HIV/AIDS causes debilitating illness and premature death, often during the prime years of life. The disease has devastated families and communities. Further, HIV/AIDS has complicated efforts to improve health and promote development by diminishing a person’s ability to support his or her family; increasing household medical expenses; deepening socioeconomic and gender disparities; decreasing opportunities for education among children forced to leave school to care for family members; and straining community resources, including hospitals, social services, schools and businesses.¹

The Global View

◆ In 2009, about 2 million people died of AIDS, 33.4 million were living with HIV and 2.7 million people were newly infected with the virus.²

◆ HIV infections and AIDS deaths are unevenly distributed geographically, with more than 90 percent of people with HIV living in the developing world.²
  - About 22.4 million of all people infected with HIV live in sub-Saharan Africa.
  - South and Southeast Asia are home to 3.8 million people living with HIV.
  - Prevalence is increasing in Eastern Europe and Central Asia, largely due to an increase in the rate of new infections.

◆ Women and girls now comprise half of those aged 15 and older living with HIV, and 60 percent of infections in Sub-Saharan Africa.²

◆ In 2009, 430,000 children under age 15 were infected with HIV and 280,000 died of AIDS; about 15 million children have lost one or both parents due to the disease.²³

◆ Many obstacles hinder the scale-up of prevention and treatment interventions, including: ⁴⁻⁹
  - Funding shortfalls, resources not distributed in accordance with need and a focus on short-term grants rather than sustainable investments;
  - Limited capacity of programs to absorb funds, monitor programs and scale up services;
  - Weak health systems that lack trained health workers, consistent supply chains, service delivery mechanisms, safety protocols to protect workers and patients;
  - Lack of coordination among HIV/AIDS programs and between maternal and child health, reproductive health, and infectious disease programs; and
  - Lack of harmonization among donors, governments and nongovernmental organizations.

◆ The challenges confronted by a person diagnosed with HIV in a developing country add additional obstacles for those battling the disease, including ⁴⁻¹⁰⁻¹³
  - Stigma and discrimination, causing them to hide the disease from their coworkers, partner, family and community;
  - Lack of access to treatment and care, particularly in remote regions or for opportunistic infections;
  - Lack of research and outreach to sero-discordant couples;
  - Poor diet, hampering ability to fight off infection and cope with rigorous drug regimens;
  - Limited power and control for women, particularly regarding property or inheritance rights and gender-based violence; and
  - Lack of adherence to treatment with antiretroviral drugs (ARVs), which increases the possibility of developing drug resistance.

◆ Millennium Development Goal 6 focuses on infectious diseases—the target for HIV is “to halt and begin to reverse the spread of the disease by 2015.”¹⁴⁻¹⁶ Among the progress indicators are:
  - HIV prevalence among pregnant women aged 15–24 years;
  - Condom and contraceptive use;
  - Knowledge and understanding of HIV/AIDS; and
  - The ratio of orphans (aged 10–14 years) attending school to their non-orphans peers who attend school.

◆ One target of Millennium Development Goal 6 is to achieve universal access to prevention, treatment, care and support.¹⁴ To achieve that goal, UNAIDS estimates that the global funding need is US$25.1 billion in 2010 and $54 billion by 2015—significantly higher than current funding level: US$13.7 billion.⁵⁻¹⁷,¹⁸
The Need for Prevention

- In 2008, 45 percent of those newly infected were age 15–24 and 16 percent were under age 15. Innovative prevention tools to reach adolescents, especially girls, are lacking.

- Reproductive health providers are important entry points to HIV prevention services.
  - Outreach to women who come for antenatal care in many African countries has led to a decline in HIV rates for that population.
  - Expectant and new mothers account for 630,000 infants worldwide infected with HIV during their mother’s pregnancy, labor and delivery.

- Approximately 2.9 million lives have been saved through ARVs. The application of treatment as a form of prevention is crucial. The provision of ARVs and replacement feeding can reduce transmission rates from mother-to-child from 30–35 percent down to 1–2 percent; current estimates are 200,000 new HIV infections averted in the past 12 years. More than half of newborns without treatment will die before age two years.

- About 90 percent of HIV is transmitted via sexual contact. Prevention has focused on abstaining from sex until marriage, being faithful to one’s partner (or reducing the number of concurrent partners), and consistently and correctly using condoms (can reduce risk by 80–90 percent).

- Members of groups at high risk often lack the power to control the situation because of gender or cultural norms, physical circumstances or legal status.

- The female condom is an alternative, but they are often unavailable or unaffordable.

- Male circumcision has been shown to reduce HIV transmission and prevalence.

- Treatment can dramatically reduce sexual transmission rates.

The Need for Research

- Microbicides are a promising approach to reduce or prevent the spread of HIV during sexual intercourse by inactivating the virus. Microbicides do not require a partner’s cooperation and could increase the ability of vulnerable populations to protect themselves from HIV.

- HIV vaccines are also promising approaches for preventing HIV transmission or delaying progression of the disease. There are more than 30 potential vaccines in clinical trials.

- The development of new medications is critical, as drug resistance to current ARVs is a growing threat.

The Need for Treatment

- The prices of most first-line ARVs decreased by 30–68 percent from 2004 to 2008 and by 10–40 percent from 2006 to 2008, contributing greatly to the wider availability of treatment, though prices remain high in many countries. An estimated 11.7 million life years were added globally between 1996 and 2008 as a result of ARVs; new and improved drugs have facilitated this process.

- While some strides have been made on health systems strengthening, 34 percent of reporting low- and middle-income countries had experienced at least one stock-out during 2008, increasing the risk of treatment interruptions, failure or drug resistance.

- The mortality rate for HIV-positive children is 10-times higher than for other children. Delays in diagnosis lead to delays in treatment; infected children often suffer from malnutrition and co-infection with other diseases.

- HIV infection is growing among injecting drug users, accounting for 10 percent of global infections and 30 percent of infections outside of sub-Saharan Africa. AIDS is the leading cause of death in IDU populations, an estimated 78 percent of whom live in developing countries.

- Commercial sex workers are at high risk for contracting HIV because they lack the power to negotiate condom use and are susceptible to violence; the illegal nature of the work keeps it hidden.

The Need for Research

- Microbicides are a promising approach to reduce or prevent the spread of HIV during sexual intercourse by inactivating the virus. Microbicides do not require a partner’s cooperation and could increase the ability of vulnerable populations to protect themselves from HIV.

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- The development of new medications is critical, as drug resistance to current ARVs is a growing threat.

- Behavior change, operations and impact research are needed to promote efficient and effective interventions that are acceptable to the target populations.
Key Interventions for HIV/AIDS

- Distribute condoms;
- Educate about sex and high-risk behaviors;
- Promote testing and counseling;
- Reach out to discordant couples;
- Expand prevention of mother-to-child transmission (PMTCT) services;
- Promote male circumcision programs;
- Encourage programs that target vulnerable populations;
- Screen for and treat co-infections, particularly tuberculosis;
- Promote needle and syringe exchange, and treatment programs for injection drug users;
- Remove punitive laws, policies, and practices (including stigma and discrimination) that block effective responses to HIV/AIDS;
- Implement programs to stop violence against women and girls;
- Empower young people to protect themselves from HIV;
- Advance research on and application of pre-exposure prophylaxis (PrEP);
- Support research to develop microbicides, medications, vaccines and other tools;
- Ensure that people living with HIV receive ARVs as needed;
- Encourage culturally appropriate programs and target barriers that impede prevention efforts (e.g., status of women, poverty or unhealthy living conditions).

New Infections and Deaths, by Year

Estimated Number of People Living with HIV/AIDS, by Year

Global HIV Infections and Deaths, 2008

<table>
<thead>
<tr>
<th>Regions</th>
<th>Adults and Children Newly Infected with HIV</th>
<th>Adults and Children Living with HIV</th>
<th>Adult and Child AIDS Deaths</th>
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<tr>
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<td>World*</td>
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</table>

*Percentages do not add up to 100 due to rounding.
Towards Universal Access

Unified Strategy

Global health stakeholders should implement the agreed-upon goals for HIV/AIDS in a coordinated approach to achieve universal access to prevention, treatment and care.

Know Your Epidemic

The HIV/AIDS strategy should reflect the disease burden in each country and address health systems strengthening, the underlying causes of illness and death, and the needs of poor or marginalized populations.

Country-led Plans

The HIV/AIDS strategy should be led by national governments in partnership with other stakeholders and should be responsive to existing structures and capacity.

Increased Investment

Higher investment is needed to expand prevention and treatment services, particularly to at-risk populations; funding between prevention and treatment must be balanced; and investments should focus on countries most in need.

Effective Partnerships

International stakeholders need to work together to establish effective partnerships and greater harmonization of programmatic and funding efforts to promote holistic and integrated HIV/AIDS strategies and programs.

Recommendations

- Implement a global plan of action to reach universal access for prevention—for every two people in treatment, five become infected; gains in treatment cannot be sustained without greater attention to prevention.
- Integrate sexual and reproductive health services and counseling into HIV prevention, care and treatment interventions—this is crucial to programmatic success.
- Promote a woman-centered approach to HIV reduction and control—adopt the UNAIDS Action Framework for addressing women, girls, gender equality and HIV; work toward 80 percent coverage of PMTCT programs.
- Focus on the most-at-risk populations (e.g., commercial sex workers, injecting drug users, men who have sex with men)—to stem the spread of HIV and decriminalize vulnerable groups and activities.
- Increase investments for research—new vaccines, microbicides and medications are needed, as are program monitoring and operations and impact research to improve interventions.
- Promote treatment as a means of prevention—ARVs lower viral load, which reduces the risk of transmission.
- Develop better treatment options for children—child-focused treatment lags behind adult-oriented interventions, putting children at unnecessary risk.
- Scale up programs in male circumcision and partner reduction—such proven interventions are especially needed in East and Southern Africa.
- Emphasize health systems strengthening—make resources available for optimum care, service delivery and training of health care workers, including community health workers.
- Increase support to country-led efforts—for strategic national plans that are cost-effective and efficient; for community-based coverage to complement facility-based services.
- Harmonize funding from all sources—coordinate resources at the national level; streamline the evaluation and reporting processes to avoid duplication of effort and reduce administrative burden.
- Hold governments accountable for their international agreement commitments—both developing country governments, who need to increase domestic health expenditures, and donor governments who should meet their targets.
References


