely be cost-effective when compared with a lifetime of treatment.

HIV/AIDS by the Numbers

| **38 million** | people are living with HIV/AIDS |
| **1.7 million** | people contracted HIV in 2019 |
| **33% of people** | living with HIV don’t have access to treatment and can infect others |
| **$26.2 billion** | needed for global HIV/AIDS response in 2020 |
| **20+ HIV vaccine clinical trials are ongoing** |

Sources available at iavi.org/fact-sheets-sources
Innovation fuels progress in HIV vaccine research

Researchers have made great progress in the quest to develop an HIV vaccine. Their findings have led to a new generation of vaccine strategies aiming to stimulate production of powerful antibodies able to block a wide range of HIV variants. This approach and others that target different aspects of the immune system harness advanced molecular engineering and computational tools that have arisen during decades of research on HIV. Many experts agree that not only is vaccine possible, but also that we’re closer to one than ever before.

HIV vaccine research has broad benefits

HIV vaccine research benefits the HIV prevention and treatment field broadly. It has made fundamental contributions to scientists’ understanding of the biology of HIV infection, including the human immune response to infection. Vaccine-focused research into HIV-blocking antibodies has resulted in those antibodies being investigated as standalone prevention products. Beyond HIV/AIDS, the investment in HIV vaccine research capacity has strengthened health systems. And HIV vaccine research has contributed to medical advances for other diseases, leading to longer, healthier lives for people all over the world.

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

- Foundation for the National Institutes of Health
- National Institute of Allergy and Infectious Diseases
- amfAR, The Foundation for AIDS Research
- The Burmec Group
- Broadway Cares/Equity Fights AIDS
- Cancer Research UK
- The City of New York Economic Development Corporation
- Congressionally Directed Medical Research Program (DoD)
- GSK
- The Hearst Foundations
- Keith Haring Foundation
- And many other generous individuals and partners around the world

As of February 2020

Go to iavi.org/subscribe to receive our updates
Find us on Twitter @iavi

IAVI's HIV Vaccine Pipeline

<table>
<thead>
<tr>
<th>IAVI Sponsored</th>
<th>Preclinical Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 programs</td>
<td>mRNA-based vaccine and replicating viral vector-based (VSV) vaccine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 programs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IAVI Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 programs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IAVI Product Development Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 programs</td>
</tr>
</tbody>
</table>

IAVI.org info@iavi.org