





A Comprehensive Response to AIDS: Moving Toward a Long-Term, Sustainable Solution

Now in its 25th year, HIV/AIDS is the defining scientific and developmental challenge of our time. AIDS has claimed more than 25 million lives to date and continues to devastate households, deepen poverty, reduce economic growth, and undermine health and education systems in developing countries throughout the world.

Despite significant progress over the past decade to expand prevention and treatment programs, the number of new infections continues to climb each year. Without a significant improvement in prevention efforts, HIV infections could double from around five million a year in 2005 to 10 million a year by 2030.¹

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The AIDS crisis requires a comprehensive and integrated response that balances the expansion and strengthening of current programs with targeted investments in new prevention technologies, especially vaccines and microbicides—the best hope for reversing the epidemic.



A mural in Soweto, South Africa aims to reduce stigma undermining HIV prevention efforts

Scaling Up HIV Prevention and Treatment

There is much that can be done today to improve HIV prevention. Current prevention services reach fewer than 20% of those who need them.² Short-term challenges include promoting behavior change, stimulating demand for condoms and other prevention methods, and building stronger health care systems to deliver urgently needed AIDS prevention services.

Expanded access to treatment is a humanitarian imperative and an urgent global priority. Since the international community launched its '3 by 5' program in 2003, the number of people on antiretroviral drugs in low- and middleincome countries has more than tripled, to 1.3 million—an encouraging start toward universal coverage. Yet treatment is neither a cure nor a solution that can easily be sustained financially. Growing numbers of HIV-infected individuals on treatment, coupled with growing biological resistance to the least expensive therapies, will place an enormous burden on national treasuries and health systems in countries around the world. Unless new infections are lowered through better prevention, the costs of treating AIDS will continue to escalate in the coming years, potentially jeopardizing access to antiretrovirals for poor families in the developing world.

New Prevention Technologies (NPTs)

New prevention technologies (NPTs) for AIDS could not only complement existing prevention methods in the short term, but also significantly slow the spread of HIV/AIDS in the future. AIDS researchers are currently conducting a range of new prevention technology studies. Some scientists hope that providing antiretrovirals (ARVs) to individuals at high risk of HIV could prevent infection, and this concept, known as pre-exposure prophylaxis or PrEP, is being tested in five ongoing clinical trials. Phase III trials are currently under way to test six different experimental microbicides—topical gels that can be applied vaginally by women to reduce the risk of HIV transmission. Recent studies suggest male circumcision could also reduce the risk of men contracting HIV—another potentially promising development.

An AIDS vaccine could have the largest impact on the pandemic as an effective prevention tool for both men and women. A study commissioned by the International AIDS Vaccine Initiative (IAVI) suggests that even a modest-ly effective AIDS vaccine could cut the number of new infections by one-third over a decade, saving millions of lives, while a more effective vaccine delivered to more people could drive the number of new infections to dramatically lower levels.

Women, comprising nearly half of the 40.3 million people living with HIV globally, need a range of new prevention options and tools that they can easily control. A vaccine that women could receive through two or three injections at a health center or school would be a highly gender-friendly AIDS service.

An AIDS vaccine would have a tremendous positive effect on other areas of social and economic progress for millions of poor people living in Africa, Asia, and Latin America. Better HIV prevention is one of the keys to reaching nearly all of the Millennium Development Goals (MDGs)—reducing child and maternal deaths, expanding enrollment of girls in primary schools, and lifting families out of poverty. Finding a vaccine should therefore be seen as sitting squarely at the center of both the global public health and development agendas.

The International AIDS Vaccine Initiative (IAVI) is a global not-for-profit organization whose mission is to ensure the development of safe, effective, accessible, preventive HIV vaccines for use throughout the world. Founded in 1996 and operational in 23 countries, IAVI and its network of collaborators research and develop vaccine candidates. IAVI's financial and in-kind supporters include the Alfred P. Sloan Foundation, the Bill & Melinda Gates Foundation, The New York Community Trust, The Rockefeller Foundation, and The Starr Foundation; the Governments of the Basque Country, Canada, Denmark, European Union, Ireland, The Netherlands, Norway, Sweden, United Kingdom, and the United States; multilateral organizations such as The World Bank; corporate donors including BD (Becton, Dickinson & Co.), Continental Airlines, DHL, Merck & Co. Inc., and Pfizer Inc.; leading AIDS charities such as Broadway Cares/Equity Fights AIDS, Crusaid, Deutsche AIDS-Stiftung, and Until There's A Cure Foundation; other private donors such as the Haas Charitable Trusts; and many generous individuals from around the world. For more information, see www.iavi.org.

Stover J. and Willson K., Modeling the Impact of AIDS Vaccines: A Review of Literature (New York: International AIDS Vaccine Initiative, Policy Research Working Paper #5, October 2005).

²UNAIDS/WHO, *AIDS Epidemic Update: December 2005* (Geneva: Joint United Nations Programme on HIV/AIDS and World Health Organization, December 2005).

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