

# The Washington Post

## A Policy Cocktail for Fighting HIV

By Anthony S. Fauci  
Thursday, April 16, 2009

Nearly 30 years after the first cases were recognized in the United States, HIV/AIDS remains an incurable disease that is devastating large swaths of our country and the rest of the world. To understand the magnitude of the destruction, look around our nation's capital. Last month, D.C. health officials [announced](#) that 3 percent of city residents had full-blown AIDS or were infected with HIV. Not only is that infection rate on a par with rates in some African countries, but the D.C. data were based only on those who have been tested for HIV; the actual rate is probably much higher. Globally, an estimated 33 million people carry the virus. In 2007 alone, about 2.7 million new infections occurred.

The annual number of new HIV infections in the United States -- about 56,000 -- has remained fairly constant for more than a decade. That's right, 56,000 people are infected in this country every year. Clearly, our efforts at HIV prevention have been insufficient. Drastic action and new approaches are urgently needed.

Vaccines have historically been mankind's best weapon against the worst infectious diseases. But HIV's unique and formidable nature has presented challenges to the development of an effective vaccine. Although we remain committed to the research necessary to find a preventive HIV vaccine, a licensed product is not likely to be available in the near future.

In the absence of a vaccine, three bold new approaches to controlling the HIV/AIDS pandemic are being discussed by those working in medicine and public health. These approaches are still in the conceptual and testing phases, but if applied as a group, it's possible they could have a dramatic effect.

The first approach would provide a daily dose of antiretroviral medicines to people who are not infected with HIV but are at high risk of becoming infected. This strategy, known as pre-exposure prophylaxis, or PrEP, is based on the concept that blocking HIV's replication immediately after exposure to the virus may prevent infection.

A somewhat similar strategy of treating HIV-infected mothers before and during delivery and treating their newborns for a limited time afterward has virtually eliminated mother-to-child HIV transmission in the United States.


The National Institutes of Health and other organizations are conducting clinical PrEP trials among various at-risk populations. Initial findings are expected later this year. Of course, safety and cost-effectiveness will be important factors to consider even if the approach proves effective in preventing infection.

The second approach would involve universally available, voluntary, annual testing for HIV infection and immediately providing antiretroviral therapy to those who test positive. The potent combinations of antiretroviral medicines available today can suppress the amount of HIV in an infected person's body to extremely low levels, resulting in longer lives and better health.

Advertisement » Your Ad Here

replay 

roll over to see what Americans are saying



[learn more at att.com/investinginamerica](http://att.com/investinginamerica)

Plus, it has been clearly shown that those who have less HIV in their blood are less infectious to others. In fact, when a drug regimen suppresses HIV to certain low levels, the risk that the infected person will infect another through sexual contact appears to be greatly reduced, even though the virus has not been eradicated. New modeling research suggests that implementing a voluntary "test and treat" approach could dramatically reduce new HIV cases beginning within a decade and ultimately halt the pandemic.

Universal voluntary testing and treatment potentially could have a transformational effect on public health. Before this approach can be implemented, however, we must pursue a research agenda that includes studies of feasibility, efficacy, the benefits to individual patients vs. the benefits to society, and cost-effectiveness.

The third approach relates to the lifelong treatment that most people with HIV eventually need. Certainly, this care imposes financial and other burdens on patients, their families and health-care systems. But now, for the first time, AIDS researchers are pursuing major efforts to cure HIV infection. This might entail purging all vestiges of the virus from a person's body, a difficult challenge. Perhaps more likely, though still difficult, would be a "functional cure" -- therapies that suppress the virus to such low levels that an HIV-infected person would no longer need treatment because his or her immune system could keep the residual virus in check. The latter result would be more likely if therapy were initiated early in the course of infection, when significant immune function remains. The NIH plans soon to launch an initiative designed to solicit novel ideas for an HIV cure from the scientific community.

It is too early to predict the success or even the feasibility of such a three-pronged approach. Just the research to determine feasibility would be extremely costly. It is clear, however, that new methods of fighting infection must be pursued, and it is encouraging that new NIH funding provided through the American Recovery and Reinvestment Act offers the chance to at least explore such an approach, with the hope that an end to the HIV/AIDS pandemic could be within our reach.

*The writer is director of the National Institute of Allergy and Infectious Diseases, a part of the National Institutes of Health.*

### Post a Comment

[View all comments](#) that have been posted about this article.

You must be logged in to leave a comment. [Login](#) | [Register](#)

Submit

Comments that include profanity or personal attacks or other inappropriate comments or material will be removed from the site. Additionally, entries that are unsigned or contain "signatures" by someone other than the actual author will be removed. Finally, we will take steps to block users who violate any of our posting standards, terms of use or privacy policies or any other policies governing this site. Please review the [full rules](#) governing commentaries and discussions. You are fully responsible for the content that you post.

**Ads by Google**

**Drugs to Treat HIV**

Learn about drugs to treat HIV. There are many options available.

[www.HIVTreatmentsPower.com](http://www.HIVTreatmentsPower.com)

**Local HIV/STD Testing**

Local & Same Day HIV/STD Testing 1-800-610-0346, Fast Results

[www.LocalSTDtesting.com/](http://www.LocalSTDtesting.com/)

**Dangerous HIV Symptoms**

Do NOT wait and live in fear, Safe Result HIV Home Test, free shipping

[www.easykit.info](http://www.easykit.info)