

# AIDS epidemic update

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UNAIDS - 20 avenue Appia - 1211 Geneva 27 - Switzerland  
Telephone: (+41 22) 791 46 51 - Fax: (+41 22) 791 41 87  
E-mail: [unaids@unaids.org](mailto:unaids@unaids.org) - Internet: <http://www.unaids.org>

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# GLOBAL SUMMARY OF THE HIV/AIDS EPIDEMIC, DECEMBER 2001

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Number of people living with HIV/AIDS	<b>Total</b>	<b>40 million</b>
	Adults	37.2 million
	<i>Women</i>	<i>17.6 million</i>
	Children under 15 years	2.7 million

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People newly infected with HIV in 2001	<b>Total</b>	<b>5 million</b>
	Adults	4.3 million
	<i>Women</i>	<i>1.8 million</i>
	Children under 15 years	800 000

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AIDS deaths in 2001	<b>Total</b>	<b>3 million</b>
	Adults	2.4 million
	<i>Women</i>	<i>1.1 million</i>
	Children under 15 years	580 000

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## GLOBAL OVERVIEW

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Twenty years after the first clinical evidence of acquired immunodeficiency syndrome was reported, AIDS has become the most devastating disease humankind has ever faced. Since the epidemic began, more than 60 million people have been infected with the virus. HIV/AIDS is now the leading cause of death in sub-Saharan Africa. Worldwide, it is the fourth-biggest killer.

At the end of 2001, an estimated 40 million people globally were living with HIV. In many parts of the developing world, the majority of new infections occur in young adults, with young women especially vulnerable. About one-third of those currently living with HIV/AIDS are aged 15–24. Most of them do not know they carry the virus. Many millions more know nothing or too little about HIV to protect themselves against it.

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### EASTERN EUROPE AND CENTRAL ASIA — STILL THE FASTEST-GROWING EPIDEMIC

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Eastern Europe—especially the Russian Federation—continues to experience the fastest-growing epidemic in the world, with the number of new HIV infections rising steeply. In 2001, there were an estimated 250 000 new infections in this region, bringing to 1 million the number of people living with HIV. Given the high levels of other sexually transmitted infections, and the high rates of injecting drug use among young people, the epidemic looks set to grow considerably.

### ASIA AND THE PACIFIC — NARROWING WINDOWS OF OPPORTUNITY

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In Asia and the Pacific, an estimated 7.1 million people are now living with HIV/AIDS. The epidemic claimed the lives of 435 000 people in the region in 2001. The apparently low national prevalence rates in many countries in this region are dangerously deceptive. They hide localized epidemics in different areas, including some of the world's most populous countries. There is a serious threat of major, generalized epidemics. But, as Cambodia and Thailand have shown, prompt, large-scale prevention programmes can hold the epidemic at bay. In Cambodia, concerted efforts, driven by strong political leadership and public commitment, lowered HIV prevalence among pregnant women to 2.3% at the end of 2000—down by almost a third from 1997.

### SUB-SAHARAN AFRICA — THE CRISIS GROWS

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AIDS killed 2.3 million African people in 2001. The estimated 3.4 million new HIV infections in sub-Saharan Africa in the past year mean that 28.1 million Africans now live with the virus. Without adequate treatment and care, most of them will not survive the next decade. Recent antenatal clinic data show that several parts of southern Africa have now joined Botswana with prevalence rates among pregnant women exceeding 30%. In West Africa, at least five countries are experiencing serious epidemics, with adult HIV prevalence exceeding 5%. However, HIV prevalence among adults continues to fall in Uganda, while there is evidence that prevalence among young people (especially women) is dropping in some parts of the continent.

### THE MIDDLE EAST AND NORTH AFRICA — SLOW BUT MARKED SPREAD

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In the Middle East and North Africa, the number of people living with HIV now totals 440 000. The epidemic's advance is most marked in countries (such as Djibouti, Somalia and the Sudan) that are already experiencing complex emergencies. While HIV prevalence continues to be low in most countries in the region, increasing numbers of HIV infections are being detected in several countries, including the Islamic Republic of Iran, the Libyan Arab Jamahiriya and Pakistan.

## Regional HIV/AIDS statistics and features, end of 2001

Region	Epidemic started	Adults and children living with HIV/AIDS	Adults and children newly infected with HIV	Adult prevalence rate (*)	% of HIV-positive adults who are women	Main mode(s) of transmission (#) for adults living with HIV/AIDS
Sub-Saharan Africa	late '70s early '80s	28.1 million	3.4 million	8.4%	55%	Hetero
North Africa & Middle East	late '80s	440 000	80 000	0.2%	40%	Hetero, IDU
South & South-East Asia	late '80s	6.1 million	800 000	0.6%	35%	Hetero, IDU
East Asia & Pacific	late '80s	1 million	270 000	0.1%	20%	IDU, hetero, MSM
Latin America	late '70s early '80s	1.4 million	130 000	0.5%	30%	MSM, IDU, hetero
Caribbean	late '70s early '80s	420 000	60 000	2.2%	50%	Hetero, MSM
Eastern Europe & Central Asia	early '90s	1 million	250 000	0.5%	20%	IDU
Western Europe	late '70s early '80s	560 000	30 000	0.3%	25%	MSM, IDU
North America	late '70s early '80s	940 000	45 000	0.6%	20%	MSM, IDU, hetero
Australia & New Zealand	late '70s early '80s	15 000	500	0.1%	10%	MSM
<b>TOTAL</b>		<b>40 million</b>	<b>5 million</b>	<b>1.2%</b>	<b>48%</b>	

\* The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 2001, using 2001 population numbers.

# Hetero (heterosexual transmission), IDU (transmission through injecting drug use), MSM (sexual transmission among men who have sex with men).

### HIGH-INCOME COUNTRIES — RESURGENT EPIDEMIC THREATENS

A larger epidemic also threatens to develop in the high-income countries, where over 75 000 people acquired HIV in 2001, bringing to 1.5 million the total number of people living with HIV/AIDS. Recent advances in treatment and care in these countries are not being consistently matched with enough progress on the prevention front. New evidence of rising HIV infection rates in North America, parts of Europe and Australia is emerging. Unsafe sex, reflected in outbreaks of sexually transmitted infections, and widespread injecting drug use are propelling these epidemics, which, at the same time, are shifting more towards deprived communities.

### LATIN AMERICA AND THE CARIBBEAN — DIVERSE EPIDEMICS

An estimated 1.8 million adults and children are living with HIV in Latin America and the Caribbean—a region that is experiencing diverse epidemics. With an average adult HIV prevalence of approximately 2%, the Caribbean is the second-most affected region in the world. But relatively low national HIV prevalence rates in most South and Central American countries mask the fact that the epidemic is already firmly lodged among specific population groups. These countries can avert more extensive epidemics by stepping up their responses now.

## STRONGER COMMITMENT

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Greater and more effective prevention, treatment and care efforts need to be brought to bear. During the year 2001, the resolve to do so became stronger than ever.

History was made when the United Nations General Assembly Special Session on HIV/AIDS in June 2001 set in place a framework for national and international accountability in the struggle against the epidemic. Each government pledged to pursue a series of many benchmark targets relating to prevention, care, support and treatment, impact alleviation, and children orphaned and made vulnerable by HIV/AIDS, as part of a comprehensive AIDS response. These targets include the following:

- To reduce HIV infection among 15–24-year-olds by 25% in the most affected countries by 2005 and, globally, by 2010;
- By 2005, to reduce the proportion of infants infected with HIV by 20%, and by 50% by 2010;
- By 2003, to develop national strategies to strengthen health-care systems and address factors affecting the provision of HIV-related drugs, including affordability and pricing. Also, to urgently make every effort to provide the highest attainable standard of treatment for HIV/AIDS, including antiretroviral therapy in a careful and monitored manner to reduce the risk of developing resistance;
- By 2003, to develop and, by 2005, implement national strategies to provide a supportive environment for orphans and children infected and affected by HIV/AIDS;
- By 2003, to have in place strategies that begin to address the factors that make individuals particularly vulnerable to

HIV infection, including under-development, economic insecurity, poverty, lack of empowerment of women, lack of education, social exclusion, illiteracy, discrimination, lack of information and/or commodities for self-protection, and all types of sexual exploitation of women, girls and boys;

- By 2003, to develop multisectoral strategies to address the impact of the HIV/AIDS epidemic at the individual, family, community and national levels.

Increasingly, other stakeholders, including nongovernmental organizations and private companies worldwide, are making clear their determination to boost those efforts.

New resources are being marshalled to lift spending to the necessary levels, which UNAIDS estimates at US\$7–10 billion per year in low- and middle-income countries. The global fund called for by United Nations Secretary-General Kofi Annan has attracted about US\$1.5 billion in pledges. In addition, the World Bank plans major new loans in 2002 and 2003 for HIV/AIDS, with a grant equivalency of over US\$400 million per year. All the while, more countries are boosting their national budget allocations towards AIDS responses. Several ‘least developed countries’ have received, or are in line for, debt relief that could help them increase their spending on HIV/AIDS.

More private companies are also stepping up their efforts. Guiding some of their interventions is a new international code of conduct on AIDS and the workplace, which was ratified earlier this year by members of the International Labour Organization (the new, eighth cosponsoring organization of UNAIDS).

The challenge now is to build on the new-found commitment and convert it into sustained action—both in the countries and regions already hard hit, and in those where the epidemic began later but is gathering steam.



## BEYOND COMPLACENCY

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The diversity of HIV's spread worldwide is striking. But in many regions of the world, the HIV/AIDS epidemic is still in its early stages. While 16 sub-Saharan African countries reported overall adult HIV prevalence of more than 10% by the end of 1999, there remained 119 countries of the world where adult HIV prevalence was less than 1%.

Low national prevalence rates can, however, be very misleading. They often disguise serious epidemics that are initially concentrated in certain localities or among specific population groups and that threaten to spill over into the wider population.

Nationwide prevalence in Myanmar, for instance, has been put at 2%. Yet, national HIV rates as high as 60% are being registered among injecting drug users and almost 40% among sex workers. Moreover, in vast, populous countries such as China, India and Indonesia (where individual provinces or states often have more inhabitants than most countries), national prevalence all but loses meaning. The Indian states of Maharashtra, Andhra Pradesh and Tamil Nadu (each with at least 55 million inhabitants), have registered HIV prevalence rates of over 2% among pregnant women in one or two sentinel sites and over 10% among sexually transmitted infection patients—rates far higher than the national average of less than 1%. In the absence of vigorous prevention efforts, there is considerable scope for further HIV spread. Even HIV prevalence rates as low as 1% or 2% across Asia and the Pacific (which is home to about 60% of the world's population) would cause the number of people living with HIV/AIDS to soar.

All countries have, at some point in their epidemic histories, been low-prevalence countries. HIV prevalence among pregnant women attending antenatal clinics in South Africa was less than 1% in 1990 (almost a decade after the first HIV diagnosis there in 1982). Yet, a decade later, the country was experiencing one of the fastest growing

epidemics in the world, with prevalence among pregnant women at 24.5% by the end of 2000.

Low-prevalence settings present special challenges. At the same time, they offer opportunities for averting large numbers of future infections. Today, we are seeing rapidly emerging epidemics in several countries that had previously recorded relatively low rates of HIV infection—proof that the epidemic can emerge quickly and unexpectedly, and that no society is immune. In Indonesia, where recorded infection rates were negligible until very recently (even among some high-risk groups), there is new evidence of striking increases in the infection rates of HIV. Prevalence has risen significantly among female sex workers in three cities at opposite ends of the Indonesian archipelago, with similar increases also evident at other sites. Among women working in massage parlours in the capital, Jakarta, HIV prevalence was measured at 18% in 2000. Blood donor data now show a tenfold rise in HIV prevalence since 1998 (see Figure 1). Elsewhere, longer-standing epidemics could be on the verge of spreading more rapidly and widely. Nepal and Viet Nam, for example, have registered marked increases in HIV infection in recent years, while in China—home to a fifth of the world's people—the virus seems to be moving into new groups of the population.

In other areas of the world, too, time is fast running out if much larger AIDS epidemics are to be averted. For instance, in the Russian Federation, only 523 HIV infections had been diagnosed by 1991. A decade later, that number had climbed to more than 129 000. In a country where injecting drug use among young people is rife (and there are high levels of sexually transmitted infections in the wider population), there is an urgent need for action to avoid an even larger number of new infections.

## PROMPT, FOCUSED PREVENTION

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Countries that still have low levels of HIV infection should avert the epidemic's potential spread, rather than take comfort

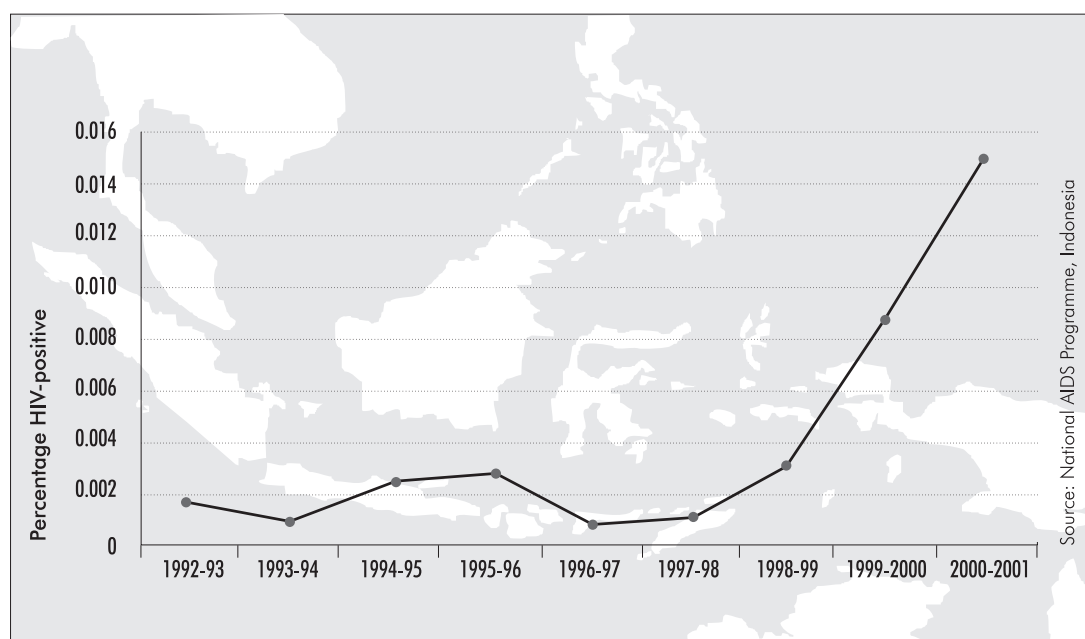
from current infection rates. The key to success in low-prevalence settings where HIV is not yet a risk to the wider population is to enable the most vulnerable groups to adopt safer sexual and drug-injecting behaviour, interrupt the virus's spread among and between those groups, and buy time to bolster the wider population's ability to protect itself against the virus.

This means, first, determining which population groups are at highest risk of infection and, second, mustering the political will to safeguard them against the epidemic. At the same time, it is vital to defuse the stigma and blame so often attached to vulnerable

groups and to deepen the wider public's knowledge and understanding of the epidemic.

Young people are a priority on this front. Twenty years into the epidemic, millions of young people know little, if anything, about HIV/AIDS. According to UNICEF, over 50% of young people (aged 15–24) in more than a dozen countries, including Bolivia, Botswana, Côte d'Ivoire, the Dominican Republic, Ukraine, Uzbekistan and Viet Nam, have never heard of AIDS or harbour serious misconceptions about how HIV is transmitted. Providing young people with candid information and life skills is a prerequisite for success in any AIDS response.

Figure 1. HIV prevalence in blood donations in Indonesia, 1992-2001



## RECLAIMING THE FUTURE

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The impact of the AIDS epidemic is being increasingly felt in many countries across the world. Southern Africa continues to be the worst affected area, with adult prevalence rates still rising in several countries. But elsewhere, also, in countries often already burdened by huge socioeconomic challenges, AIDS threatens human welfare, developmental progress and social stability on an unprecedented scale.

The AIDS epidemic has a profound impact on growth, income and poverty. It is estimated that the annual per capita growth in half the countries of sub-Saharan Africa is falling by 0.5–1.2% as a direct result of AIDS. By 2010, per capita GDP in some of the hardest hit countries may drop by 8% and per capita consumption may fall even farther. Calculations show that heavily affected countries could lose more than 20% of GDP by 2020. Companies of all types face higher costs in training, insurance, benefits, absenteeism and illness. A survey of 15 firms in Ethiopia has shown that, over a five-year period, 53% of all illnesses among staff were AIDS-related.

## DEVASTATING CYCLES

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An index of existing social and economic injustices, the epidemic is driving a ruthless cycle of impoverishment. People at all income levels are vulnerable to the economic impact of HIV/AIDS, but the poor suffer most acutely. One quarter of households in Botswana, where adult HIV prevalence is over 35%, can expect to lose an income earner within the next 10 years. A rapid increase in the number of very poor and destitute families is anticipated. Per capita household income for the poorest quarter of households is expected to fall by 13%, while every income earner in this category can expect to take on four more dependents as a result of HIV/AIDS.

In sub-Saharan Africa, the economic hardships of the past two decades have left

three-quarters of the continent's people surviving on less than US\$2 a day. The epidemic is deepening their plight. Typically, this impoverished majority has limited access to social and health services, especially in countries where public services have been cut back and where privatized services are unaffordable.

In hard-hit areas, households cope by cutting their food consumption and other basic expenditures, and tend to sell assets in order to cover the costs of health care and funerals.

Studies in Rwanda have shown that households with a HIV/AIDS patient spend, on average, 20 times more on health care annually than households without an AIDS patient. Only a third of those households can manage to meet these extra costs.

According to a new United Nations Food and Agricultural Organization (FAO) report, seven million farm workers have died from AIDS-related causes since 1985 and 16 million more are expected to die in the next 20 years. Agricultural output—especially of staple products—cannot be sustained in such circumstances. The prospect of widespread food shortages and hunger is real. Some 20% of rural families in Burkina Faso are estimated to have reduced their agricultural work or even abandoned their farms because of AIDS. Rural households in Thailand are seeing their agricultural output shrink by half. In 15% of these instances, children are removed from school to take care of ill family members and to regain lost income. Almost everywhere, the extra burdens of care and work are deflected onto women—especially the young and the elderly.

Families often remove girls from school to care for sick relatives or assume other family responsibilities, jeopardizing the girls' education and future prospects. In Swaziland, school enrolment is reported to have fallen by 36% due to AIDS, with girls most affected. Enabling young people—especially girls—to attend school and, hopefully, complete their education, is essential. South Africa's and

Malawi's universal free primary education systems point the way. Schemes to provide girls with second-chance schooling are another option.

## DEVELOPMENT AND STABILITY

### THREATENED

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Meanwhile, the epidemic is claiming huge numbers of teachers, doctors, extension workers and other human resources. In some countries, health-care systems are losing up to a quarter of their personnel to the epidemic. In Malawi and Zambia, for example, five-to-six-fold increases in health worker illness and death rates have reduced personnel, increasing stress levels and workload for the remaining employees.

Teachers and students are dying or leaving school, reducing both the quality and efficiency of educational systems. In 1999 alone, an estimated 860 000 children lost their teachers to AIDS in sub-Saharan Africa. In the Central African Republic, AIDS was the cause of 85% of the 300 teacher deaths that occurred in 2000. Already, by the late 1990s, the toll had forced the closure of more than 100 educational establishments in that country. In Guatemala, studies have shown that more than a third of children orphaned by HIV/AIDS drop out of school. In Zambia, teacher deaths caused by AIDS are equivalent to about half the total number of new teachers the country manages to train annually.

Replacing skilled professionals is a top priority, especially in low-income countries where governments depend heavily on a small number of policy-makers and managers for public management and core social services. In heavily affected countries, losing such personnel reduces capacity, while raising the costs of recruitment, training, benefits and replacements. A successful response to AIDS requires that essential public services, such as education, health, security, justice and institutions of democratic governance, be maintained. Each sector has to take account of HIV/AIDS in its own development plans

and introduce measures to sustain public sector functions. Such actions might include fast-track training, as well as the recruitment of key civil servants and the reallocation of budgets towards the most essential services.

Countries that explore innovative ways of maintaining and rebuilding capacity in government will be better equipped to contain the epidemic. Equally valuable are labour and social legislation changes that boost people's rights, more effective and equitable ways of delivering social services, and more extensive programmes that benefit those worst hit by the epidemic (especially women and orphans).

## COPING WITH CRISIS

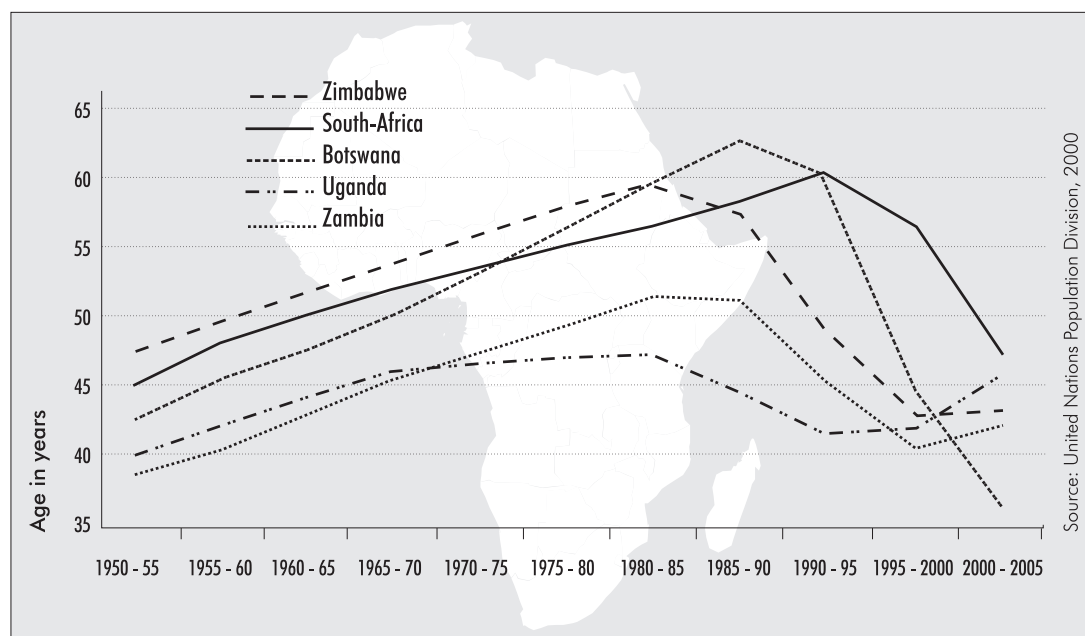
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In the worst-affected countries, steep drops in life expectancies are beginning to occur, most drastically in sub-Saharan Africa, where four countries (Botswana, Malawi, Mozambique and Swaziland) now have a life expectancy of less than 40 years. Were it not for HIV/AIDS, average life expectancy in sub-Saharan Africa would be approximately 62 years; instead, it is about 47 years. In South Africa, it is estimated that average life expectancy is only 47 years, instead of 66, if AIDS were not a factor (see Figure 2). And, in Haiti, it has dropped to 53 years (as opposed to 59). The number of African children who had lost their mother or both parents to the epidemic by the end of 2000—12.1 million—is forecast to more than double over the next decade. These orphans are especially vulnerable to the epidemic, and the impoverishment and precariousness it brings.

As more infants are born HIV-positive in badly affected countries, child mortality rates are also rising. In the Bahamas, it is estimated that some 60% of deaths among children under the age of five are due to AIDS, while, in Zimbabwe, the figure is 70%.

Unequal access to affordable treatment and adequate health services is one of the main factors accounting for drastically different survival rates among those living with

Figure 2. Changes in life expectancy in selected African countries with high HIV prevalence, 1950-2005



HIV/AIDS in rich and poor countries and communities. Public pressure and UN-sponsored engagements with pharmaceutical corporations (through the Accelerating Access Initiative), along with competition from generic drug manufacturers, has helped drive antiretroviral drug prices down. But prices remain too high for public-sector budgets in low-income countries where, in addition, health infrastructures are too frail to bring life-prolonging treatments to the millions who need it.

Backed by a strong social movement, Brazil's government has shown that those barriers are not impregnable and that the use of cheaper drugs can be an important element of a successful response. Along with Brazil, countries such as Argentina and Uruguay also guarantee HIV/AIDS patients free antiretroviral drugs. In Africa, several governments are launching programmes to provide similar drugs through their public health systems, albeit on a limited scale, at first.

In all such cases, though, clearing the hurdle of high prices is essential but not enough. Also indispensable are functioning and affordable health systems. Massive international support is needed to help countries meet that challenge.

## EASTERN EUROPE AND CENTRAL ASIA

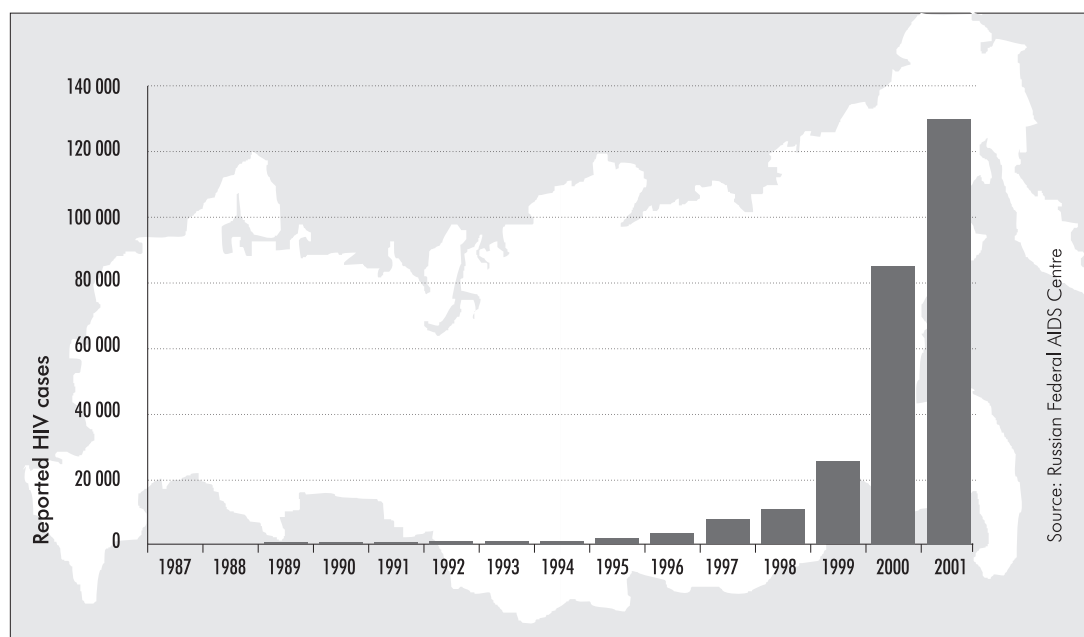
HIV incidence is rising faster in this region than anywhere else in the world. There were an estimated 250 000 new infections in 2001, raising to 1 million the number of people living with HIV.

In the Russian Federation, the startling increase in HIV infections of recent years is continuing, with new reported diagnoses almost doubling annually since 1998. In 2001, more than 40 000 new HIV-positive diagnoses were reported in the first six months. The total number of HIV infections reported since the epidemic began came to more than 129 000 in June 2001—up from the 10 993 reported for the end of 1998 (see Figure 3). The actual number of people now living with HIV in the Russian Federation is estimated to be many times higher than these reported figures.

At 1%, the adult HIV prevalence rate in Ukraine is the highest in the region. While injecting drug use is currently responsible for three-quarters of HIV infections in Ukraine, the proportion of sexually transmitted HIV infections is increasing. In Estonia, reported HIV infections have soared from 12 in 1999 to 1112 in the first nine months of 2001. Outbreaks of HIV-related injecting drug use are also being reported in several Central Asian republics, including Kazakhstan and, most recently, Kyrgyzstan, Tajikistan and Uzbekistan.

Given the current evidence, a much larger and more generalized epidemic is a real threat. However, the epidemic is still at an early stage in the region and massive prevention efforts could curtail its scale and

Figure 3. Cumulative number of reported HIV cases in the Russian Federation, 1987-2001 (as of June 2001)



extent. Such efforts would require a comprehensive response to reduce risky sexual and drug-injecting behaviour among young people, and tackle the socioeconomic and other factors that promote the spread of the virus.

In the Russian Federation and other parts of the former Soviet Union, the vast majority of reported HIV infections are related to injecting drug use, which has become unusually widespread among young people, especially young men. An estimated 1% of the population of those countries is injecting drugs. Given the high odds of transmission through needle sharing, the fact that the young people are also sexually active, and the high levels of sexually transmitted infections in the wider population, a huge epidemic may be imminent. As well, the male-female ratio among newly detected HIV cases has narrowed from 4:1 to 2:1, indicating that young women are increasingly at risk of HIV infection.

Several factors are creating a fertile setting for the epidemic: mass unemployment and economic insecurity beset much of the region; social and cultural norms are being increasingly liberalized; and public health services are steadily disintegrating.

Reported rates of other sexually transmitted infections are very high and compound the odds of HIV being transmitted through unprotected sex. The incidence of syphilis (the reported number of infections in a given year) in the Russian Federation in 2000 stood at 157 per 100 000 persons, compared to 4.2 per 100 000 persons in 1987. Similar general trends are visible in the Baltic States, Belarus, the Central Asian republics, the Republic of Moldova, and Ukraine.

Unprecedented numbers of young people are not completing their secondary schooling. With jobs in short supply, many are at special risk of joining groups of vulnerable populations, by resorting to injecting drug use and (regular or occasional) sex work. Among young people in the Russian Federation, for instance, drug use is almost three times more

prevalent than it was five years ago. Drug use is steadily becoming a more frequent feature of secondary school life in many cities. Needle sharing is common practice among injecting drug users—and a common cause of HIV transmission. Surveys in some cities in the Russian Federation show that most sex workers are 17–23 years old and that condom use in the sex industry is erratic, at best.

HIV risk is high among men who have sex with men, among whom multiple partners and unprotected sex are widespread. While laws penalizing homosexual activities with imprisonment have been struck off the statute books in the Russian Federation and in most (though not all) other countries of the former Soviet Union, men who have sex with men remain highly stigmatized socially. Currently, there are very few examples of HIV prevention activities targeting this group.

In south-eastern Europe, rates of sexually transmitted infections and injecting drug use are also on the rise, although still at considerably lower levels than elsewhere in the region. Drug trafficking, along with the economic and psychological aftermath of recent conflicts, are increasing the likelihood that HIV epidemics will emerge in this region.

In Central Europe, there is cause for tempered optimism. There is little indication, at this stage, of a potential rise in HIV infections. By mounting a strong national response, the Polish Government has successfully curtailed the epidemic among injecting drug users and prevented it from gaining a foothold in the general population. Prevalence remains low in countries such as the Czech Republic, Hungary and Slovenia, where well-designed national HIV/AIDS programmes are in operation.

More than 150 HIV/AIDS prevention projects among injecting drug users have been set up across the region in the past five years, along with projects focusing on other vulnerable populations such as prison inmates, sex workers and men who have sex with men. Although comparatively few in number, many

of these projects are laying the foundations for larger, more extensive prevention work.

At the same time, there are signs of growing political commitment in the region. Following the UN General Assembly Special Session on HIV/AIDS, countries of the Commonwealth of Independent States are developing a special declaration on the epidemic and are preparing a regional work plan to guide a coordinated response. In countries such as Bulgaria, Romania, the Russian Federation and Ukraine, the budgets of national AIDS programmes have increased substantially. The strong partnerships being forged between the government, private sector and nongovernmental organizations in Ukraine are setting a positive example for the rest of the region. In June 2001, the President of Ukraine declared 2002 the year of the fight against AIDS.

Vigorous prevention efforts are needed to equip young people with the knowledge and services (such as HIV/AIDS information, condom promotion, life-skills training) they need to protect themselves against the virus. Given that young people (especially women) are bearing the brunt of the economic transitions in the region, socioeconomic programmes that can reduce the vulnerability of young men and women are also vital.

Special steps are needed to include HIV-related life-skills education in school curricula and to extend peer education to vulnerable young people who are in institutions or out of school and employment. Much more comprehensive efforts are needed to address the complex issues related to HIV and injecting drug use among young people.





## ASIA AND THE PACIFIC

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HIV/AIDS was late coming to Asia. Until the late 1980s, no country in the region had experienced a major epidemic and, in 1999, only Cambodia, Myanmar and Thailand had documented significant nationwide epidemics. This situation is now rapidly changing. In 2001, 1.07 million adults and children were newly infected with HIV in Asia and the Pacific, bringing to 7.1 million the total number of people living with HIV/AIDS in this region. Of particular concern are the marked increases registered in some of the world's most heavily populated countries.

Surveillance data on China's huge population are sketchy, but the country's health ministry estimates that about 600 000 Chinese were living with HIV/AIDS in 2000. Given the recently observed rises in reported HIV infections and infection rates in many sub-populations in several parts of the country, the total number of people living with HIV/AIDS in China could well have exceeded one million by late 2001. Reported HIV infections rose by 67.4% in the first six months of 2001, compared with the previous year, according to the country's ministry of health. Increasing evidence has emerged of serious epidemics in Henan Province in central China, where many tens of thousands (and possibly more) of rural villagers have become infected since the early 1990s by selling their blood to collecting centres that did not follow basic blood donation safety procedures.

HIV levels in specific groups are known to be rising in several other areas. Seven Chinese provinces were experiencing serious local HIV epidemics in 2001, with prevalence higher than 70% among injecting drug users in a number of areas, such as Yili Prefecture in Xinjiang and Ruili County in Yunnan. Another nine provinces are possibly on the brink of HIV epidemics

among injecting drug users because of very high rates of needle sharing. There are also signs of heterosexually transmitted HIV epidemics in at least three provinces (Yunnan, Guangxi and Guangdong), with HIV rates reaching 4.6% (up from 1.6% in 1999) in Yunnan and 10.7% in Guangxi (up from 6%) among sentinel sex worker populations in 2000.

Vast and populous India faces similar challenges. At the end of 2000, the national adult HIV prevalence rate was under 1%, yet this meant that an estimated 3.86 million Indians were living with HIV/AIDS—more than in any other country besides South Africa. Indeed, median HIV prevalence among women attending antenatal clinics was higher than 2% in Andhra Pradesh and exceeded 1% in five other states (Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu) and in several major cities (including Bangalore, Chennai, Hyderabad and Mumbai). India's epidemic is also strikingly diverse, both among and within states.

Indonesia—the world's fourth-most populous country—offers an example of how suddenly a HIV/AIDS epidemic can emerge. After more than a decade of negligible rates of HIV, the country is now seeing infection rates increase rapidly among injecting drug users and sex workers, in some places, along with an exponential rise in infection among blood donors (an indication of HIV spread in the population at large). HIV infection in injecting drug users was not considered worth measuring until 1999/2000, when it had already reached 15%. Within another year, 40% of injectors in treatment in Jakarta were already infected. In Bogor, in West Java Province, 25% of injecting drug users tested were HIV-infected, while among drug-using prisoners tested in Bali, prevalence was 53%.

Behaviours that bring the highest risk of infection in Asia and the Pacific are unprotected sex between clients and sex workers, needle sharing and unprotected sex between men. But infections do not remain confined to those with higher-risk behaviour. Many countries have seen major epidemics grow out of initially relatively contained rates of infection in these populations. Northern Thailand's epidemic in the late 1980s and early 1990s was primed in this way. Over 10% of young men became infected before strong national and local prevention efforts, including the '100% condom programme', reduced high-risk behaviour, encouraged safer sex and lowered HIV prevalence.

Commercial sex provides the virus with considerable scope for growth. The limited national behavioural data collected in the region to date show that, over the past decade, the percentage of surveyed adult men who reported having visited a sex worker in a given year ranged from 5% in some countries to 20% in others. India and Viet Nam are countries where levels of infection among clients and sex workers are rising. In Ho Chi Minh City, the percentage of sex workers with HIV has risen sharply since 1998, reaching more than 20% by 2000.

Few countries are acting vigorously enough to protect sex workers and clients from the HIV virus. Yet, it is from the comparatively small pool of sex workers first infected by their clients that HIV steadily enters the larger pool of still-uninfected clients who eventually transmit the virus to their wives and partners. Although recent behaviour surveillance surveys show that, in 11 out of 15 Asian countries and Indian states, over two-thirds of sex workers report using a condom with their last client, the need to boost condom use remains. In Bangladesh, Indonesia, Nepal and the Philippines, for instance, fewer than half of sex workers report using condoms with every client.

Sharing injecting equipment is a very efficient way of spreading HIV, making prevention programmes among injecting drug user populations another top priority. Upwards

of 50% of injecting drug users have acquired the virus in Myanmar, Nepal, Thailand, China's Yunnan Province and Manipur in India. Recent surveys show that a third of injecting drug users in Viet Nam said they recently shared needles with other users, while 55% of male injecting drug users in northern Bangladesh and 75% in the central region reported sharing injecting equipment at least once in the week prior to being questioned.

Extensive harm reduction programmes can and do work. By the late 1980s, Australia had prevented a major epidemic from occurring among injecting drug users and, quite likely, from spreading beyond them. Such examples are being followed by several other countries, but in an isolated fashion. The SHAKTI Project in Dhaka, Bangladesh, offers injecting drug users needle exchange, safer injecting options and safer sex education, as well as condoms. IKHLAS, in the Malaysian capital of Kuala Lumpur, provides peer support services, but the estimated 5000 injecting drug users reached are only a fraction of the country's drug-injecting population.

The need to expand such programmes nationally is patent if these concentrated epidemics are to be brought under control before they spill into the wider population. Many injecting drug users are sexually active young men. Many have steady partners; others buy sex. The overlap between injecting drug use and buying sex is striking. In some Vietnamese cities, 17% of male injecting drug users reported having recently bought unprotected sex. Between half and three-quarters of male injecting drug users in several cities of Bangladesh have reported buying sex from women during the past year, with fewer than one-quarter of them saying they had used a condom the last time they paid for sex. There also is increasing evidence of female sex workers taking up injecting drug use in Viet Nam.

Some self-identified 'gay' communities exist throughout the region but, in most of Asia, many additional categories of men engage in same-sex intercourse. Many men who prefer sex with men also have sex with women.

Indeed, many marry and raise families. This creates a huge potential for men who have unprotected sex with men to act as 'bridges' for the virus in the wider population. In Cambodia, for instance, some 40% of men who have sex with men reported also having had sex with women in the month prior to being surveyed.

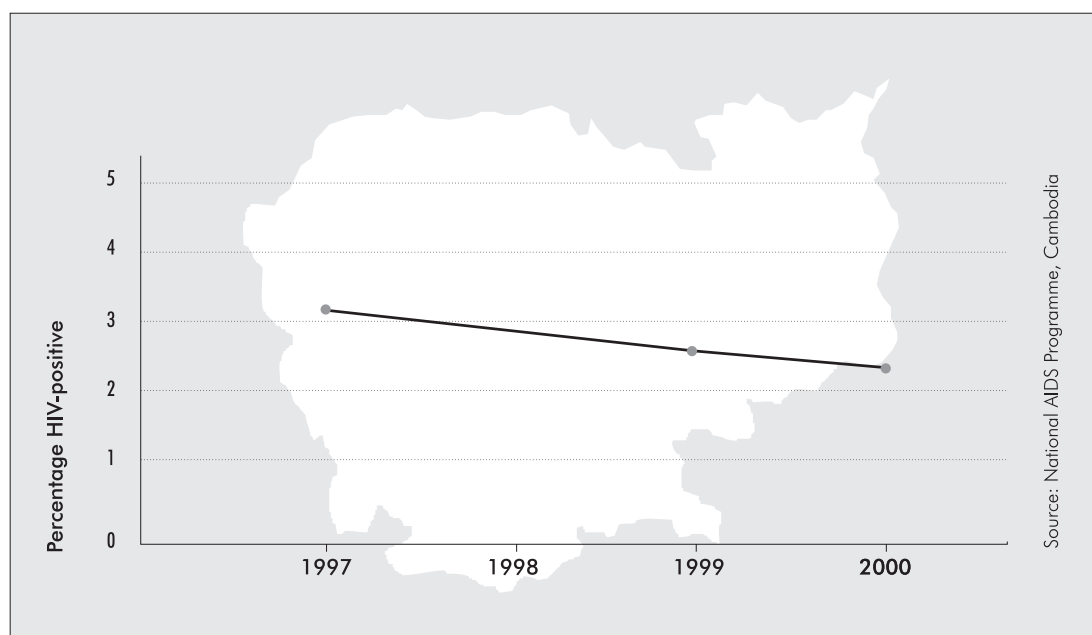
At the same time, there is ample evidence that early, large-scale and focused prevention programmes, which include efforts directed at both those with higher-risk behaviour and the broader population, can keep infection rates lower in specific groups and reduce the risk of extensive HIV spread among the wider population. Cambodia's prevention measures, which began in earnest in 1994–95, saw high-risk behaviour among men fall and condom use rise consistently in the late 1990s. As a consequence, HIV prevalence among pregnant women declined from 3.2% in 1997 to 2.3% at the end of 2000, suggesting that the country is beginning to bring its epidemic under control (see Figure 4).

Thailand's well-funded, politically-supported and comprehensive prevention programmes, which accelerated in the early

1990s, have trimmed annual new HIV infections to about 30 000, from a high of 140 000 a decade ago. Although an estimated 700 000 Thais are living with HIV today, Thailand's prevention efforts probably averted millions of HIV infections. Nonetheless, one-in-60 Thais in this country of 62 million people is infected with HIV, and AIDS has become the leading cause of death, despite the country's prevention successes. There are indications that transmission between spouses is now responsible for more than half of new infections—a reminder that mainly targeting high-risk groups is inadequate, and that countries need to carefully track patterns of HIV spread and adapt their responses accordingly. Furthermore, ongoing high rates of HIV infection through needle sharing in Thailand highlight the need to sustain prevention efforts as the epidemic evolves.

In large parts of Asia and the Pacific, prevention programmes are poorly funded and resourced. Typically, small projects are scattered across countries and do not acquire the scale or coherence that is needed to halt the epidemic's spread. Because many high-risk practices are frowned upon and even criminalized, there are serious political hurdles to prevention.

Figure 4. HIV prevalence among pregnant women in Cambodia, 1997–2000



## SUB-SAHARAN AFRICA

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Sub-Saharan Africa remains the region most severely affected by HIV/AIDS. Approximately 3.4 million new infections occurred in 2001, bringing to 28.1 million the total number of people living with HIV/AIDS in this region.

The region is experiencing diverse epidemics in terms of scale and maturity. HIV prevalence rates have risen to alarming levels in parts of southern Africa, where the most recent antenatal clinic data reveal levels of more than 30% in several areas. In Swaziland, HIV prevalence among pregnant women attending antenatal clinics in 2000 ranged from 32.2% in urban areas to 34.5% in rural areas; in Botswana, the corresponding figures were 43.9% and 35.5%. In South Africa's KwaZulu-Natal Province, the figure stood at 36.2% in 2000.

At least 10% of those aged 15–49 are infected in 16 African countries, including several in southern Africa, where at least 20% are infected. Countries across the region are expanding and upgrading their responses. But the high prevalence rates mean that even exceptional success on the prevention front will now only gradually reduce the human toll. It is estimated that 2.3 million Africans died of AIDS in 2001.

This notwithstanding, in some of the most heavily affected countries there is growing evidence that prevention efforts are bearing fruit. One new study in Zambia shows urban men and women reporting less sexual activity, fewer multiple partners and more consistent use of condoms. This is in line with earlier indications that HIV prevalence is declining among urban residents in Zambia, especially among young women aged 15–24.

According to the South African Ministry of Health, HIV prevalence among pregnant women attending antenatal clinics reached 24.5% in 2000. About one-in-nine South Africans (or 4.7 million people) are living with HIV/AIDS. Yet, there are possibly heartening signs that positive trends might be increasingly taking hold among adolescents, for whom prevalence rates have dropped slightly since 1998. Large-scale information campaigns and condom distribution programmes appear to be bearing fruit. In South Africa, for instance, free male condom distribution rose from 6 million in 1994 to 198 million five years later. In recent surveys, approximately 55% of sexually active teenage girls reported that they always use a condom during sex. But these developments are accompanied by a troubling rise in prevalence among South Africans aged 20–34, highlighting the need for greater prevention efforts targeted at older age groups, and tailored to their realities and concerns.

Progress is also being made on the treatment and care front. In the southern African region, relatively prosperous Botswana has become the first country to begin providing antiretroviral drugs through its public health system, thanks to a bigger health budget and drug price reductions negotiated with pharmaceutical companies.

Within the context of a public/private partnership between five research-and-development pharmaceutical companies and five United Nations agencies, there is increasing access to antiretroviral therapy in Africa. As of the end of 2001, more than 10 African countries were providing antiretroviral therapy to people living with HIV/AIDS.

In five West African countries—Burkina

Faso, Cameroon, Côte d'Ivoire, Nigeria and Togo—national adult prevalence rates already passed the 5% mark in 2000. Countries such as Nigeria are boosting their spending on HIV/AIDS and extending their responses nationwide. This year, Nigeria launched a US\$240-million HIV/AIDS Emergency Action Plan. Determined prevention efforts in Senegal continue to bear fruit, thanks to the prompt political support for its programmes.

On the eastern side of the continent, the downward arc in prevalence rates continues in Uganda—the first African country to have subdued a major HIV/AIDS epidemic. HIV prevalence in pregnant women in urban areas has fallen for eight years in a row, from a high of 29.5% in 1992 to 11.25% in 2000. Focusing heavily on information, education and communication, and decentralized programmes that reach down to village level, Uganda's efforts have also boosted condom use across the country. In the Masindi and Pallisa districts, for instance, condom use with casual partners in 1997–2000 rose from 42% and 31%, respectively, to 51% and 53%. In the capital, Kampala, almost 98% of sex workers surveyed in 2000 said they had used a condom the last time they had sex.

But despite such success, huge challenges remain. New infections continue to occur at a high rate. Most people with HIV do not have access to antiretroviral therapy. Already, by the end of 1999, 1.7 million children had lost a mother or both parents to the disease. Providing them with food, housing and education will test the resources and resolve of the country for many years to come.

Uganda's experience underlines the fact that even a rampant HIV/AIDS epidemic can be brought under control. The axis of any effective response is a prevention strategy that draws on the explicit and strong commitment of leaders at all levels, that is built on community mobilization, and that extends into every area of the country.

Although they are exceptionally vulnerable to the epidemic, millions of young

African women are dangerously ignorant about HIV/AIDS. According to UNICEF, more than 70% of adolescent girls (aged 15–19) in Somalia and more than 40% in Guinea Bissau and Sierra Leone, for instance, have never heard of AIDS. In countries such as Kenya and the United Republic of Tanzania, more than 40% of adolescent girls harbour serious misconceptions about how the virus is transmitted. One of the targets fixed at the UN General Assembly Special Session on HIV/AIDS in June 2001 was to ensure that at least 90% of young men and women should, by 2005, have the information, education and services they need to defend themselves against HIV infection. As in other regions of the world, most countries in sub-Saharan Africa are a considerable way from fulfilling that pledge.

The vast majority of Africans living with HIV do not know they have acquired the virus. One study has found that 50% of adult Tanzanian women know where they could be tested for HIV, yet only 6% have been tested. In Zimbabwe, only 11% of adult women have been tested for the virus. Moreover, many people who agree to be tested prefer not to return and discover the outcome of those tests. However, other obstacles remain. A study in Abidjan, Côte d'Ivoire, shows that 80% of pregnant women who agree to undergo a HIV test return to collect their results. But of those who discover they are living with the virus, fewer than 50% return to receive drug treatment for the prevention of mother-to-child transmission of the virus.

More than half of the women who know they have acquired HIV, and who were surveyed by Kenya's Population Council this year, said they had not disclosed their HIV status to their partners because they feared it would expose them to violence or abandonment. Not only are voluntary counselling and testing services in short supply across the region, but stigma and discrimination continue to discourage people from discovering their HIV status.

Accumulating over the past year have

been many encouraging developments. Thirty-one countries in the region have now completed a national HIV/AIDS strategic plan and another 12 are developing such a plan. Several regional initiatives to roll back the epidemic are under way. Some, such as those grouping countries in the Great Lakes region, the Lake Chad Basin and West Africa, are concentrating their efforts on reducing the vulnerability of refugee and other mobile populations. The political commitment to turn the tide of AIDS appears stronger than ever. Gatherings such as the 2000 African Development Forum meeting last December, and the Organization of African Unity Summit on HIV/AIDS, Tuberculosis and Other Related Infectious Diseases in April 2001, appear to be cementing that resolve. At the latter meeting, Heads of State agreed to devote at least 15% of their countries' annual budgets to improving health sectors. Fewer than five countries had reached that level in 2000.

AIDS has become the biggest threat to the continent's development and its quest to bring about an African Renaissance. Most governments in sub-Saharan Africa depend on a small number of highly skilled personnel in important areas of public management and core social services. Badly affected countries are losing many of these valuable civil servants to AIDS. Essential services are being depleted at the same time as state institutions and resources come under greater strain and traditional safety nets disintegrate. In some countries, health-care systems are losing up to a quarter of their personnel to the epidemic. People at all income levels are vulnerable to these repercussions, but those living in poverty are hit hardest. Meanwhile, the ability of the state to ensure law and order is being compromised, as the epidemic disrupts institutions such as the courts and the police. The risks of social unrest and even socio-political instability should not be underestimated.



## THE MIDDLE EAST AND NORTH AFRICA

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In the countries of the Middle East and North Africa, the visible trend is also towards increasing HIV infection rates, though still at very low levels. Existing surveillance systems remain inadequate, but it is estimated that 80 000 people acquired the virus in 2001, bringing to 440 000 the number of people living with HIV/AIDS. The need for early, effective prevention is becoming manifest throughout this region.

Unfortunately, factors driving the epidemic are still too seldom systematically analysed in most countries in the region. As a result, HIV/AIDS responses are rarely based on a clear understanding of infection patterns or knowledge of particular high-risk groups.

Based on current knowledge, however, factors putting people at risk are varied, though sexual intercourse remains the dominant route of transmission. A local study in Algeria has revealed prevalence rates of 1% among pregnant women. Outbreaks now appear to be occurring elsewhere, including in the Libyan Arab Jamahiriya, where all but a fraction of the 570 new HIV infections reported in 2000 were among drug users. Djibouti and the Sudan are facing growing epidemics that are being driven by combinations of socioeconomic disparities, large-scale population mobility and political instability.

The rate of HIV infection is increasing significantly in other vulnerable groups. Among prisoners in the Islamic Republic of Iran, rates of HIV infection have risen from 1.37% in 1999 to 2.28% in 2000. Besides the Sudan and the Republic of Yemen, all countries in the region have reported HIV transmission through injecting drug use. Unless addressed promptly through harm reduction and other

prevention approaches, the epidemic among these subpopulations of injecting drug users could grow dramatically and spread into the wider population.

There are also signs that the double disease burden of HIV and tuberculosis is growing in some countries. Rates of HIV infection among tuberculosis patients are rising and, by mid-2001, stood at 8% in the Sudan, 4.8% in Oman, 4.2% in the Islamic Republic of Iran and 2.1% in Pakistan.

At the same time, the political will to mount a more potent response to the epidemic is visible in several countries, some of which are introducing innovative approaches. Examples include the mobilization of nongovernmental organizations around prevention programmes in Lebanon, and harm reduction work among injecting drug users in the Islamic Republic of Iran.

# HIGH-INCOME COUNTRIES

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Unless averted with renewed and more effective prevention efforts, resurgent epidemics will continue to threaten high-income countries, where over 75 000 people became infected with HIV in 2001.

In Australia, Canada, the United States of America (USA) and countries of Western Europe, a pronounced rise in unsafe sex is triggering higher rates of sexually transmitted infections and, in some cases, higher levels of HIV incidence among men who have sex with men. The prospect of rebounding HIV/AIDS epidemics looms as a result of widespread public complacency and stalled, sometimes inappropriate, prevention efforts that do not reflect changes in the epidemic. In Japan, meanwhile, HIV infections are also on the rise.

The rise in new HIV infections among men who have sex with men is striking. In Vancouver, Canada, HIV incidence among young men who have sex with men rose from an average of 0.6% in 1995–1999 to 3.7% in 2000. In London, United Kingdom, reported HIV infections among gay men are also on the rise. In Madrid, reported HIV infections rose almost twofold (from 1.16% to 2.16%) in 1996–2000, whereas, in San Francisco, it rose from 1.1% in 1997 to 1.7% in 2000 and appears to be rising still, according to recent studies. Among gay men who inject drugs in that city, the infection rate climbed from 2% in 1997 to 4.6% in 2000.

Rising incidence of other sexually transmitted infections among men who have sex with men (in Amsterdam, Sydney, London and southern California, for instance) confirms that more widespread risk-taking is eclipsing the safer-sex ethic promoted so effectively for much of the 1980s and 1990s. Similar trends are being detected among the heterosexual

populations of some countries, especially among young people. Diagnoses of gonorrhoea and syphilis among men and women have hit their highest levels for 13 years in England and Wales, for instance.

Part of the explanation could lie in the visibly life-saving effects of antiretroviral therapy, introduced in high-income countries in 1996. Deaths attributed to HIV in the USA, for instance, fell by a remarkable 42% in 1996–97, since when the decline has levelled off. However, this wide access to antiretroviral therapy has encouraged misperceptions that there is now a cure for AIDS and that unprotected sex poses a less daunting risk. High-risk behaviour is increasing, as a result.

Prevention efforts, as well as treatment and care strategies, have to contend with other, significant shifts in the epidemic, such as its slow but apparently inexorable shift towards other vulnerable populations. At play appears to be an overlap of racial discrimination with income, health and other inequalities.

In high-income countries there is evidence that HIV is moving into poorer and more deprived communities, with women at particular risk of infection. Young adults belonging to ethnic minorities (including men who have sex with men) face considerably greater risks of infection than they did five years ago in the USA. African-Americans, for instance, make up only 12% of the population of the USA, but constituted 47% of AIDS cases reported there in 2000. As elsewhere in the world, young disadvantaged women (especially African-American and Hispanic women) in the USA are being infected with HIV at higher rates and at younger ages than their male counterparts.



In the USA, men having sex with men is still the main mode of transmission (accounting for some 53% of new HIV infections in 2000), but almost one-third of new HIV-positive diagnoses were among women in 2000. In this latter group, an overlap of injecting drug use and heterosexual intercourse appears to be driving the epidemic. Indeed, injecting drug use has become a more prominent route of HIV infection in the USA, where an estimated 30% of new reported AIDS cases are related to this mode of transmission. In Canada, women now represent 24% of new HIV infections, compared to 8.5% in 1995.

The HIV epidemic in western and central Europe is the result of a multitude of epidemics that differ in terms of their timing, their scale and the populations they affect. Portugal faces a serious epidemic among injecting drug users. Of the 3733 new HIV infections reported there in 2000, more than half were caused by injecting drug use and just under a third occurred via heterosexual intercourse. Reports of new HIV infections also indicate that sex between men is an important transmission route in several countries, including Germany, Greece and the United Kingdom. Unfortunately, HIV reporting data are uneven in several of the more affected countries, including some of those believed to be most affected by the epidemic among injecting drug users.

In Japan, the number of HIV infections detected in men who have sex with men has risen sharply in recent years, with male-male sex now accounting for more than twice as many infections in men as heterosexual sex. This is a major departure from past patterns: until two years ago, the number of new infections reported in both groups was roughly equal.

There are also signs that the sexual behaviour of youth in Japan could be changing significantly and putting this group at greater risk of HIV infection. Higher rates of *Chlamydia* among females and gonorrhoea infections among males, as well as a doubling of the number of induced abortions among teenage women in the past five years, suggest increased rates of unprotected sexual

intercourse. Behavioural data, meanwhile, show low condom use, both in the general population and among sex workers.

# LATIN AMERICA AND THE CARIBBEAN

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Major differences in epidemic levels and patterns of HIV transmission are evident in Latin America and the Caribbean, where an estimated 1.8 million adults and children are living with HIV—including the 190 000 people who acquired the virus in the past year. Some 1.4 million people are living with HIV/AIDS in Latin America and 420 000 in the Caribbean.

In Central America and the Caribbean, HIV is mainly heterosexually transmitted, with unsafe sex and frequent partner exchange among young people high among the factors driving the epidemic. Other powerful dynamics are abetting the spread of HIV, notably the combination of socioeconomic pressures and high population mobility (including tourism).

The Caribbean is the second-most affected region in the world, with adult HIV prevalence rates only exceeded by those of sub-Saharan Africa. In several Caribbean countries, HIV/AIDS has become a leading cause of death. Worst affected are Haiti and the Bahamas, where adult HIV prevalence rates are above 4%. But the epidemic is by no means concentrated only in the Caribbean.

Along with Barbados and the Dominican Republic, several Central American and Caribbean countries had adult HIV prevalence rates of at least 1% at the end of 1999, including Belize, Guyana, Honduras, Panama and Suriname. By contrast, prevalence is lowest in Bolivia, Ecuador and other Andean countries.

Almost three-quarters of AIDS cases reported in Central America are the result of sex between men and women. On some Caribbean islands, the phenomenon of young women having sex with older men is especially prominent, and is reflected in the fact that the

HIV rate among girls aged 15–19 is up to five times that of boys in the same age group. Research among sex workers in Guyana's capital, Georgetown, has found that 46% of surveyed sex workers were living with HIV/AIDS, that more than one-third of them never used a condom with their clients, and that almost three-quarters did not use condoms with their regular partners. The probability of the virus passing into the wider population is therefore high.

In Costa Rica, Mexico, Nicaragua and parts of the Andean region, sex between men is the more prominent route of HIV transmission. Recent studies among men who have sex with men in Mexico have shown that just over 14% were HIV-positive. Prevalence rates among heterosexual sex workers and sexually transmitted infection patients in Mexico, meanwhile, appear still to be low. Injecting drug use is a main route of HIV transmission in Argentina, Chile and Uruguay, and also plays a major role in Brazil.

Patterns of transmission can also differ markedly within countries—a reminder that universal national programmes are inappropriate. In Colombia's highlands, for instance, unprotected sex between men accounts for most HIV infections, while, on the coast, heterosexual intercourse is the main route of transmission.

Countries' commitment to stem the epidemic and limit its effects has grown markedly. Several countries have launched or are developing government programmes to distribute antiretroviral drugs to HIV/AIDS patients. But there are wide disparities in the quality and scope of different countries' antiretroviral treatment programmes. The wide

access to treatment that people living with HIV/AIDS have in countries such as Argentina, Brazil and Uruguay is not yet matched in most other countries of the Americas. Up to recently, Central America experienced a large gap in access to treatment. Now, however, countries such as Costa Rica and Panama are providing treatment access. Caribbean countries are currently developing a regional strategy to speed up and expand access to treatment and care for people living with HIV/AIDS. Countries such as Barbados and Trinidad and Tobago are preparing to implement new national programmes.

In Brazil, a substantial decline in HIV prevalence among injecting drug users has been observed recently in several large metropolitan areas. This suggests that HIV/AIDS prevention and harm reduction programmes in those cities have made possible safer injection habits among these populations.

Brazil's prevention efforts are being balanced with an extensive treatment and care programme that guarantees state-funded antiretroviral therapy for those living with HIV/AIDS. The number of people living with the virus in Brazil has reached about 600 000, according to the country's Health Ministry—up from 540 000 in 1999. An estimated 105 000 Brazilians are receiving antiretroviral drugs through the public health system.

A new political resolve is also apparent in several regional initiatives. Launched in February 2001, the Pan-Caribbean Partnership against HIV/AIDS, for instance, links the resources of governments and the international community with those of civil society to boost national and regional responses. It is being coordinated by the Caribbean Community Secretariat (CARICOM). On the basis of the Nassau Declaration issued in July 2001, as follow-up to the UN General Assembly Special Session on HIV/AIDS, Caribbean Heads of Government are also devising ways to support each other's national HIV/AIDS programmes and jointly negotiate affordable prices for antiretroviral drugs.

Meanwhile, protecting vulnerable populations on the move is now the focus of a regional initiative in Central America. Argentina, Chile, Paraguay and Uruguay are collaborating in harm-reduction schemes for injecting drugs users. National AIDS programmes have also joined a collaborative scheme to share technical assistance throughout Latin America and the Caribbean. Known as the Horizontal Technical Cooperation Group, it brings together more than 20 countries of the region.



## Maps

Global estimates for adults and children, end 2001

Adults and children estimated to be living with HIV/AIDS  
as of end 2001

Estimated number of adults and children newly infected with HIV  
during 2001

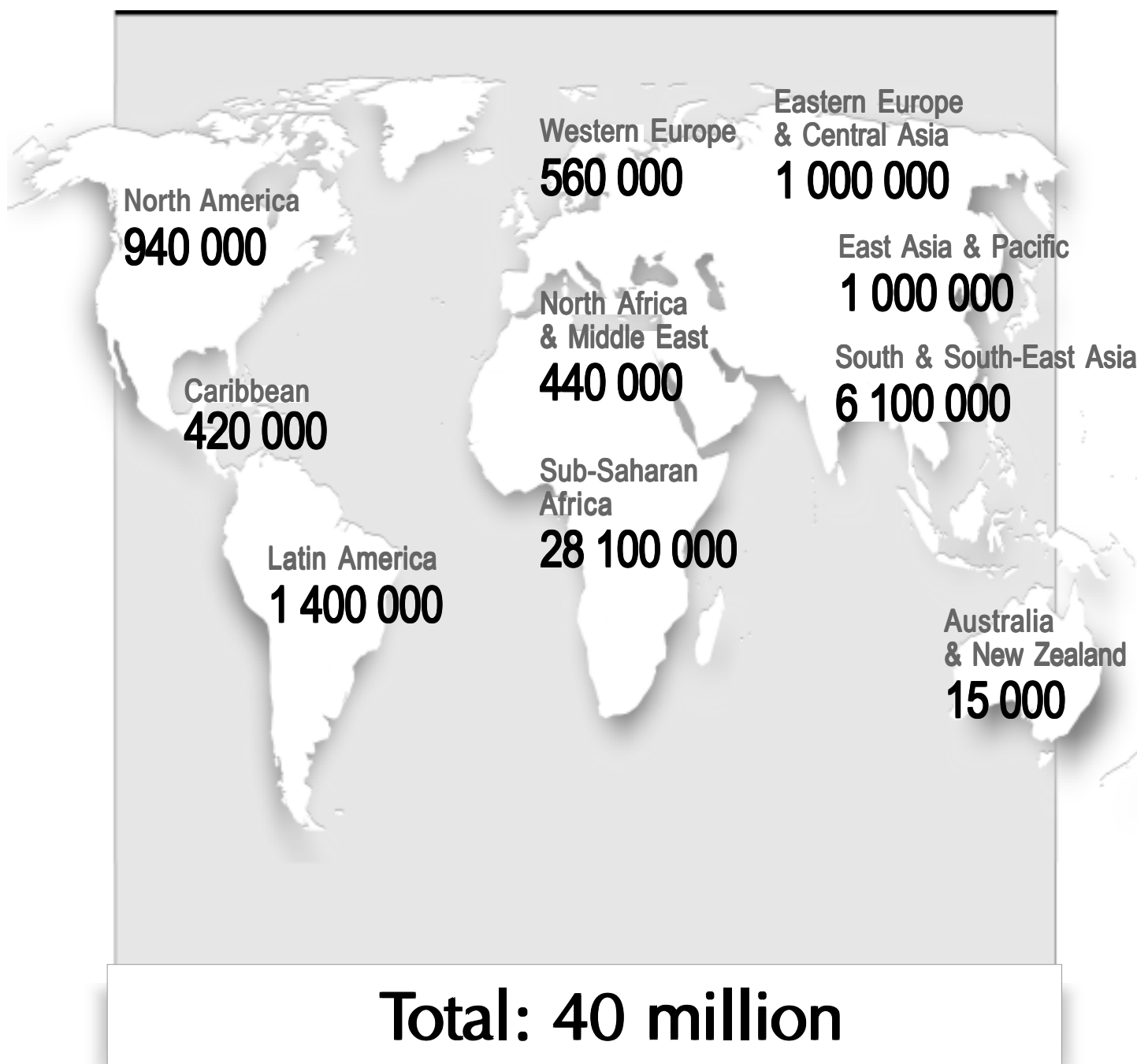
Estimated adult and child deaths due to HIV/AIDS during 2001

# Global estimates for adults and children, end 2001

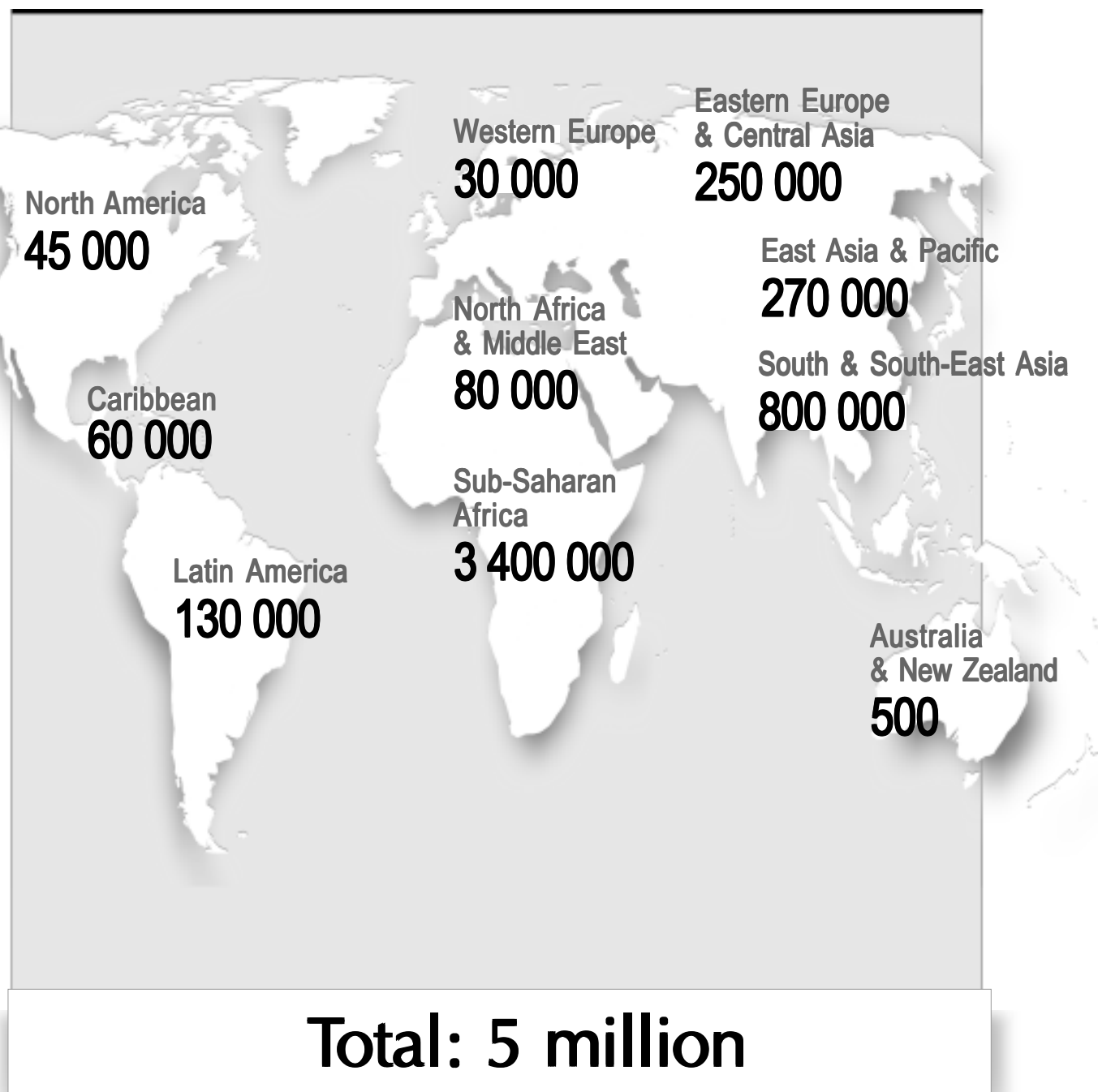


<b>People living with HIV/AIDS</b>	<b>.....</b>	<b>40 million</b>
<b>New HIV infections in 2001</b>	<b>.....</b>	<b>5 million</b>
<b>Deaths due to HIV/AIDS in 2001</b>	<b>.....</b>	<b>3 million</b>

# Adults and children estimated to be living with HIV/AIDS as of end 2001

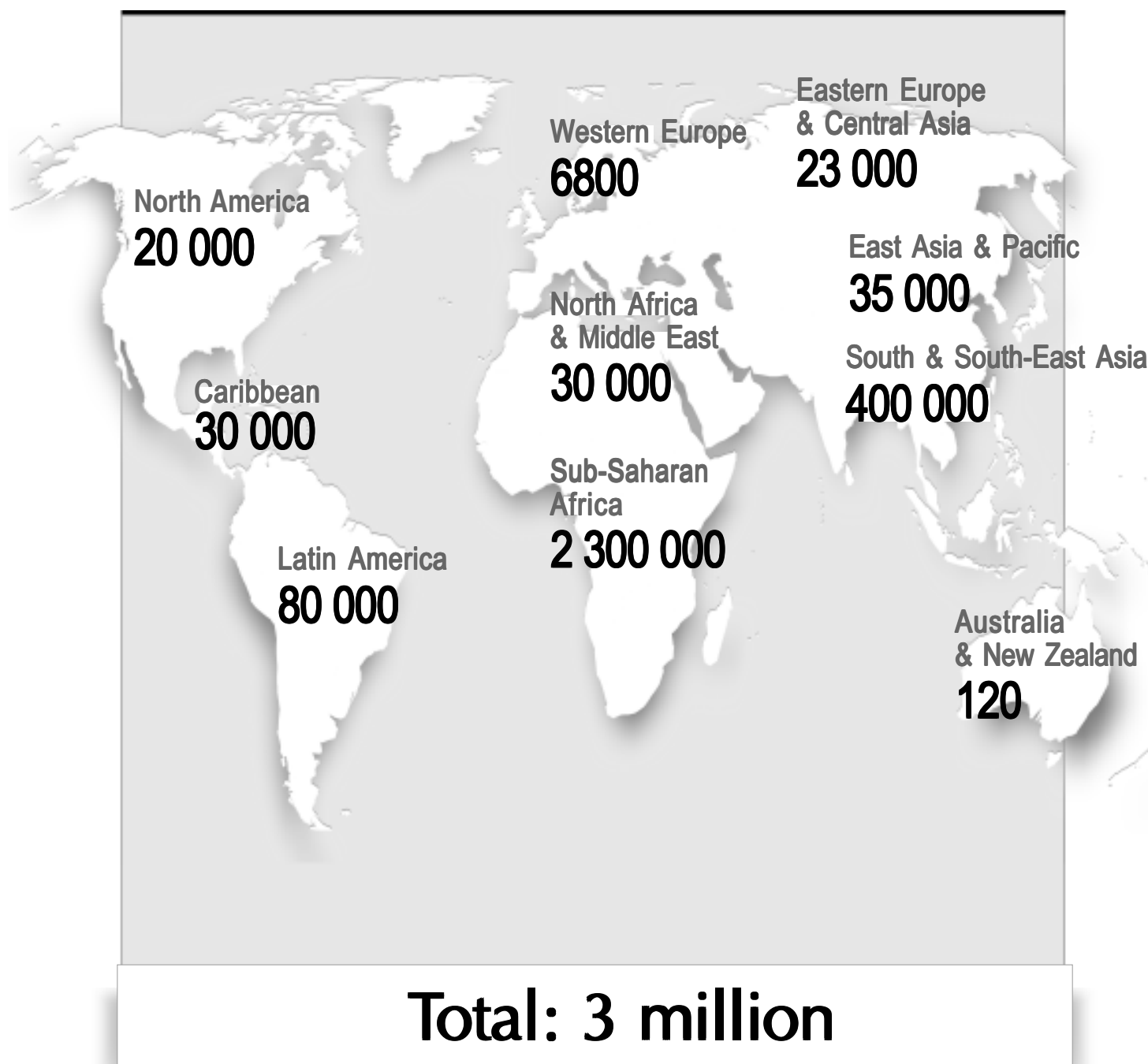


## Estimated number of adults and children newly infected with HIV during 2001





# Estimated adult and child deaths due to HIV/AIDS during 2001





## Explanatory note about UNAIDS/WHO estimates

The UNAIDS/WHO estimates in this document are based on the most recent available data on the spread of HIV in countries around the world. They are provisional. UNAIDS and WHO, together with experts from national AIDS programmes and research institutions, regularly review and update the estimates as improved knowledge about the epidemic becomes available, while also drawing on advances made in the methods for deriving estimates.

The estimates and data provided in the graphs and tables are given in rounded numbers. However, unrounded numbers were used in the calculation of rates and regional totals, so there may be small discrepancies between the global totals and the sum of the regional figures.

In 2001, new software was developed to model the course of HIV/AIDS around the world and to further enhance the quality of estimates of HIV/AIDS prevalence and impact. As a result, this year's estimates incorporate, in particular, new knowledge and assumptions about survival times for adults and children living with HIV/AIDS. Because of this, some of the new estimates cannot be compared directly with estimates from previous years.

UNAIDS and WHO will continue to work with countries, partner organizations and experts to improve data collection. These efforts will ensure that the best possible estimates are available to assist governments, nongovernmental organizations and others in gauging the status of the epidemic and monitoring the effectiveness of their considerable prevention and care efforts.





For more information, please contact Anne Winter, UNAIDS, Geneva, (+41 22) 791 4577, mobile (+41) 79 213 4312, Dominique de Santis, UNAIDS, Geneva, (+41 22) 791 4509 or Andrew Shih, UNAIDS, New York, (+1 212) 584 5012. You may also visit the UNAIDS home page on the Internet for more information about the programme (<http://www.unaids.org>).