

HIV Vaccines

What is a vaccine?

A vaccine is a substance that teaches the body's immune system to recognize and protect against a disease caused by an infectious agent.

What is the difference between preventative and therapeutic vaccines?

In the simplest terms, a preventative vaccine would provide some protection against HIV infection in people not yet infected with HIV, while a therapeutic vaccine would be used by people living with HIV/AIDS to boost the immune system to help control the HIV in the body.

What would be an ideal preventative HIV vaccine?

It would be effective regardless of nutrition, health status or ethnicity; protect against all subtypes of the virus; protect against any route of infection; be inexpensive to manufacture, easy to transport and administer, stable under field conditions; and provide long-lasting protection.

How many vaccines are being tested?

No preventative or therapeutic vaccines are currently available. Testing of preventative HIV vaccines started in 1987. To date, about 30 products have been tested. Only two preventative HIV vaccines have reached the last phase of clinical testing. In one case, it was shown not to be effective (AIDSVAX). In the other, AIDSVAX is being tested with another vaccine in a combination approach. Less research is currently being done on the therapeutic vaccines.

Who is developing HIV vaccines?

Only 1% of global health research and development spending is on HIV vaccines research. Most of the research funding comes from governments and foundations. Research is mostly conducted by government-funded research bodies, such as the National Institutes of Health in the US or CANVAC in Canada, by small biotech companies, by universities, by pharmaceutical companies, or by research organizations such as the International AIDS Vaccine Initiative (IAVI).

When will a vaccine be available?

It will likely take up to 15-20 years or more to develop an effective HIV preventative vaccine. A therapeutic vaccine could be available sooner.

Once I am vaccinated, will I be protected against HIV/AIDS?

HIV preventative vaccines will not likely provide 100% protection. No vaccine does. It is hoped that a relatively effective vaccine will provide additional protection, increasing the number of available prevention tools. Similarly, a therapeutic vaccine would provide an additional therapeutic tool, in combination with existing anti-retroviral treatments.

What can you do?

You can raise awareness of vaccines in your organization and community and advocate for the development of HIV vaccines. Basic information on vaccines and links to resources can be found on the CAS web site, at www.cdn aids.ca