

4th global report

2004
Report
on the global
AIDS
epidemic



Joint United Nations Programme on HIV/AIDS

UNAIDS

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Preface

The global AIDS epidemic is one of the greatest challenges facing our generation. AIDS is a new type of global emergency—an unprecedented threat to human development requiring sustained action and commitment over the long term. As this report shows, the epidemic shows no sign of weakening its grip on human society.

The AIDS crisis continues to deepen in Africa, while new epidemics are growing with alarming speed in Asia and Eastern Europe. No region of the world has been spared.

While there is a pressing need for additional resources and commitment, this report also documents some of the success stories that have been achieved—by groups of people living with or affected by HIV, as well as by governments, nongovernmental organizations, business people and religious leaders.

AIDS has been with us for more than 20 years. It will continue to challenge us for many decades to come. The most important lesson we have learned so far is that we can make a difference: we can prevent new infections, and we can improve the quality of care and treatment for people living with HIV.

Our greatest challenge is to extend the extraordinary examples of leadership recorded in this report to the mainstream of everyday life. In the absence of a cure, the mass mobilization of every sector of society remains our only weapon.



Kofi A. Annan

Secretary-General of the United Nations

Foreword

Every two years, on the occasion of the International Conference on AIDS, this Global Report sets out our current knowledge on the state of the epidemic based on the experiences of the Joint United Nations Programme on HIV/AIDS (UNAIDS), which comprises nine United Nations system agencies. It makes for sobering reading.

Far from levelling off, rates of infection are still on the rise in many countries in Sub-Saharan Africa. Indeed, in 2003 alone, an estimated 3 million people in the region became newly infected. Most alarmingly, new epidemics appear to be advancing unchecked in other regions, notably Eastern Europe and Asia.

Countries in Eastern Europe and East Asia are experiencing the fastest growing HIV epidemic in the world. The large, populous countries of China, India and Indonesia are of particular concern. General prevalence is low there, but this masks serious epidemics already under way in individual provinces, territories and states.

AIDS is the most globalized epidemic in history, and we are witnessing its growing 'feminization'. Every year brings an increase in the number of women infected with HIV. Globally, nearly half of all persons infected between the ages of 15 to 49 are women. In Africa, the proportion is reaching 60%. Because of gender inequality, women living with HIV or AIDS often experience greater stigma and discrimination.

Yet this is a problem with a solution. As our report indicates, we know what works—successful approaches are evolving locally, nationally and globally. They are being helped by the growing momentum of international political leadership, by business workplace programmes, and by the dynamic mobilization of affected communities themselves—a key element that remains at the heart of our global response.

The good news is that the world is significantly increasing its commitments and resources. Yet as the number of governments, financial institutions and partners responding to AIDS increases, there is an urgent need for greater support for, and collaboration with, heavily affected countries. There is also a need to avoid duplication and fragmentation of resources.

Building on commitments made by leading donors in April 2004, we must not only raise more resources, but make sure that they are spent wisely to help countries mount sustainable and effective AIDS strategies. In particular, we must join forces to help countries strengthen their capacity to deliver these strategies.

A particularly welcome development is that the world has increasingly recognized the need to improve access to antiretroviral treatment for all people infected with HIV, regardless of the country in which they live. Treatment must be at the heart of every comprehensive AIDS strategy. However, prevention is equally important. We must never lose sight of doing everything we can to prevent people from becoming infected in the first place.

Over 20 years of AIDS provides us with compelling evidence that unless we act now we will be paying later—a trenchant message for the countries of Asia and the Pacific. AIDS demands that we do business differently; not only do we need to do more and do it better, we must transform both our personal and our institutional responses in the face of a truly exceptional global threat to security and stability.

AIDS is likely to be with us for a very long time, but how far it spreads and how much damage it does is entirely up to us.



Peter Piot
Executive Director
Joint United Nations Programme on HIV/AIDS

Global estimates of HIV and AIDS as of end 2003



Total number of adults and children living with HIV: 38 million [35-42 million]

Number of people living with HIV	Total	37.8 million	[34.6–42.3 million]
	Adults	35.7 million	[32.7–39.8 million]
	Women	17 million	[15.8–18.8 million]
	Children <15 years	2.1 million	[1.9–2.5 million]

People newly infected with HIV in 2003	Total	4.8 million	[4.2–6.3 million]
	Adults	4.1 million	[3.6–5.6 million]
	Children <15 years	630 000	[570 000–740 000]

AIDS deaths in 2003	Total	2.9 million	[2.6–3.3 million]
	Adults	2.4 million	[2.2–2.7 million]
	Children <15 years	490 000	[440 000–580 000]



Overcoming **AIDS:** the 'Next Agenda'

The gender factor

Women are more physically susceptible to HIV infection than men. Data from a number of studies suggest that male-to-female transmission during sex is about twice as likely to occur as female-to-male transmission, if no other sexually transmitted infections are present. Moreover, young women are biologically more susceptible to infection than older women before menopause.

Women's increased risk is also a reflection of gender inequalities. Gender refers to the societal beliefs, customs and practices that define 'masculine' and 'feminine' attributes and behaviour. In most societies, the rules governing sexual relationships differ for women and men, with men holding most of the power. This means that for many women, including married women, their male partners' sexual behaviour is the most important HIV-risk factor.

The epidemic also has a disproportionate impact on women. Their socially defined roles as carers, wives, mothers and grandmothers means they bear the greatest part of the AIDS-care burden. When death and illness lead to household or community impoverishment, women and girls are even more affected due to their low social status and lack of equal economic opportunities.

Women and girls' special vulnerability

Challenging negative gender roles is critical to the global AIDS response. The 2001 UN Declaration of Commitment on HIV/AIDS recognized that gender inequality is fuelling the epidemic. In the Declaration, governments pledged to create multisectoral strategies to reduce girls' and women's vulnerabilities. Its 2003–2005 benchmarks include:

- addressing the epidemic's gender dimensions (article 37);
- accelerating national strategies that promote women's advancement and their full enjoyment of all human rights; the sharing of responsibility by men and women to ensure safer sexual behaviour and empowering women to make decisions about their sexuality and protect themselves from HIV (article 59);
- eliminating discrimination against women, including violence against women, harmful traditional practices, trafficking and sexual exploitation (articles 61–2);
- reducing mother-to-child HIV transmission by increasing women's access to antenatal care, information, counselling and testing, other prevention services, and treatment (article 54); and
- reviewing the epidemic's social and economic impact, especially on women in their role as caregivers (article 68).

Since 2001, a variety of regional, national and international initiatives have emerged. The United Nations Development Fund for Women launched a programme to intensify gender and human rights activities within 10 highly affected countries' national responses (Barbados, Brazil, Cambodia, India, Kenya, Nigeria, Rwanda, Senegal, Thailand, and Zimbabwe). Among other activities, the programme aims to enhance national capacity to review legislation or policies with implications for the epidemic's gender dimensions.

“Too often I have listened to women describe how their experiences are not part of the policy discussion. Whether talking about the unequal impact of globalization, the ravages of war and armed conflict, or the reality of living with HIV/AIDS, they feel marginalized and excluded from decision-making and resources that affect their lives. And yet, it is well-known that the most effective policy approaches come from listening to those who have experienced such problems first hand, who can provide needed perspectives, improve understanding and offer creative solutions so that resources may be used creatively.” —Noeleen Heyzer, Executive Director, the United Nations Development Fund for Women

HIV-positive women's organizations are becoming increasingly visible. Globally, the International Community of Women Living with HIV and AIDS helps positive women's organizations to share their experiences. One of the organization's recent initiatives is the Voices and Choices project. It includes participatory research and advocacy for improved policy and practices. In 12 francophone African countries, it also currently researches support, treatment and care provision for HIV-positive women.

A new coalition

In 2003, the Global Coalition on Women and AIDS was launched. It brings together HIV-positive persons, civil society leaders, celebrity activists, nongovernmental organization (NGO) representatives, and UN figures to facilitate collaboration and to support innovative scaling up of efforts that have an impact on women's and girls' lives. The Global Coalition will work on: preventing HIV infection among girls and young women; reducing violence against women; protecting girls' and women's property and inheritance rights; ensuring women's and girls' equal access to treatment and care; supporting community-based care with a special focus on women and girls; promoting women's access to new prevention technologies and supporting ongoing efforts towards girls' universal education.

Overcoming **AIDS:** the 'Next Agenda'

1

AIDS is an extraordinary kind of a crisis. To stand any chance of effectively responding to the epidemic we have to treat it as both an emergency *and* a long-term development issue. This means resisting the temptation to accept the inevitability of AIDS as just another of the world's many problems. The AIDS epidemic is exceptional; it requires an exceptional response that remains flexible, creative, energetic and vigilant.

AIDS is unique in human history in its rapid spread, its extent and the depth of its impact. Since the first AIDS case was diagnosed in 1981, the world has struggled to come to grips with its extraordinary dimensions. Early efforts to mount an effective response were fragmented, piecemeal and vastly under-resourced. Few communities recognized the dangers ahead, and even fewer were able to mount an effective response. Now, more than 20 years later, 20 million people are dead and 37.8 million people (range: 34.6–42.3 million) worldwide are living with HIV. And still, AIDS expands relentlessly, destroying people's lives and in many cases seriously damaging the fabric of societies.

But experience has shown that the natural course of the epidemic can be changed with the right combination of leadership and comprehensive action. Two decades of tackling AIDS have yielded important successes and have taught crucial lessons about which approaches work best, although a cure remains elusive. We now know that comprehensive approaches to prevention bring the best results. Fortright national leadership, widespread public awareness and intensive prevention efforts have

enabled entire nations to reduce HIV transmission. In Africa, Uganda remains the pre-eminent example of sustained success. In Asia, comprehensive action in Thailand averted some five million HIV infections during the 1990s. Cambodia too has managed to curb rapid growth of its epidemic. On every continent we can point to cities, regions or states where concerted efforts have kept the epidemic at bay.

At the same time, we now have antiretroviral medicines that can prolong life and reduce the physical effects of HIV infection. Coordinated national and international action has slashed the prices of these medicines in low- and middle-income countries, and sustained efforts are now under way to make access a reality for people living with HIV across the world who desperately need antiretroviral therapy.

Furthermore, the veil of silence and stigma that has crippled efforts to respond to AIDS is finally lifting in many countries. Leaders of governments, businesses and religious and cultural institutions are increasingly coming forward to take action against AIDS. The movement of people living with HIV has become a global force in the vanguard of social

Progress update on the global response to the AIDS epidemic, 2004

The AIDS epidemic: dynamic and diverse

- The epidemic remains extremely dynamic, growing and changing character as the virus exploits new opportunities for transmission.
- Girls and young women are at greatest risk. As of December 2003, women accounted for nearly 50% of all people living with HIV worldwide, and for 57% in sub-Saharan Africa.
- Young people (15–24 years old) account for half of all new HIV infections worldwide; more than 6000 contract the virus each day.
- The 2001 UN Declaration of Commitment on HIV/AIDS envisions major progress in delivering comprehensive care services by 2005. However, only minimal coverage has been achieved for care and treatment of HIV-related disease. Current prevention efforts in most low- and middle-income countries come nowhere near the scale of the epidemic.
- Achieving the 2005 targets will require urgent, innovative and expanded efforts to strengthen and accelerate the response.

change in responding to the epidemic. The impact of AIDS on development prospects in the worst-affected regions is being increasingly recognized, and action is under way to make necessary fundamental shifts in development practice.

Despite these signs of progress, more sophisticated monitoring and evaluation of the epidemic's behaviour reveal the scale of the challenge: fewer than one in five people who need prevention services and tools have access to them. Globally, five to six million people need antiretroviral medicines now; yet only 7% in low- and middle-income countries have access to these drugs—fewer than 400 000 people at the end of 2003. Many national leaders are still in denial about the impact of AIDS on their people and societies.

An unprecedented level of financial resources is now available to tackle the disease, but it is still less than half of what is really needed. Even these funds are not being applied in a fully effective, coordinated manner. In some instances, AIDS funding sits idle, blocked in government bank accounts or stalled by rules of international funders.

The result: the AIDS epidemic is now at a true crossroads. If the world's response to AIDS continues in its well-meaning but haphazard and ineffectual fashion, then the global epidemic will continue to outpace the response. But there is an alternative: to embark boldly upon the 'Next Agenda'—an agenda for future action that adopts the essential, radical and innovative approaches needed for countries to reverse the course of the epidemic.

A few home truths...

Women now the most affected

In the early days of the epidemic, men vastly outnumbered women among people infected with HIV. Indeed, it initially took the medical establishment some time and a great deal of evidence before it accepted the very idea that HIV was a threat to women. The proportion of females infected by HIV worldwide steadily grew until by 2002 about half of all people infected were women and girls.

In Southern Africa, where almost every family has been touched by AIDS, infected females outnumber males by as much as two to one

Assessing global and national progress in scaling up responses to AIDS

As part of follow-up activities to the 2001 UN Declaration of Commitment on HIV/AIDS, the UNAIDS Secretariat and Cosponsors collaboratively developed a series of global, regional and national indicators to measure the world's progress in reaching the Declaration's targets.

In 2003, 103 Member States of the UN provided UNAIDS with national reports on their progress, which formed the basis of a comprehensive assessment of global, regional and national responses to AIDS. It was called 'Progress report on the global response to the HIV/AIDS epidemic, 2003'.

In 2004, key elements of this material have been further updated by a study called '*Coverage of selected services for HIV/AIDS prevention and care in low- and middle-income countries in 2003*' (Policy Project, 2004). These two reports present progress on key global and national indicators in areas such as national response scale up, resources, eliminating stigma and discrimination, and prevention and treatment programmes.

Examples of key findings include the following: since 2002 global funding available to respond to AIDS almost tripled, but remains seriously inadequate, and—due to various blockages—is not reaching those who need it most; 38% of countries still have not adopted AIDS-related anti-discrimination legislation; and nearly one-third of countries lack policies that ensure women's equal access to critical prevention and care services.

The UNAIDS report's goal was to spur all stakeholders to generate even greater commitment towards achieving the 2001 UN Declaration of Commitment targets. Updated indicators in each area are spread throughout this global report and can be found in boxes called 'Progress update on the global response to the AIDS epidemic'.

in some age groups. Besides being the majority of those infected, women and girls are now bearing the brunt of the epidemic in other ways too: it is they who principally take care of sick people, and they are the most likely to lose jobs, income and schooling. Women may even lose their homes and other assets if they are widowed. To bring the concerns of women and girls into sharp focus, gender sections can be found in each chapter.

Young people: harsh impact

The epidemic is also affecting young people disproportionately: 15–24-year-olds account for half of all new HIV infections worldwide; more than 6000 contract the virus every day. This trend is especially alarming because this is the largest youth generation in history. Today's

15–24-year-olds have never known a world without AIDS, and have no 'folk memory' of the shocking early days of the 'new' disease. Yet it is today's young people who will be responsible for sustaining responses to the epidemic—they are tomorrow's leaders, thinkers and decision-makers, and it is vital that they play an integral part in responding to the epidemic (see 'Young People' focus).

The epidemic's dimensions and the task ahead

No other infectious disease in history has been so intensively studied. In the two decades since AIDS was first recognized, an enormous amount has been learned about HIV and the forces that drive the epidemic around the world.

Factors that influence HIV transmission: vulnerability and risk

Given the increases in the number of women infected with HIV, there is a special need to address the specific factors that contribute to women's vulnerability and risk. These include ensuring adolescent girls have access to information and services, that violence against women is not tolerated, that women can enforce property rights, that they do not miss out on treatment and that prevention options are expanded (for example, through developing a microbicide). However, in seeking to empower women, it is important to recognize that cultural and social expectations for boys and men can be just as much of a trap; they too need to be empowered to recognize and reject pressures to treat women and girls badly.

HIV transmission is not a random event; the spread of the virus is profoundly influenced by the surrounding social, economic and political environment. Wherever people are struggling against adverse conditions, such as poverty, oppression, discrimination and illiteracy, they are especially vulnerable to being infected by HIV. Efforts to prevent the spread of HIV need to focus both on individual risk behaviour, and on the broad structural factors underlying exposure to HIV—so as to help people control the risks they take and thereby protect themselves.

Vulnerability, risk and the impact of AIDS coexist in a vicious circle. Vulnerability can be reduced by providing young people with schooling, supporting protective family environments and extending access to health and support services population-wide. Addressing vulnerability at the structural level includes reforming discriminatory laws and policies, monitoring practices and providing legal protections for people living with HIV.

Challenges in scaling up antiretroviral treatment

Since 2002, the feasibility of providing antiretroviral therapy in resource-poor settings has become almost universally recognized. Governments and donors worldwide are increasingly committed to expanding access as quickly as possible to the many people who need life-prolonging antiretroviral treatment.

Scaling up antiretroviral treatment requires assured long-term political support and funding. Any lapse in support could result in collapsed antiretroviral programmes, with resultant interruptions in treatment giving HIV the opportunity to become drug resistant. Not only would this be an individual tragedy, it would also create a grave social threat, since drug-resistant strains of the virus can spread and render entire treatment programmes useless.

Health staffing is also crucial to the prospects of extending antiretroviral access. Already, Africa has a major shortage of nurses, midwives and doctors, as they leave their native countries for better salaries, working conditions and opportunities in higher-income countries. For example, 70% of doctors trained in South Africa currently live abroad. The gap is partially filled with health professionals from other African countries, which then widens the gap there. The cycle of out-migration leaves the lowest-income countries on the continent in dire need.

It is important to avoid the kind of chaos reported from some countries, where desperate patients buy antiretrovirals without medical advice and often without prescriptions. Treatment literacy should be an integral part of all treatment programmes, and people with HIV can play an important role since they speak with the authority of their own experience. In addition, community members can

be trained to support treatment adherence and can assume some of the duties of health-care workers. This will help make more efficient use of all available resources.

AIDS-related stigma hampers the response and accelerates transmission

AIDS-related stigma and discrimination directly hamper the effectiveness of AIDS responses. Stigma and concerns about discrimination constitute a major barrier to people coming forward to have an HIV test, and directly affect the likelihood of protective behaviours. For example, the silence around HIV can prevent the use of condoms or can lead to HIV-positive women breastfeeding their infants for fear of being identified.

Stigma is not only directed towards people living with HIV. In many cases, HIV stigma has attached itself to pre-existing stigmas—to racial and ethnic stereotypes and to discrimination against women and sexual minorities. At the same time, long-standing patterns of racial, ethnic and sexual inequality increase vulnerability to HIV. In many countries stigma and discrimination remain important barriers to understanding how marginalized groups of society are coping with the epidemic.

Data now show that relatively new epidemics in East Asia, Eastern Europe and Central Asia are spreading fast. Despite the overwhelming evidence that AIDS is everywhere, the impulse to say AIDS is only a problem ‘somewhere else’ is still strong. In such a climate, people who are stigmatized and live on the margins of society, such as injecting drug users and men who have sex with men, are often badly served by prevention programmes. In some countries, their care and support needs are systematically ignored.

Developing a comprehensive approach to HIV prevention

Current HIV-prevention coverage is extremely low. Only a fraction of people at risk of HIV exposure have meaningful access to basic prevention services, although most countries have developed strategic frameworks for prevention activities. In low- and middle-income countries in 2003, only one in ten pregnant women was offered services for preventing mother-to-child HIV transmission, and an even smaller proportion of adults aged 15–49 years had access to voluntary counselling and testing.

Closing this prevention gap will require major recommitment of resources as well as a commitment to full-scale programming—too many efforts today are still at the ‘demonstration project’ level. It should be stressed that efforts to expand coverage of prevention services should avoid ‘more of the same’. They need to take account of what experience has shown works best. For example, evidence suggests that messages and activities developed at the grassroots level are much more effective than those developed by remote ‘professionals,’ and that to make a difference, prevention messages need to be focused and go beyond simply raising awareness of AIDS.

Full-scale and comprehensive prevention efforts will need to be sensitive to the different contexts of the epidemic. For example, where overall HIV prevalence remains low, the relative importance of measures addressing particularly vulnerable sections of the population—such as sex workers, men who have sex with men, or migrant populations—increases. Where population-wide prevalence is high, efforts still need to be tailored to particular populations, but reducing HIV transmission will depend on achieving and sustaining a broad range of safe behaviours across wide

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 population sectors, such as all young people. Evidence-informed decisions about effective prevention require knowledge of local epidemics, how they are changing over time, and who is currently at greatest risk of HIV exposure.

The changing nature of the epidemic requires prevention efforts to be constantly renewed. For example, it has become clear that the overwhelming emphasis on more effective treatment in high-income countries since the latter half of the 1990s was to the detriment of renewed prevention efforts. Prevention gains stalled and, in many cases, rises in HIV trans-

mission were experienced for the first time in a decade. Similarly, in Thailand, outstanding success in reducing transmission associated with sex work in the 1990s changed the shape of the epidemic; now, the area of greatest need is within marriages and regular relationships.

Impact alleviation

The first signs of the full-scale societal impact of AIDS are becoming apparent in Southern and Eastern Africa, with the exacerbation of food crises, increases in the number of orphans, and relentless weakening of human capacity in both government and private sec-

The UN system: active on all fronts

The United Nations system has remained committed to the effective implementation of the 2001 Declaration of Commitment on HIV/AIDS. The Joint UN response to the AIDS epidemic continues to gather pace, especially with the addition of the World Food Programme (WFP) as the ninth UNAIDS Cosponsor.

Twenty-nine individual UN agencies take global leadership roles in their areas of specialization. Among UNAIDS Cosponsors these are: United Nations Office on Drugs and Crime (UNODC) on injecting drug users; United Nations Population Fund (UNFPA) on gender and young people; United Nations Educational, Scientific and Cultural Organization (UNESCO) on education; United Nations Children's Fund (UNICEF) on orphans and mother-to-child transmission; International Labour Organization (ILO) on HIV and the workplace; United Nations Development Programme (UNDP) on HIV, governance and development; and the World Bank through its Multi-Country AIDS Programme. With the joint World Health Organization and UNAIDS '3 by 5' Treatment Initiative, the WHO has increased its role in the global expansion of access to antiretroviral treatment.

The United Nations Secretary-General's four Special Envoys on HIV/AIDS have increased HIV-related political, donor, civil society and media attention. For example, Nafis Sadik, the Special Envoy for Asia, has boosted Nepal's human-rights approach to AIDS. In several Caribbean countries, Dr George Alleyne, the Special Envoy for the Caribbean, encouraged legal reforms and steps to reduce AIDS-related stigma and discrimination. Meanwhile, the UN Special Envoy for Eastern Europe and Central Asia, Dr Lars Kalling, is raising awareness of how injecting drug use is a key factor in HIV spread.

In Africa, Stephen Lewis, the Special Envoy for that region, has joined with James T. Morris, Executive Director of WFP and the UN Secretary-General's Special Envoy for Humanitarian Needs in Southern Africa, to raise awareness about Southern Africa's deadly combination of AIDS, drought and shrinking human capacity.

tors. AIDS is fundamentally changing the fabric and functioning of societies. One way in which the epidemic creates a vicious circle is by striking hardest at those countries with the weakest capacity to implement responses. In many nations, AIDS is now depleting capacity faster than it can be replenished.

Given the deep and lasting effects of the epidemic, the most-affected countries need to review and adapt policies and investments across a wide range of areas to cope with the coming impact. AIDS calls for a complete rethinking of how skills will be built, retained and sustained. In low-prevalence countries, aggressive prevention efforts are important in order to preserve investments in human and institutional development. A long-term perspective on retaining or rebuilding development capacity needs to be adopted. The immediate pressures of responding to the epidemic and keeping people alive will have immediate returns, but must also be accompanied by forward-looking measures that restore social resilience (see 'Impact' chapter).

More commitment needed to help orphans

An issue of particular concern is the neglect of orphaned children. AIDS has killed one or both parents of an estimated 12 million children in sub-Saharan Africa. Yet less than half of the countries with the most acute crisis have national policies in place to provide essential support to children orphaned or made vulnerable by the epidemic. To limit the impact of AIDS on the social and economic life of communities and countries, it is a political imperative that orphaned and vulnerable children be cared for.

Challenges of the 'Next Agenda'

It will take some extraordinary efforts to make the leap from the current piecemeal approaches to AIDS to the dynamic requirements of the 'Next Agenda'. The world's foremost national and international leaders, scientists, policy-makers, business and community leaders and the UN system all need to create new concepts and embrace key challenges in order to revolutionize and harmonize the global AIDS response.

Resources and funding

In financing, the 'Next Agenda' will require innovations that enhance country capacity to determine resource needs in prevention, care and impact alleviation. It requires countries and the international community to respond with unprecedented commitment and political will. Important progress has been made in raising additional funds, but global spending in 2003 was less than half of what will be needed in 2005, and only one-quarter of the amount needed in 2007 (see 'Finance' chapter). National and community-level civil society organizations require support to access and effectively use funds. For their part, donors and the international community need to carefully determine their fair share of contributions to the AIDS response.

Efforts to track resources and to prove they are being used efficiently also need strengthening, since this evidence is key to continuing financial support for programmes.

Building and rebuilding capacity

In addition to mobilizing still more funds, a great deal of work is needed to seriously scale

up country programming capacity, and to clear blockages and bottlenecks in the system to ensure the money gets to where it is needed to support activities. AIDS itself has seriously depleted response capacity, and in many cases its impact has been worst in those communities and nations where capacity was already weakest as a result of decades of inadequate development.

Bold new approaches are required to reinvest in human and community resources, starting with preserving lives to the greatest extent possible, including through the roll-out of antiretroviral therapy. Long- and short-term strategies are needed in equal measure. In the immediate term, most countries possess untapped human capacity reserves (for example, in trained workforces that have retired or moved away from their professions). In the longer term, strategies that reverse the worst effects of 'brain drain' need to be devised.

Harmonization and coordination


At the national level, all stakeholders need to accept that an effective AIDS response can only be achieved if countries own and drive it within their own borders. International assistance is important, but it only works effectively if it is embedded within a national response. The concepts of national ownership, multisectorality, mainstreaming, harmonization and coherence need to be based on guiding principles called the 'Three Ones': one agreed AIDS action framework that provides the basis for coordinating the work of all partners; one national AIDS coordination body, with a broad-based multisectoral mandate; and one agreed country-level monitoring and evaluation system.

Action informed by science

The threat posed by AIDS is now widely recognized. More resources than ever before have been pledged to respond; and more than ever, evidence is available about what works in response to the epidemic. Unfortunately at times, a willingness to be guided by scientific evidence and to develop consensus on effective approaches is put aside in favour of preconceived prejudices or sectoral interests, to the detriment of a concerted global response to AIDS. Time costs lives and it is vital that the world unites with a common understanding of what is needed to mount a rapid and effective response.

The exceptionality of AIDS

AIDS is an exceptional disease with exceptional and wide-ranging impact; it requires an exceptional response. It has the characteristics of both a short-term emergency and of a long-term development crisis. New and hybrid forms of response are needed. International financial institutions need to create mechanisms which alleviate countries' debt-service payments so they can devote additional resources to their AIDS response. Potential short-term inflationary effects of increased and additional resources applied to the HIV epidemic can be managed, and in any event, pale in comparison with what will be the long-term effects of half-hearted responses to AIDS on the economies of hard-hit countries.

The world has new tools and a new opportunity to beat the scourge of AIDS. This is the moment for a bold new agenda to tackle AIDS; we must not let it pass. 

A global overview of the **AIDS** epidemic

Women increasingly infected by HIV

In recent years, the overall proportion of HIV-positive women has steadily increased. In 1997, women were 41% of people living with HIV; by 2002, this figure rose to almost 50%. This trend is most marked in places where heterosexual sex is the dominant mode of transmission, particularly the Caribbean and sub-Saharan Africa. Women also significantly figure in many countries with epidemics that are concentrated in key populations such as injecting drug users, mobile populations, and prisoners.

Sub-Saharan Africa

Nowhere is the epidemic's 'feminization' more apparent than in sub-Saharan Africa, where 57% of adults infected are women, and 75% of young people infected are women and girls. Several social factors are driving this trend. Young African women tend to have male partners much older than themselves—partners who are more likely than young men to be HIV-infected. Gender inequalities in the region make it much more difficult for African women to negotiate condom use. Furthermore, sexual violence, which damages tissues and increases the risk of HIV transmission, is widespread, particularly in the context of violent conflict.

In countries where the general population's prevalence is high and women's social status is low, the risk of HIV infection through sexual violence is high. A survey of 1366 women attending antenatal clinics in Soweto, South Africa, found significantly higher rates of HIV infection in women who were physically abused, sexually assaulted or dominated by their male partners. The study also produced evidence that abusive men are more likely than non-abusers to be HIV-positive (Dunkle et al., 2004).

Asia

Similar factors are threatening women in South and South-East Asia, but the overall impact in the region is much lower because the epidemic in most countries is concentrated among injecting drug users and other key populations. At the end of 2003, women accounted for 28% of infections, a slight increase compared to end-2001 estimates. In South Asia, women's low economic and social position has profound implications. Congruence between indicators of women's poor status and their HIV vulnerability suggests a close link between patriarchy and HIV in South Asia (UNDP, 2003). Women typically have limited access to reproductive health services and are often ignorant about HIV, the ways in which it can spread and prevention options. Social and cultural norms often prevent them from insisting on prevention methods such as use of condoms in their relations with their husbands.

Global increases, global inequality

Increases in the percentage of HIV-infected women also appear to be rising in: North America (25% in 2003, compared to 20% in 2001); Oceania (19% in 2003, compared to 17% in 2001); Latin America (36% in 2003, compared to 35% in 2001); the Caribbean (49% in 2003, compared to 48% in 2001), and Eastern Europe and Central Asia (33% in 2003, compared to 32% in 2001). While it is difficult to compare all the regional factors causing this increase, it is clear that gender inequalities—especially the rules governing sexual relationships for women and men—are at the heart of the matter.

A global overview of the **AIDS** epidemic

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In 2003, an estimated 4.8 million people (range: 4.2–6.3 million) became newly infected with HIV. This is more than in any one year before. Today, some 37.8 million people (range: 34.6–42.3 million) are living with HIV, which killed 2.9 million (range: 2.6–3.3 million) in 2003, and over 20 million since the first cases of AIDS were identified in 1981.

The epidemic remains extremely dynamic, growing and changing character as the virus exploits new opportunities for transmission. There is no room for complacency anywhere. Virtually no country in the world remains unaffected. Some countries that have let down their guard are seeing a renewed rise in numbers of people infected with HIV. For example, in some industrialized countries, widespread access to antiretroviral medicines is fuelling a dangerous myth that AIDS has been defeated. In sub-Saharan Africa, the overall percentage of adults with HIV infection has remained stable in recent years, but the number of people living with HIV is still growing.

The epidemic is not homogeneous within regions; some countries are more affected than others. Even at country level there are usually wide variations in infection levels between different provinces, states or districts, and between urban and rural areas. In reality, the national picture is made up of a

series of epidemics with their own characteristics and dynamics.

Since 2002, there has been a resurgence of energy and commitment in responding to the epidemic. Finances have increased considerably, and donors are exploring ways of channelling AIDS resources more quickly and efficiently to where they are most needed. The cost of antiretroviral medicines has tumbled, and concerted efforts are being made to extend treatment to millions of people in low- and middle-income countries whose lives depend on it. There is now also more funding available for prevention.

Together, all these approaches are making a difference in curbing the spread of HIV and in restoring quality of life to infected people and their families. But they are doing so on a scale that is nowhere near the level required to halt or reverse the epidemic. At the rate it is currently spreading, HIV will have an increasingly serious impact into the foreseeable future, unravelling the fabric of societies in its path.

Trends of global HIV infection

The number of people living with HIV continues to rise, despite the fact that effective prevention strategies exist. All the estimates in this report are based on updated estimation methodologies and the latest available data. Hence current estimates cannot be compared directly with previously published estimates. UNAIDS and the World Health Organization (WHO) have produced country-specific estimates for HIV every two years since 1998. During that time, the methods and assumptions used to make these estimates have been continually evolving. The UNAIDS Reference Group on Estimates, Modelling and Projections (scientists and researchers from a variety of institutions, convened by UNAIDS) meets annually to guide this process and refine the research tools, drawing on work carried out through smaller technical groups over the course of the year. Updated assumptions and methods are then applied to the subsequent round of estimates.

UNAIDS and WHO have revised their global estimates of the number of adults living with HIV, particularly in the sub-Saharan region. These new estimates are the result of more accurate data from country surveillance, additional information from household surveys, and steady improvements in the modelling methodology used by UNAIDS, WHO and their partners. This has led to lower global HIV estimates for 2003, as well as for previous years. Although the global estimates are lower, this does not mean the AIDS epidemic is easing off or being reversed. The epidemic continues to expand.

There are massive challenges in determining the exact prevalence levels of any disease—all figures are estimates based on available data. While the facts on HIV have been more accurate than many infectious diseases, there are those who would argue that UNAIDS and WHO have sometimes underestimated the epidemic, and at other times inflated the HIV numbers. The reality is more complex since global estimates are based on country estimates which themselves are derived from country surveillance systems. These systems collect data on HIV infection levels in different groups, but data are incomplete and their quality has varied.

In many countries, vast populations in rural areas are not well covered by surveillance. Because of social and political prejudice, many surveillance systems also bypass the population groups most likely to be exposed to HIV, such as injecting drug users, sex workers and men who have sex with men. By 2002, only 36% of low- and middle-income countries had a fully implemented surveillance system; however, 58% of countries with a generalized epidemic (where HIV prevalence is above 1%) had such a system.

The three most-commonly-used sources of data are sentinel surveillance systems that undertake periodic surveys among specific population groups; national population-based surveys; and case reports from health facilities. Each type of data has strengths and weaknesses. If more sources can be tapped, a more detailed picture can be pieced together and more accurate estimates achieved. In sub-Saharan Africa, the virus is spreading throughout the general population in many countries, and estimates are based largely on information gathered from pregnant women attending selected antenatal clinics. Recently, several countries have conducted national population-based surveys with HIV testing, some of which have been Demographic and Health Surveys. Examples include Burundi, Kenya, Mali, Niger, South Africa, Zambia and Zimbabwe. The data from these surveys have suggested that previous estimates based on sentinel surveillance were too high. However, all data are subject to possible biases. For example:

- The assumption that HIV prevalence among pregnant women is equivalent to the prevalence among both men and women in the surrounding communities may not be valid in all countries.
- Data from antenatal clinics do not fully represent remote rural populations, and there are few data to help adjust for this bias.
- In household surveys in some countries, people who refuse to participate, and those who are not at home when the survey team passes, may well have higher levels of HIV infection.

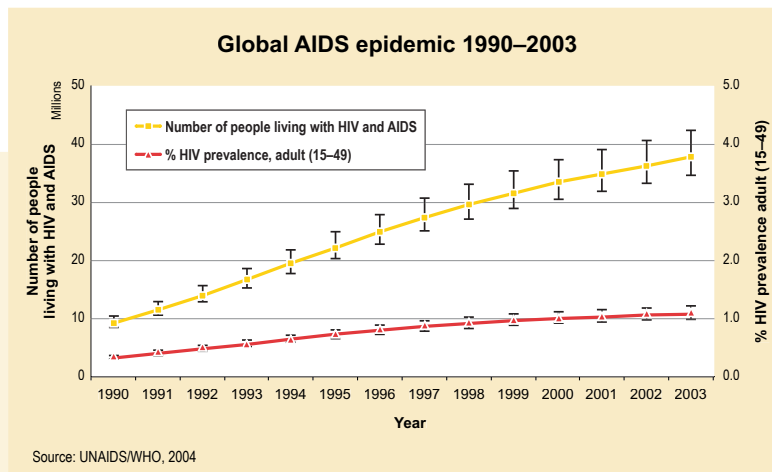


Figure 1

Difficulties in reconciling different estimates based on data from health facilities and population-based surveys are not applicable solely to HIV. For many conditions and diseases, including micronutrient deficiencies, noncommunicable disorders, and infectious diseases, estimates are improved through surveys collecting clinical and biological data. Even when non-disease indicators, such as poverty levels, are used, reconciling national household accounts with household surveys has become a difficult technical issue. But most experts agree that both should be used and that the truth about global poverty and inequality lies somewhere between the extremes suggested by the two methodologies.

An accurate picture of the epidemic is vital for directing national responses. Some countries may exaggerate estimates if they believe that doing so will increase their chances of obtaining international funding support. Or they may understate estimates to disguise poor political leadership, or because they fear high HIV levels will scare off tourists or business investors. However, much of the difference in interpreting the data does not stem from purposeful misrepresentation, but from the simple fact that there are important data gaps.

Even before the latest household survey results were released, more sophisticated sentinel surveillance and improved analysis resulted in lower estimates for a number of African countries. This is good news in that it means that fewer people than previously thought will suffer the horror of AIDS, but it should not be cause for undue optimism. For Africa, AIDS remains a catastrophe, and unrelenting commitment is required to turn the epidemic around and alleviate its tremendous impact.

Good intelligence is the key to appropriate action

Almost universally, mainstream society disapproves of, and sometimes harshly punishes, behaviour such as illicit drug use, sex between men, and sex work. This societal disapproval has meant that people engaged in these behaviours are frequently ignored by epidemiological surveillance systems, even though they are among the most likely to be exposed to HIV. Failure to monitor what is going on among them inevitably means that efforts to respond to the epidemic will be out of step with what is required, and HIV will retain the upper hand. Countries that conduct comprehensive surveillance are more likely to have an accurate picture of their epidemic, and can better plan an effective response.

Progress update on the global response to the AIDS epidemic, 2004

AIDS epidemic continues to expand; vulnerable populations at greatest risk

- Country data indicate that the number of people living with HIV continues to rise in all parts of the world despite the fact that effective prevention strategies exist. Sub-Saharan Africa remains the hardest-hit region with extremely high HIV prevalence among pregnant women aged 15–24 reported in a number of countries.
- In Asia, the HIV epidemic remains largely concentrated in injecting drug users, men who have sex with men, sex workers, clients of sex workers and their immediate sexual partners. Effective prevention programming coverage in these populations is inadequate.
- Diverse epidemics are under way in Eastern Europe and Central Asia. Injecting drug use is the main driving force behind epidemics across the region.
- In many high-income countries, sex between men plays an important role in the epidemic. Drug injecting plays a varying role. In 2002, it accounted for more than 10% of all reported HIV infections in Western Europe and was responsible for 25% of HIV infections in North America.
- In Latin America and the Caribbean, 11 countries have an estimated national HIV prevalence of 1% or more.

Source: UNAIDS

Asia

An estimated 7.4 million people (range: 5.0–10.5 million) in Asia are living with HIV. Around half a million (range: 330 000–740 000) are believed to have died of AIDS in 2003, and about twice as many—1.1 million—(range: 610 000–2.2 million) are thought to have become newly infected with HIV. Among young people 15–24 years of age, 0.3% of women (range: 0.2–0.3%) and 0.4% of men (range: 0.3–0.5%) were living with HIV by the end of 2003. Epidemics in this region remain largely concentrated among injecting drug users, men who have sex with men, sex workers, clients of sex workers and their sexual partners.

China and India: large epidemics

The region includes the world's most populous countries—China and India—with 2.25 billion people between them. National HIV prevalence in both countries is very low: 0.1% (range: 0.1–0.2%) in China and between 0.4% and 1.3% in India. But a closer focus reveals that both have extremely serious epidemics in a number of provinces, territories and states.

In China, 10 million people may be infected with HIV by 2010 unless effective action is taken. The virus has spread to all 31 provinces, autonomous regions and municipalities, yet each area has its own distinctive epidemic pattern. In some, injecting drug use is fueling HIV spread. Among injecting drug users, HIV prevalence is 35–80% in Xinjiang, and 20% in Guangdong. In other areas, such as Anhui, Henan, and Shandong, HIV gained a foothold in the early 1990s among rural people who were selling blood plasma to supplement their meagre farm incomes. Infection levels of 10–20% have been found, rising to 60% in certain communities. As a result, many people have already died of AIDS.

India has the largest number of people living with HIV outside South Africa—estimated at 4.6 million in 2002. Most infections are acquired sexually, but a small proportion is acquired through injecting drug use. Injecting drug use dominates in Manipur and Nagaland in the north-east of the country, bordering Myanmar and close to the Golden Triangle. In this area, HIV infection levels of 60–75% have

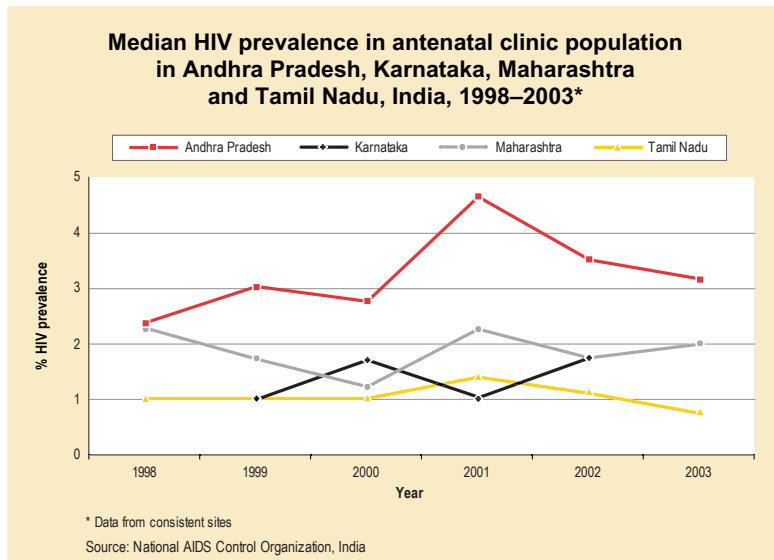


Figure 2

been found among injecting drug users using non-sterile injecting equipment.

In the southern states of Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu, HIV is transmitted mainly through heterosexual sex, and is largely linked to sex work. Indeed, according to selected surveys, more than half of sex workers have become infected with HIV. In all four states, infection levels among pregnant women in sentinel antenatal clinics have remained roughly stable at over 1%, suggesting that a significant number of sex workers' clients may have passed on HIV to their wives (see Figure 2).

In India, knowledge about HIV is still scant and incomplete. In a 2001 national behavioural study of nearly 85 000 people, only 75% of respondents had heard of AIDS and awareness was particularly low among rural women in Bihar, Gujarat and West Bengal. Less than 33% of all respondents had heard of sexually transmitted infections and only 21% were aware of the links between sexually transmitted infections and HIV.

HIV transmission through sex between men is also a major cause for concern in many areas of India. Recent research shows that many men who have sex with men also have sex with women. In 2002, behavioural surveillance in five cities among men who have sex with men found that 27% reported being married, or living with a female sexual partner. In a study conducted in a poor area of Chennai in 2001, 7% of men who have sex with men were HIV-positive. Attention currently focuses on areas with high recorded prevalence,

but there is concern about what might be happening in the vast areas of India for which there are little data.

Risk behaviour on the rise

Elsewhere in South Asia, behavioural information suggests that conditions are ripe for HIV to spread. For example, in Bangladesh, national adult prevalence is less than 0.1%, but there are significant levels of risky behaviour. Large numbers of men continue to buy sex in greater proportions than elsewhere in the region. Moreover, most of these men do not use condoms in their commercial sex encounters and female sex workers report the lowest condom use in the region.

Among injecting drug users, 71% of those who do not participate in needle-exchange programmes use non-sterile injecting equipment, compared with 50% of attendees in central Bangladesh programmes, and 25% in north-west Bangladesh programmes. Drug use in south-east Bangladesh appears to be on the rise (Dhaka, 2003). Surveys show that only about 65% of young people, fewer than 20%

of married women, and just 33% of married men have even heard of AIDS.

In Pakistan, 2001 country-level studies of populations more likely to be exposed to HIV revealed very low prevalence. Pakistan has an estimated adult HIV prevalence of 0.1%. It also has about three million heroin users, many of whom started injecting drugs in the 1990s. The first outbreak of HIV infection among injecting drug users happened in 2003. In Larkana, a small rice-growing town in Sindh province, 10% of 175 injecting drug users tested HIV-positive. A behavioural survey in Quetta found that a high proportion of respondents used non-sterile injecting equipment; and over half of them said they visited sex workers. Few had heard of AIDS, and even fewer had ever used a condom.

In South-East Asia, three countries in particular—Cambodia, Myanmar and Thailand—are experiencing particularly serious epidemics. Cambodia's national HIV prevalence is around 3%—the highest recorded in Asia. Data suggest that there have been some dramatic changes in the shape of Cambodia's epidemic. For instance, infection among brothel-based sex workers fell from 43% in 1998 to 29% in 2002 (see Figure 3).

There have also been sustained declines in prevalence among their customers, who include urban policemen, military conscripts and motorcycle taxi riders. This is believed to be due to increased condom use, as well as fewer visits to sex workers. However, the picture is incomplete: little has been done to monitor the epidemic among drug users, or

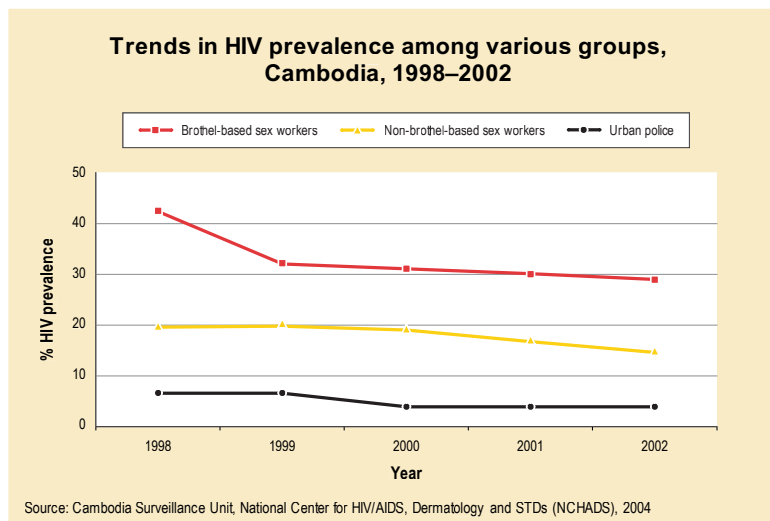


Figure 3

men who have sex with men, even though HIV prevalence among male sex workers in the capital was above 15% when last measured in 2000 (Girault et al., 2004).

Thailand: progress is lagging

In Thailand, the number of new infections has fallen from a peak of around 140 000 a year in 1991, to around 21 000 in 2003. This remarkable achievement came about mainly because men used condoms more, and also reduced their use of brothels. However, Thailand's epidemic has been changing over the years (see Figure 4). There is mounting evidence that HIV is now spreading largely among the spouses and partners of clients of sex workers and among marginalized sections of the population, such as injecting drug users and migrants.

Despite Thailand's indisputable success, coverage of prevention activities is inadequate. This is especially the case among men who have sex with men, and injecting drug users; their infection levels remain high. In Bangkok, over 15% of men who have sex with men who were tested in a 2003 study were HIV-positive, and 21% had not used a condom with their last casual partner.

Estimated number of new HIV infections in Thailand by year and changing mode of transmission

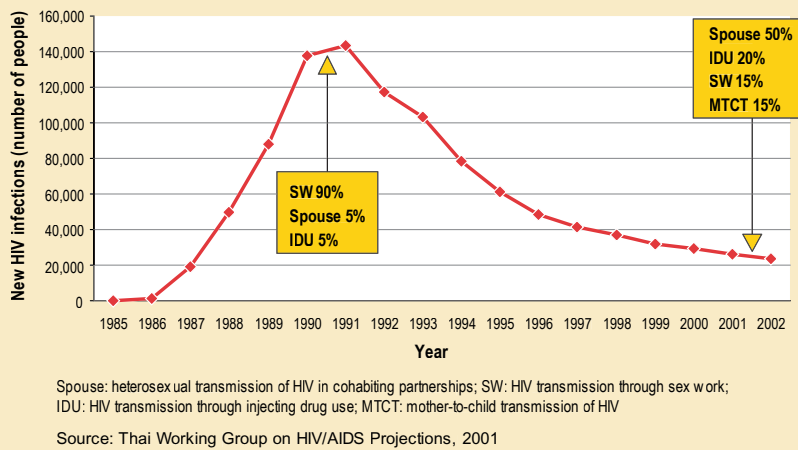


Figure 4

Many young Thai men avoid brothels because they are afraid of contracting HIV. However, the drop in commercial sex patronage appears to have been accompanied by an increase in extramarital and casual sex. Young Thai women also appear more likely to engage in premarital sexual relationships than earlier generations (VanLandingham and Trujillo, 2002). In Chiang Rai province, a study among vocational students revealed that only 7% of males surveyed said they had ever bought sex, but that almost half the students (male and female) were sexually active. Behavioural surveillance between 1996 and 2002 shows a clear rise in the proportion of secondary-school students who are sexually active. It also shows consistently low levels of condom use.

One of the newest epidemics in the region is in Viet Nam. National prevalence is still well below 1%, but, in many provinces, sentinel surveillance has revealed HIV levels of 20% among injecting drug users. Although HIV prevalence among injecting drug users increased significantly in some provinces in the late 1990s, recent outbreaks are now occurring in other provinces such as Can Tho, Hue, Nam Dinh,

Thai Nguyen, and Thanh Hoa. Use of contaminated drug injecting equipment is believed to be responsible for two-thirds of HIV infections, but unsafe sex is also a concern in Viet Nam. In major cities in 2002, prevalence levels of 8–24% were reported among sex workers.

Indonesia's epidemic is currently unevenly distributed across this archipelago nation of 210 million people; six of

the 31 provinces are particularly badly affected. The country's epidemic is also driven largely by the use of contaminated needles and syringes for drug injection. HIV prevalence among its 125 000–196 000 injecting drug users has increased threefold—from 16% to 48% between 1999 and 2003. In 2002 and 2003, HIV prevalence ranged from 66% to 93% among injecting drug users attending testing sites in the capital city, Jakarta. Indonesia's drug users are regularly arrested and sent to jail. In early 2003, 25% of inmates in Jakarta's Cipinang prison were HIV-positive.

Among Indonesia's more than 200 000 female sex workers, HIV prevalence varies widely. In many areas, recent serosurveillance shows that HIV infection in this population group is still rare. But some areas of the country have recorded sharp rises in the past year or two, with reported levels as high as 8–17%. Among transgender sex workers, known as *waria*, data show a sharp increase in HIV prevalence—from 0.3% in 1995 to nearly 22% in 2002 in Jakarta. There is strong evidence that various sexual and injecting-drug-user networks in Indonesia overlap significantly, thus creating an ideal environment for HIV to spread.

Oceania

In Australia, following a long-term decline, the annual number of new HIV diagnoses has gradually increased over a five-year period, from around 650 cases in 1998 to around 800 in 2002. HIV transmission continues to occur mainly through sexual contact between men. Among men diagnosed with newly acquired HIV infection between 1997 and 2002, more than 85% were found to have had a history of sex with another man. Relatively small percentages of newly acquired infections were attributed to a history of injecting drug use (3.4%), or heterosexual contact (8.5%). Similarly, the principal form of HIV transmission in New Zealand continues to be sexual contact between men.

Papua New Guinea, which shares an island with one of Indonesia's worst-affected provinces, Irian Jaya, has the highest prevalence of HIV infection in Oceania. Prevalence is over 1% among pregnant women in the capital, Port Moresby, and in Goroka and Lae. Papua New Guinea's epidemic appears largely heterosexually driven. High levels of other sexually transmitted infections indicate behavioural patterns that would also facilitate HIV transmission beyond sex workers and their clients.

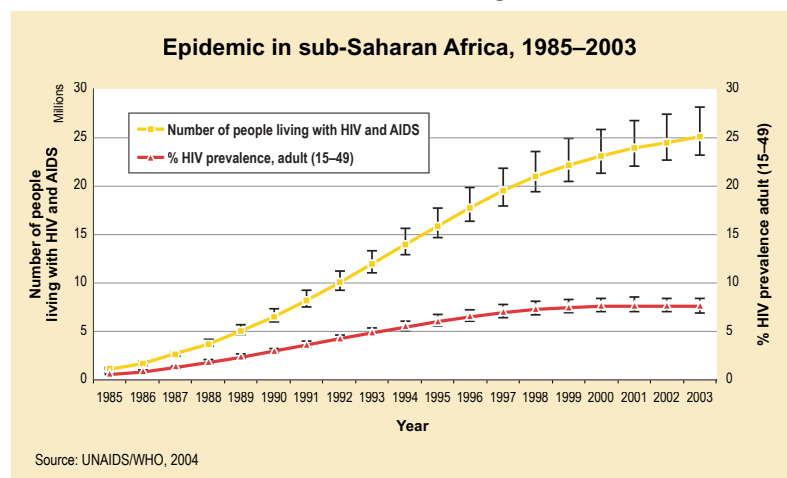
In other islands in Oceania, HIV infection levels are still very low, but levels of sexually transmitted infections are high. A person with a sexually transmitted infection faces a higher risk of contracting and transmitting HIV during sexual encounters. In Vanuatu, pregnant women have chronically high levels of some sexually transmitted infections: 28% have *Chlamydia* and 22% have *Trichomonas* infection. Some 6% of pregnant women are infected with gonorrhoea, and 13% with syphilis. About 40% of the women had more than one sexually transmitted infection. Similarly, in Samoa,

31% of pregnant women had *Chlamydia* and 21% had *Trichomonas* infection. Overall, 43% of pregnant women had at least one sexually transmitted infection.

Sub-Saharan Africa

Sub-Saharan Africa has just over 10% of the world's population, but is home to close to two-thirds of all people living with HIV—some 25 million (range: 23.1–27.9 million). In 2003 alone, an estimated 3 million people (range: 2.6–3.7 million) in the region became newly infected, while 2.2 million (range: 2.0–2.5 million) died of AIDS. Among young people 15–24 years of age, 6.9% of women (range: 6.3–8.3%) and 2.1% of men (range: 1.9–2.5%) were living with HIV by the end of 2003.

Figure 5



Many African countries are experiencing generalized epidemics. This means that HIV is spreading throughout the general population, rather than being confined to populations at higher risk, such as sex workers and their clients, men who have sex with men, and injecting drug users. In sub-Saharan Africa, as the total adult population is growing, the number of people living with HIV is increasing, with the result

that adult prevalence has remained stable in recent years (see Figure 5). However, this overall stabilization of prevalence in the sub-Saharan region conceals important regional variations.

Although prevalence is stable in most countries, it is still rising in a few countries, such as Madagascar and Swaziland, and is declining nationwide in Uganda and in smaller areas in several other countries. Stabilized infection levels in an epidemic often result from rising death rates from AIDS, which conceal a continuing high rate of new infections. Even when HIV prevalence falls, as in Uganda, the number of new infections can remain high.

Within countries, there can be variations in prevalence by region. It has long been recognized that in most countries HIV infection levels are higher in urban than in rural areas. A review of national community-based studies shows that HIV prevalence in urban areas is about twice as high as in rural areas (see Figure 6).

Women face greater risk

African women are being infected at an earlier age than men, and the gap in HIV prevalence between them continues to grow. At the beginning of the epidemic in sub-Saharan Africa, women living with HIV were vastly outnumbered by men. But today there are, on average, 13 infected women for every 10 infected men—up from 12 infected women for every 10 infected men in 2002. The difference between infection levels is more pronounced in urban areas, with 14 women for every 10 men, than in rural areas, where 12 women are infected for every 10 men (Stover, 2004).

The difference in infection levels between women and men is even more pronounced

HIV prevalence among 15–49-year-olds in urban and rural areas, selected sub-Saharan African countries, 2001–2003

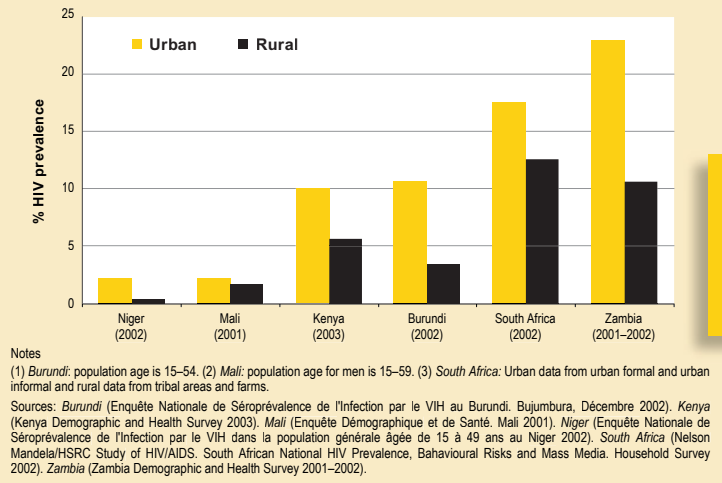


Figure 6

HIV prevalence among 15–24-year-olds in selected sub-Saharan African countries, 2001–2003

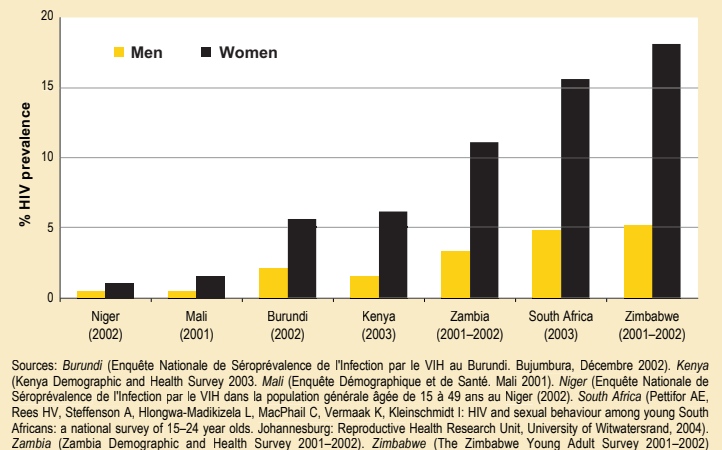


Figure 7

among young people aged 15–24. A review of HIV-infection levels among 15–24-year-olds compared the ratio of young women living with HIV to young men living with HIV (see Figure 7). This ranges from 20 women for every 10 men in South Africa, to 45 women for every 10 men in Kenya and Mali.

In sub-Saharan Africa, heterosexual transmission is by far the predominant mode of HIV transmission. Unsafe injections in health-care settings are believed to be responsible for around 2.5% of all infections. Recently, it

has been suggested that unsafe medical injections account for most HIV transmission in the region (Gisselquist et al., 2002). However, a recent thorough review of the evidence concluded that, while a serious issue, unsafe injections are not common enough to play a dominant role in HIV transmission in sub-Saharan Africa (Schmid et al., 2004).

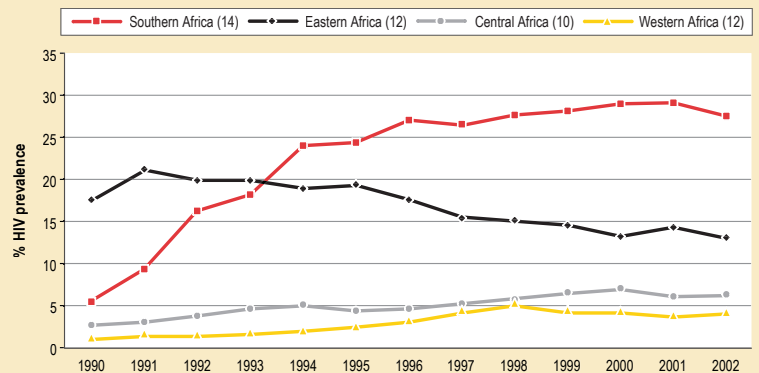
The 'unsafe injections' theory does not take into account the possibility that people sick with HIV-related disease might receive more injections. Moreover, the pattern of injections in health-care settings does not match sub-Saharan Africa's HIV-infection distribution pattern by age and sex. Although the safety of injections must be assured in all health-care settings, effective strategies addressing sexual transmission have the largest potential to turn the epidemic around in this region.

Diverse levels and trends

There is tremendous diversity across the subcontinent in the levels and trends of HIV infection (see Figure 8). Southern Africa remains the worst-affected region in the world, with data from selected antenatal clinics in urban areas in 2002 showing HIV prevalence of over 25%, following a rapid increase from just 5% in 1990. Prevalence among pregnant women in urban areas was 13% in Eastern Africa in 2002, down from around 20% in the early 1990s. During this period, prevalence in West and Central Africa remained stable.

There is no single explanation for why the epidemic is so rampant in Southern Africa. A combination of factors, often working in concert, seems to be responsible. These factors include poverty and social instability that result in family disruption, high levels of other sexually transmitted infections, the low status of women,

Median HIV prevalence (%) in antenatal clinics in urban areas, by subregion, in sub-Saharan Africa, 1990–2002



Source: Adapted from WHO AFRO 2003 Report

Figure 8

sexual violence, and ineffective leadership during critical periods in the spread of HIV. An important factor, too, is high mobility, which is largely linked to migratory labour systems.

The epidemics in Southern Africa have grown rapidly. For example, in Swaziland, the average prevalence among pregnant women was 39% in 2002—up from 34% in 2000 and only 4% in 1992. Moreover, in a number of countries, the penetration of the virus into the general population has exceeded what was considered possible. In Botswana, weighted antenatal clinic prevalence has been sustained at 36% in 2001, 35% in 2002, and 37% in 2003. In South Africa, prevalence among pregnant women was 25% in 2001 and 26.5% in 2002.

In parts of East and Central Africa, there are signs of real decline in infections in some countries. This is most notable in Uganda, where national prevalence dropped to 4.1% (range: 2.8–6.6%) in 2003. In Kampala, prevalence was around 8% in 2002—down from 29% 10 years ago. But even Uganda cannot afford to relax: surveys suggest that today's young people may be less knowledgeable about AIDS than their counterparts in the 1990s.

Mobility and the spread of HIV

Human mobility has always been a major driving force in epidemics of infectious disease. Two recent studies have examined its role in the spread of HIV.

One study on the relationship between mobility, sexual behaviour and HIV infection in an urban population interviewed a representative sample of 1913 men and women in Yaoundé, Cameroon. The study measured mobility over a one-year period. It found HIV prevalence of 7.6% among men who had been away from home for periods longer than 31 days. Prevalence among those who had been away for less than 31 days in the year was 3.4%, while prevalence among those who had not been away from home in the previous 12 months was 1.4%. The association between men's mobility and HIV was apparently related to risky sexual behaviour and remained significant after controlling for other important variables. There was no association between women's mobility and HIV infection (Lydié et al., 2004).

Across Southern Africa, the phenomenon of men migrating to urban centres in search of work and leaving their partners and children at home in rural areas is widespread and has complex historical roots. Researchers interested in the role migration plays in spreading HIV in South Africa studied the pattern of infection in couples in Hlabisa, a rural district of KwaZulu-Natal, in which nearly two-thirds of adult men spent most nights away from home.

The study confirmed that migration does play an important role in spreading HIV but revealed a more complex picture than had been expected, which challenged some basic assumptions. Looking at discordant couples (that is, couples in which just one partner is HIV-positive), the study found that, in nearly 30% of cases, the infected person was the female partner who stayed home in the rural area, while her migrant partner was HIV-negative. In other words, migration may create vulnerability to HIV exposure at both ends of the trail, and the virus may be spread in both directions (Lurie et al., 2003).

The association of mobility with HIV infection may also affect the findings of household surveys. Mobile men, who generally have higher levels of HIV infection, are less likely to be found at home for these surveys. This is especially important in countries with high levels of mobility or migration, and for surveys with a high proportion of absentees.

No other country in the region has so dramatically reversed the epidemic as Uganda, but HIV prevalence among pregnant women has declined in several other places. For example, in the Ethiopian capital, Addis Ababa, prevalence has fallen from a peak of 24% in 1995 to 11% in 2003. Prevalence has also dropped in several sites in Kenya, including in Nairobi, while prevalence in many other sites appears stable. However, not all countries in the region show stabilized levels. In Madagascar, there has been an alarming rise in prevalence among pregnant

women; it increased by almost fourfold since 2001, to reach 1.1% in 2003.

In West Africa, the epidemic is diverse and changeable. National prevalence has remained relatively low in the Sahel countries, with prevalence around 1%. However, the overall figures can conceal very high infection levels among certain population groups. In Senegal, for example, national HIV prevalence is below 1% (range: 0.4–1.7%); yet, among sex workers in two cities, prevalence rose from 5% and 8% respectively in 1992, to 14% and 23% in 2002.

Prevalence levels are highest in Côte d'Ivoire at 7% (range: 4.9–10%), although Abidjan recorded its lowest level (6%) in a decade in 2002.

Benin and Ghana show HIV prevalence in the 2–4% range, with little change over time. Nigeria, with a population of over 120 million, has the highest number of people living with HIV in West Africa. The national prevalence in 2003 was 5.4% (range: 3.6–8%). HIV prevalence among pregnant women ranges from 2.3% in the south-west region to 7% in the north-central region. Variation between states is even larger—from 1.2% in Osun to over 6% in Kaduna and to 12% in Cross River. HIV prevalence among pregnant women is over 1% in all states and is over 5% in 13 states.

North Africa and the Middle East

With the exception of a few countries, systematic surveillance of the epidemic is not well developed in North Africa and the Middle East. Furthermore, there is inadequate monitoring of the situation among populations at higher risk of HIV exposure, such as sex workers, injecting drug users and men who have sex with men. This means that potential epidemics in these populations are being overlooked.

In many countries, available information is based only on case reporting, and suggests that around 480 000 people (range: 200 000–1.4 million) are living with HIV in the region, which has a prevalence of 0.2% of the adult population (range: 0.1–0.6%). Some 75 000 people (range: 21 000–310 000) are believed to have become newly infected in 2003, and AIDS killed about 24 000 (range: 9900–62 000) that year. Among young people aged 15–24, 0.2% of women (range: 0.2–0.5%) and 0.1% of men (range: 0.1–0.2%) were living with HIV by the end of 2003.

Sudan is by far the worst-affected country in the region. Its overall HIV prevalence is nearly 2.3% (range: 0.7–7.2%); the epidemic is most severe in the southern part of the country. Heterosexual intercourse is the principal mode of transmission. The virus is spreading in the general population, infecting women more rapidly than men. Among pregnant women in the south, HIV prevalence is reported to be six-to-eight times higher than around Khartoum in the north. In Somalia, the epidemic is believed to have similar dynamics, but few surveillance data are available.

Morocco has expanded its surveillance system based on pregnant women and patients attending clinics for sexually transmitted infections, to also include sex workers and prisoners. In 2003, prevalence was 0.13% among pregnant women, 0.23% among patients at sexually-transmitted-infection clinics, 0.83% among prisoners and 2.27 % among female sex workers.

In some countries in the region, HIV infection appears concentrated among injecting drug users. Substantial transmission through contaminated injecting equipment has been reported in Bahrain, Libya and Oman. However, there is insufficient behavioural and serosurveillance among injecting drug users, resulting in an incomplete picture of HIV spread.

Unsafe blood transfusion and blood-collection practices still pose a risk of HIV transmission in some countries of the region, although efforts are being made to expand blood screening and sterile procedures in health-care systems to full coverage. In addition, there is concern that the virus may be spreading undetected among men who have sex with men. Male-to-male sexual behaviour is illegal and widely condemned in the region and the lack of surveillance means that knowledge of the epidemic's path in this population is poor.

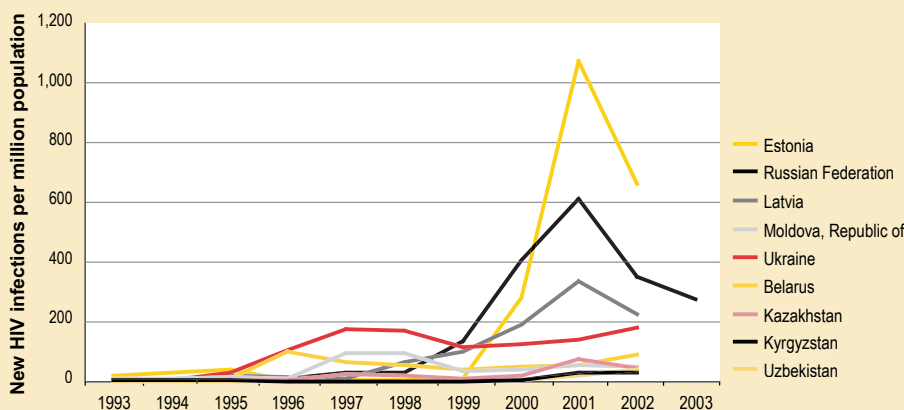
Eastern Europe and Central Asia

Diverse HIV epidemics are under way in Eastern Europe and Central Asia. About 1.3 million people (range: 860 000–1.9 million) were living with HIV at the end of 2003, compared with about 160 000 in 1995. During 2003, an estimated 360 000 people (range: 160 000–900 000) in the region became newly infected, while 49 000 (range: 32 000–71 000) died of AIDS. Among young people aged 15–24, 0.6% of women (range: 0.4–0.8%) and 1.3% of men (range: 0.9–1.8%) were living with HIV by the end of 2003.

and 2003, possibly due to testing saturation among injecting drug users, and changes in testing patterns.

The main driving force behind epidemics across the region is injecting drug use—an activity that has spread explosively in the years of turbulent change since the demise of the Soviet regime. A striking feature is the low age of those infected. More than 80% of HIV-positive people in this region are under 30 years of age. By contrast, in North America and Western Europe, only 30% of infected people are under 30.

Newly diagnosed HIV infections per million population in Eastern European and Central Asian countries, 1996–2003



Sources: (1) HIV/AIDS Surveillance in Europe, EuroHIV mid-year report 2003, No. 69. (2) AIDS Foundation East West

Figure 9

Estonia, Latvia, the Russian Federation and Ukraine are the worst-affected countries in this region, but HIV continues to spread in Belarus, Kazakhstan and Moldova (see Figure 9). For example, in Russia, the number of new cases registered in 2000 (56 630) was almost twice the cumulative number of cases registered since 1987 (French, 2004). However, the number of reported cases was down in 2002

The Russian Federation has the largest number of people living with HIV in the region, estimated at 860 000 (range: 420 000–1.4 million). The picture is uneven; well over half of all reported cases of HIV infection come from just 10 of the 89 administrative territories. Most drug users in Russia are male. But the proportion of females among new HIV cases is growing fast—up from one in

four in 2001, to one in three just a year later. The trend is most obvious in parts of Russia where the epidemic is oldest, and this suggests that sexual intercourse has been playing an increasing role in transmission. From 1998 to 2002, HIV infection levels among pregnant women in Russia increased from less than 0.01% to 0.1%—a 10-fold increase. However, in St Petersburg, HIV seroprevalence increased from 0.013% in 1998 to 1.3% in 2002—a 100-fold increase.

In Ukraine, drug injecting remains the principal mode of transmission, but sexual transmission is becoming increasingly common, especially among injecting drug users and their partners. However, an increasing proportion of those who become infected through unsafe sex have no direct relationship with drug users.

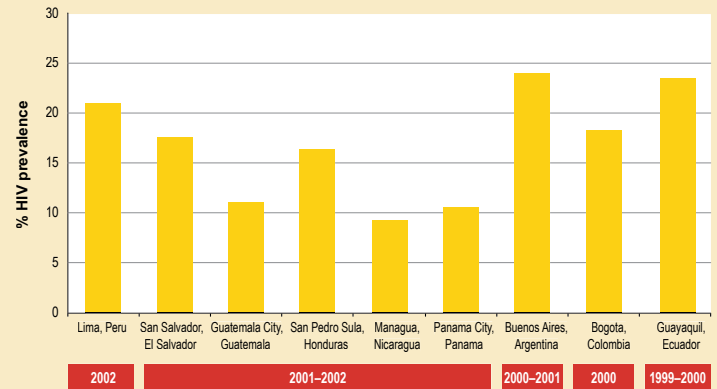
Recently, several Central Asian countries—notably, Kazakhstan, Kyrgyzstan and Uzbekistan—have reported growing numbers of people diagnosed with HIV, most of them injecting drug users. Central Asia is at the crossroads of the main drug-trafficking routes between East and West and, in some places, heroin is said to be cheaper than alcohol.

Throughout the region, estimates and trends are based almost exclusively on case reporting by the health services and the police, since there is little money or infrastructure for systematic surveillance. This raises concerns that HIV may be spreading among people who rarely come into contact with the authorities or testing services. For example, very little is known about how the epidemic affects men who have sex with men, since sex between men is widely stigmatized and rarely acknowledged. However, in Central Europe, sex between men is clearly the predominant mode of HIV transmission in the Czech Republic, Hungary, Slovenia and the Slovak Republic.

Latin America

Around 1.6 million people (range: 1.2–2.1 million) are living with HIV in Latin America. In 2003, around 84 000 people (range: 65 000–110 000) died of AIDS, and 200 000 (range: 140 000–340 000) were newly infected. Among young people 15–24 years of age, 0.5% of women (range: 0.4–0.6%) and 0.8% of men (range: 0.6–0.9%) were living with HIV by the

HIV prevalence among men having sex with men in Latin America, 1999–2002



Sources: (1) Lima data: HIV Infection and AIDS in Americas: lessons and challenges for the future. Provisional Report MAP/EpiNet, 2003 (2) San Salvador, Guatemala City, San Pedro Sula, Managua and Panama City data: Multicenter study of HIV/STD prevalences and socio-behavioral patterns, PASCA/USAID (3) Buenos Aires data: Avila, M., M. Vignoles, S. Maulen, et al., HIV Seroincidence in a Population of Men Having Sex with Men from Buenos Aires, Argentina (4) Bogota data: MS/INS/LCLCS/NMRCDC 2000 study (5) Guayaquil data: Guevara J., Suarez P., Albuja C. y col. Seroprevalencia de infección por VIH e Grupos de Riesgo en Ecuador. Revista medica del Vozandes. Vol 14, No.1:7-10, 2002

Figure 10

end of 2003. In Latin America, HIV infection tends to be highly concentrated among populations at particular risk, rather than being generalized. In most South American countries, almost all infections are caused by contaminated drug-injecting equipment or sex between men. Low national prevalence is disguising some very serious epidemics. For example, in Brazil—the most populous country in the region, and home to more than one in four of all those living with HIV—national prevalence is well below 1%. But infection levels above 60% have been reported among injecting drug users in some cities. Moreover, the picture varies considerably from one part of the country to another. In Puerto Rico, more than half of all infections in 2002 were associated with injecting drug use, and about one-quarter were heterosexually transmitted.

In Central America, injecting drug use plays less of a role, and the virus is spread predominantly through sex. A recent international study shows that HIV prevalence among female sex workers ranges from less than 1% in Nicaragua, 2% in Panama, 4% in El Salvador and 5% in Guatemala, to over 10% in Honduras.

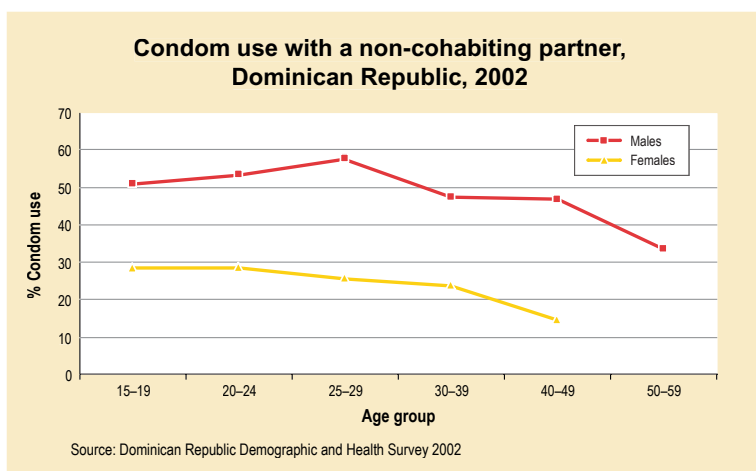
Among men who have sex with men, levels of HIV infection appear to be uniformly high, ranging from 9% in Nicaragua to 24% in Argentina (see Figure 10).

Sex between men is the predominant mode of transmission in several countries, notably Colombia and Peru. However, conditions appear ripe for the virus to spread more widely, as large numbers of men who have sex with men also have sex with women. Peru is a case in point: in a survey of young men and women (aged 18–29), 9% of men indicated that at least one of their last three sexual partners was a man and that condoms were not used in 70% of those contacts.

Caribbean

Around 430 000 people (range: 270 000–760 000) are living with HIV in the Caribbean. In 2003, around 35 000 people (range: 23 000–59 000) died of AIDS, and 52 000 (range: 26 000–140 000) were newly infected. Among young people 15–24 years of age, 2.9% of women (range: 2.4–5.8%) and 1.2% of men (range: 1.0–2.2%) were living with HIV by the end of 2003.

Figure 11



Of the seven countries in the Caribbean region, three have national HIV prevalence levels of at least 3%: the Bahamas, Haiti, and Trinidad and Tobago. Barbados is at 1.5% (range: 0.4–5.4%) and Cuba's prevalence is well below 1%. The Caribbean epidemic is predominantly heterosexual, and is concentrated among sex workers in many places. But the virus is also spreading in the general population. The worst-affected country is Haiti, where national prevalence is around 5.6% (range: 2.5–11.9%). However, HIV spread is uneven: sentinel surveillance reveals prevalence ranging from 13% in the north-west of the country, to 2–3% in the south.

Haiti shares the island of Hispaniola with the Dominican Republic, which also has a serious HIV epidemic. However, in the Dominican Republic, previously high prevalence has declined, due to effective prevention efforts that encouraged people to reduce the number of sexual partners and increase condom use (see Figure 11). Over 50% of males aged 15–29 used a condom with a non-cohabiting partner. In the capital, Santo Domingo, prevalence among pregnant women declined from around 3% in 1995 to below 1% at the end of 2003. But high levels are still reported elsewhere, and range from under 1% to nearly 5%. In 2000, HIV prevalence among female sex workers ranged from 4.5% in the eastern province tourist centre of La Romana, to 12.4% in the southern province of Bani.

High-income countries

An estimated 1.6 million people (range: 1.1–2.2 million) are living with HIV in these countries. Around 64 000 (range: 34 000–140 000) became newly infected in 2003, and 22 000 (range: 15 000–31 000) died of AIDS. Among young people 15–24 years of age, 0.1% of

women (range: 0.1–0.2%) and 0.2% of men (range: 0.2–0.3%) were living with HIV by the end of 2003.

In high-income countries, unlike elsewhere, the great majority of people who need antiretroviral treatment do have access to it. This means that they are staying healthy and surviving longer than infected people elsewhere. In the United States, deaths due to AIDS have continued to decline because people have broad access to antiretroviral therapy. There were 16 371 reported deaths in 2002, down from 19 005 in 1998. In Western Europe, the number of reported deaths among AIDS patients also continued to decline—from 3373 in 2001 to 3101 in 2002.

In the United States, about half of newly reported infections in recent years have been among African Americans. They represent 12% of the population, but their HIV prevalence is 11 times higher than among whites.

In New York City, a new system for tracking the epidemic began in June 2000. It added HIV infection reporting to the previously existing system of AIDS case reporting. A recently published analysis of the first full year of data from 2001 has revealed that over 1% of the city's adult population, and almost 2% of Manhattan's, are HIV-positive.

In many high-income countries, sex between men plays an important role in the epidemic. For example, it is the most common route of infection in Australia, Canada, Denmark, Germany, Greece, New Zealand and the United States.

In recent years, heterosexual transmission in the industrialized world has sharply increased. In several western European countries, including Belgium, Norway and the United Kingdom, the increase in heterosexually transmitted infections is dominated by people from countries with generalized epidemics, predominantly sub-Saharan Africa. Because the countries with the largest epidemics in Western Europe (Italy and Spain) do not yet have national HIV-reporting systems, it is unclear whether this trend is occurring in other regions of Western Europe.

Drug injecting plays a varying role in spreading HIV in high-income countries. In 2002, it accounted for more than 10% of all reported HIV infections in Western Europe (in Portugal it was responsible for over 50% of cases). In Canada and the United States, about 25% of HIV infections are attributed to drug injecting. Infections transmitted through contaminated injecting equipment are particularly frequent among indigenous people, who are often among the poorest and most marginalized inhabitants of the industrialized world. 