



# HIV/AIDS and the Millennium Development Goals (MDGs):

The Case for Stronger HIV Prevention Methods and a Vaccine

## Background

In September 2000, leaders from 189 countries gathered at the United Nations to forge an action agenda to address the world's most serious developmental challenges. The resulting Millennium Development Goals (MDGs) set forth unanimously agreed upon targets to increase living standards worldwide. To track progress, the goals were established as eight quantifiable and shared priorities to be achieved by 2015.

One of the MDGs focuses specifically on combating HIV/AIDS, malaria, and other diseases. But in recent years, it has become increasingly clear that HIV/AIDS is more than a major health crisis. Its devastating effects are impeding progress across many development areas—from poverty reduction to universal access to education.

*“How we fare in the fight against AIDS is crucial. Halting the spread is not only a Millennium Development Goal in itself; it is a prerequisite for reaching most of the others. Only if we meet this challenge can we succeed in our other efforts to build a humane, healthy and equitable world.”* Kofi Annan, Secretary General, United Nations

Every day an estimated 14,000 people become newly infected with HIV, 95% of them in developing countries. These numbers must be dramatically cut if the international community hopes to meet the development objectives outlined in the MDGs. Many proven strategies exist to prevent HIV transmission, but gaps remain in the range of available prevention technologies. Existing prevention tools are only partially effective and women, in particular, lack methods specifically designed for their use and control. Above all, there is an urgent need for a vaccine, the world's best hope for reversing the AIDS epidemic.

### Millennium Development Goals

- *Goal 1: Eradicate extreme poverty and hunger*
- *Goal 2: Achieve universal primary education*
- *Goal 3: Promote gender equality and empower women*
- *Goal 4: Reduce child mortality*
- *Goal 5: Improve maternal health*
- *Goal 6: Combat HIV/AIDS, malaria, and other diseases*
- *Goal 7: Ensure environmental sustainability*
- *Goal 8: Develop a global partnership for development*

## AIDS, Poverty, and Hunger

The MDGs aim to halve the proportion of people who live on less than a dollar a day, as well as the proportion of people who suffer from hunger. The AIDS epidemic, however, is deepening poverty, reducing economic growth, and undermining food security. In heavily affected countries—where national HIV prevalence equals or exceeds 20%—the gross domestic product in 20 years could be 67% lower than it would have been in the absence of the virus. In Cambodia, India, Vietnam, and Thailand—where HIV prevalence is much lower than in Africa—economic modeling suggests that AIDS will nevertheless sharply slow the pace of poverty reduction over the next 20 to 30 years.<sup>1</sup>

A study in Côte d'Ivoire revealed that income in households affected by AIDS was half that of the average household income, necessitating reductions in spending on food, schooling, and other essentials.<sup>2</sup> In a study of 44 African countries, HIV infection was associated with decreased intakes of calories and protein, even though people living with HIV have greater nutritional needs.<sup>3</sup>

## AIDS and Education

The MDGs envision that by 2015, all school-aged children will be able to complete primary education. The AIDS epidemic, however, undermines education systems, reduces school attendance, and diminishes educational opportunities, especially for girls. Unless access to antiretroviral therapy is expanded dramatically, AIDS is likely to claim the lives of 10% of all teachers in sub-Saharan Africa by 2012,<sup>4</sup> with substantially higher mortality likely in the most heavily affected countries. Children in AIDS-affected households, especially girls, are often withdrawn from school to care for the household or to work outside the home to compensate for lost income. A recent analysis of household surveys from 40 sub-Saharan African countries found that children orphaned by AIDS are 13% less likely to attend school than non-orphans.<sup>5</sup>

## AIDS and Child Mortality

With more than 600,000 infants contracting HIV infection each year, the AIDS epidemic is holding back efforts to reduce mortality in children under five by two-thirds before 2015. Children born to HIV-infected mothers are at a three times greater risk of death before age five than children born to HIV-negative mothers, and 60% of HIV-infected children do not live to see their fifth birthdays.

## AIDS and Maternal Health

The AIDS epidemic also undermines global goals to achieve a 75% reduction in the maternal mortality rate by 2015. One study in Uganda found that pregnant women who are exposed to the virus are at an increased risk of acquiring HIV,<sup>6</sup> and HIV infection significantly increases women's risk of mortality during and after pregnancy. In Malawi, as HIV prevalence among pregnant women significantly increased, overall maternal mortality nearly doubled.

## AIDS and Other Infectious Diseases

While causing more than three million deaths annually on its own, AIDS is also affecting efforts to control other serious infectious diseases. One-third of all HIV-positive people are also infected with tuberculosis (TB), an infectious disease that is a leading cause of AIDS-related deaths. Due to the high prevalence of this opportunistic infection, TB rates are now on the rise again in Africa. Co-infection with HIV and malaria also impacts the progression of both diseases, especially among pregnant women.

For more information on figures and studies cited, see IAVI's Policy Research Working Paper on AIDS and the Millennium Development Goals, available at [http://www.iavi.org/AIDSandMDGs\\_report](http://www.iavi.org/AIDSandMDGs_report).

**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](http://www.iavi.org).

<sup>1</sup>Asian Development Bank/UNAIDS, *The Impact of HIV/AIDS on Poverty in Cambodia, India, Thailand, and Vietnam* (Manila: Asian Development Bank, April 2005).

<sup>2</sup>Bechu N., The impact of AIDS on the economy of families in Côte d'Ivoire: Changes in consumption among AIDS-affected households. In: Ainsworth M., et al., (Eds.) *Confronting AIDS: Evidence from the developing world: Selected background papers for the World Bank Policy Research Report* (Brussels: European Commission, May 1998).

<sup>3</sup>Mason J.B., et al., AIDS, Drought and Child Malnutrition in South Africa, *Public Health Nutrition* 2005; 8(6): 551-563.

<sup>4</sup>Goliber T., Exploring the Implications of the HIV/AIDS Epidemic for Educational Planning in Selected African Countries: The Demographic Question (Washington: World Bank, January 2000).

<sup>5</sup>Monasch R. and Boerma J.T., Orphanhood and childcare patterns in sub-Saharan Africa: an analysis of national surveys from 40 countries, *AIDS* 2004; 18(Suppl 2): S55-S65.

<sup>6</sup>Gray R., et al., Increased Risk of incident HIV during pregnancy in Rakai, Uganda: A Prospective Study, *The Lancet* 2005; 366: 1182-1188.

Imagine a world without AIDS



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