Children and AIDS

Third Stocktaking Report, 2008

UNITE FOR CHILDREN
UNITE AGAINST AIDS

Children and AIDS: Third Stocktaking Report, 2008

The paintings on the covers of this report are by children at the Maputo Day Hospital, Mozambique, a facility providing medicine and psychosocial support, including counselling and antiretroviral therapy, to children living with HIV.

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Figures 1 and 2 on pages 4 and 5 of this report have been corrected; the figures remain uncorrected in the summary version that was issued in advance of this report. For additional updates subsequent to the issue of this report, please visit the UNICEF website and www.unicef.org/publications.

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INTRODUCTION

The phrase 'know your epidemic and response' has become extremely important in the fight against HIV and AIDS. But to better serve children, knowing your epidemic and response must be paired with 'know your children'.

This *Stocktaking Report*, the third since the *Unite for Children, Unite against AIDS* initiative was launched in 2005, examines data on progress, emerging evidence, and current knowledge and practice for children as they relate to four programme areas known as the 'Four Ps': preventing mother-to-child transmission of HIV, providing paediatric HIV care and treatment, preventing infection among adolescents and young people, and protecting and supporting children affected by HIV and AIDS.[1]

The phrase 'know your epidemic and response' has become extremely important in the fight against HIV and AIDS, given the different levels of epidemic and diverse patterns in a range of geographical, cultural and social settings and the many ways in which the epidemic has an impact on various population groups.

Knowing your epidemic is about analysing the local situation – who is infected and what factors are driving the risks and behaviours – and understanding and acting on that analysis. Knowing your response is about knowing the details of the current response, the actions taking place, the coverage being achieved, the quality of the intervention, the policies that are in place or still needed, and the populations being targeted. Consensus in the scientific community and in civil society is that interventions based on such understanding and tailored to the local situation are needed and, importantly, can work.

But to better serve children, knowing your epidemic and response must be paired with 'know your children' – determining which children are vulnerable to HIV and AIDS, which children are affected by the epidemic and what impact it has on them; how to reach children affected by AIDS, how to prevent them from getting infected with HIV and how to treat them; how to care for their mothers and how to support them when their mothers or fathers have died; and how to help all children grow safely and develop into adulthood.

To address these issues and further improve children's prospects of survival and for their futures, countries are drawing on experiences and evidence to do things differently than they have in the past. In Botswana, Rwanda and Thailand, for example, access to CD4 cell-count testing has been expanded, increasing the numbers of pregnant women living with HIV receiving antiretroviral treatment for their own health. Keeping mothers healthy and alive significantly contributes to the health and well-being of their children, whether they are infected or not.

In South Africa, many infants born to HIV-positive mothers are now tested for HIV at six weeks of age, using dried blood spots for polymerase chain reaction (PCR) testing for HIV DNA, and many of those who test positive receive antiretroviral treatment. A recent study found increased survival rates among infants who were provided with antiretroviral therapy as soon as they were diagnosed with HIV.[2] Without

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intervention, at least a third of children born with HIV will die from an HIV-related cause by their first birthday, and half will die before their second birthday.[3]

In the South Asian countries of Afghanistan, Bhutan, Maldives and Sri Lanka – where the risk of HIV infection in the general population is low – national strategic plans on HIV and AIDS have been adjusted to focus on prevention for adolescents who are most at risk.

Governments are increasingly investing in social protection in the form of safety nets for families and communities. In Brazil, the number of families affected by HIV and AIDS receiving social welfare assistance has increased. Cash transfers have shown promise in helping vulnerable children in Bangladesh, Cambodia, El Salvador, Kenya and several other countries.

Focused responses work. More pregnant women than ever have access to and use services to prevent transmission of HIV to their babies. More children than ever are receiving treatment. HIV prevalence in young people is declining in a number of high-prevalence countries, and greater knowledge of vulnerability in children affected by AIDS is resulting in a better understanding of how to protect and care for all vulnerable children.

Furthermore, assistance for people living with HIV, including children and adolescents, can be sustained during periods of upheaval. In 2006, 1.8 million people living with HIV were also affected by conflict, disaster or displacement – about 1 in 20 people living with HIV worldwide. Of this number, an estimated 930,000 were women and 150,000 were children under the age of 15.[4]

Responses have been refined in situations of short-term emergency, humanitarian crisis and protracted conflict in countries with varying levels of epidemic. During recent emergencies in China and Kenya, for example, immediate assistance for people living with HIV was focused on maintaining access to antiretroviral therapy. In the Democratic Republic of the Congo, Somalia and the Sudan, programmes for youth have addressed life skills, HIV and AIDS, and essential services. In Uganda, services for the prevention of mother-to-child transmission and paediatric treatment and care have been dramatically scaled up in the north, a region affected by more than 20 years of conflict.

All the signs of progress made to date are not signals to rest, however, but an invitation to acknowledge the stark facts they underscore:

- Pregnant women are not receiving sufficient counselling and related services for primary prevention of HIV, prevention of unintended pregnancies and safer infant feeding. Most pregnant women diagnosed with HIV do not have access to essential care and treatment that includes antiretroviral therapy: for their own health, to further reduce the likelihood of HIV transmission and to prevent orphaning.
- A critical cohort of the youngest children, those under one year old, are not being identified in time to benefit from life-saving antiretroviral therapy. They are dying of AIDS-related illnesses without ever being diagnosed.
- Significant numbers of young people continue to be infected with HIV each year, and girls in sub-Saharan Africa, in particular, remain vulnerable. Young people living with HIV are not receiving good-quality counselling and services to help them live with a chronic disease and successfully make the transition to adulthood.
- Social systems of protection and care in most countries are not adequate to meet the needs of all children made vulnerable by the AIDS epidemic or other causes.

To improve the quality of assistance for children and families, and to reach the unreached, much more remains to be done. The funds available for assisting children have increased but are not yet sufficient; often activities are not adequately tracked and results are not duly assessed. Critical links to overall child survival goals have yet to be forged in many countries. Governments, donors, development partners and communities all have an important role in addressing these issues.

1. PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Strengthened maternal, newborn and child health services will enable women to access the array of services to prevent mother-to-child transmission of HIV and promote maternal and child survival as part of a continuum of care.

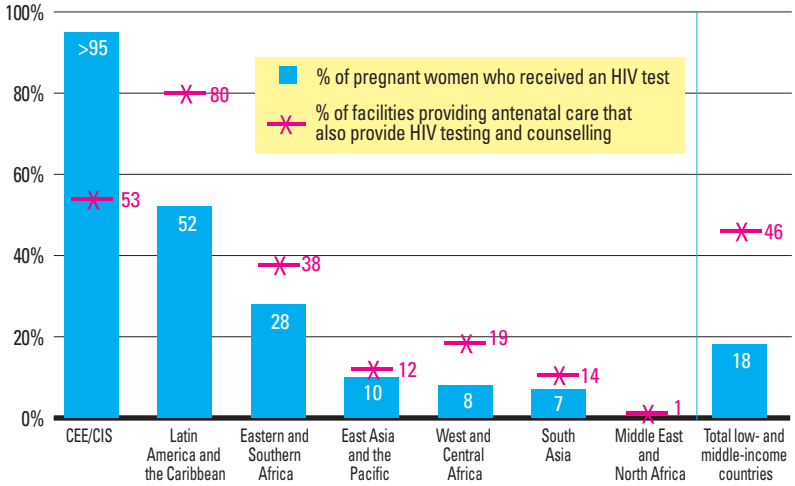
PROGRESS AND ACHIEVEMENTS

Coverage of services to prevent mother-to-child transmission of HIV (PMTCT) is expanding in low- and middle-income countries. Still, in 2007, only 33 per cent of pregnant women living with HIV in these countries received antiretroviral regimens, including antiretroviral therapy to prevent transmission of the virus to their infants, compared to only 10 per cent in 2004.[5]

Far too few pregnant women are aware of their HIV status. In 2007, only 18 per cent of pregnant women in low- and middle-income countries where data were available received an HIV test.[6]

The rates of HIV testing among pregnant women are highest in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) and in Latin America, regions with low-level or concentrated epidemics in most countries. The proportion of facilities providing antenatal care that includes HIV testing and counselling is also highest in these two regions, highlighting that overall access and uptake are strongly related to the expansion and integration of services. In Eastern and Southern Africa – the region with the highest number of pregnant women living with HIV – only 38 per cent of antenatal facilities provided HIV testing and counselling in 2007. Consequently, only 28 per cent of the estimated number of pregnant women in this region received an HIV test (*Figure 1*).

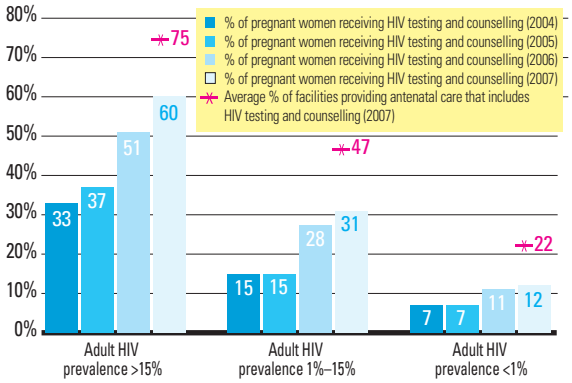
Figure 1. Percentage of pregnant women tested for HIV and level of facility coverage, by region, 2007



Source: UNICEF calculations based on data collected through the PMTCT and Paediatric HIV Care and Treatment Report Card process and reported in *Towards Universal Access: Scaling up HIV services for women and children in the health sector – Progress Report 2008* (UNICEF, UNAIDS, WHO), pp. 34–42. Regions were recalculated according to UNICEF classification of regions.

Data from 2004–2007 show a doubling or near doubling in uptake of HIV testing during antenatal care in all three country groupings: seven 'hyper-endemic' countries in which adult HIV prevalence rates are more than 15 per cent (Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia and Zimbabwe); countries with adult HIV prevalence of 1 per cent to 15 per cent; and countries with adult HIV prevalence of

Figure 2. Percentage of pregnant women tested for HIV, by prevalence level in adult population, 2004–2007



Source: UNICEF calculations based on data collected through the PMTCT and Paediatric HIV Care and Treatment Report Card process and reported in *Towards Universal Access: Scaling up HIV services for women and children in the health sector – Progress Report 2008* (UNICEF, UNAIDS, WHO), pp. 34–42.

less than 1 per cent. The largest increase in testing was seen in the hyper-endemic countries, all of them in Southern Africa. In these countries, the proportion of pregnant women who received an HIV test and counselling during antenatal care visits and at the time of delivery increased from 33 per cent in 2004 to 60 per cent in 2007 (*Figure 2*). In part, this is because an average of 75 per cent of facilities in the hyper-endemic countries were providing antenatal care and HIV testing and counselling at the end of 2007, compared to an average of 46 per cent in all low- and middle-income countries.

Overall, provision of antiretrovirals for PMTCT has improved in sub-Saharan Africa, reaching 43 per cent of pregnant women living with HIV in Eastern and Southern Africa in 2007, up from 31 per cent in 2006, and 11 per cent in West and Central Africa, up from 7 per cent. Uptake increased in East Asia and the Pacific from 24 per cent in 2006 to 38 per cent in 2007 and in South Asia from 10 per cent to 13 per cent. There was no change in CEE/CIS and in Latin America and the Caribbean between 2006 and 2007 (*Figure 3*).

Throughout sub-Saharan Africa, there is wide variation in the percentages of pregnant women living with HIV who receive antiretroviral regimens for PMTCT. In South Africa, coverage reached 57 per cent of the estimated 220,000 pregnant women living with HIV in 2007, up from 15 per cent in 2004. In the same years, coverage in Mozambique rose from 3 per cent to 46 per cent and in Zambia from 18 per cent to 47 per cent. The increase is related to antenatal care coverage rates of 85 per cent or more in all these countries.[7]

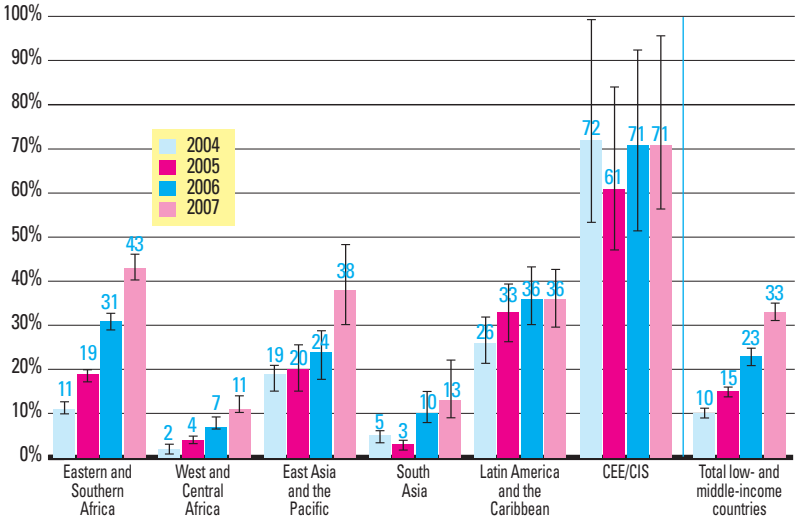
In comparison, antiretroviral coverage below 10 per cent in Ethiopia and Nigeria in 2007 may reflect these countries' below-average levels of antenatal care: 28 per cent in Ethiopia and 58 per cent in Nigeria (*see the statistical table on pages 33–35*).

Many countries are now phasing in combination antiretroviral regimens for PMTCT that are more effective than one drug alone. In 2007, in 60 low- and middle-income countries with disaggregated data on antiretroviral regimens for PMTCT, 49 per cent of HIV-infected women who received antiretroviral drugs received single-dose nevirapine, 26 per cent a combination of two antiretrovirals and 8 per cent a three-drug combination.[8]

In general, coverage of antiretrovirals for PMTCT depends on a multitude of factors, including uptake of HIV testing, early reporting of women for antenatal care, attendance at delivery by skilled personnel, and health-system infrastructure, including laboratory and human resource capacity.

Strong political commitment and leadership, enabling policies and the adoption of innovations in service delivery – namely, the introduction of provider-initiated testing and counselling, combined with rapid testing with same-day results, within antenatal and delivery care settings – have contributed to increasing access and uptake of HIV testing in the context of PMTCT.

Figure 3. Percentage of HIV-infected pregnant women who received antiretrovirals for PMTCT, 2004–2007



Note: The lines on the bars show the uncertainty bounds for the estimates. Data were insufficient to calculate an average for the Middle East and North Africa region.

Source: UNICEF calculations based on data collected through the PMTCT and Paediatric HIV Care and Treatment Report Card process and reported in *Towards Universal Access: Scaling up HIV services for women and children in the health sector – Progress Report 2008* (UNICEF, UNAIDS, WHO), pp. 19, 43. Regions were recalculated according to UNICEF classification of regions.

The seven hyper-endemic countries are also benefiting from important funding opportunities, including considerable financial support from the US President's Emergency Plan for AIDS (PEPFAR), in addition to financing from the Global Fund to Fight AIDS, Tuberculosis and Malaria and other sources.[9] Four of them are PEPFAR focus countries. Overall improvements, however, belie important areas where work must be expanded to reach the international target of 80 per cent of pregnant women accessing interventions to prevent mother-to-child transmission of HIV. New guidance from the World Health Organization (WHO), UNICEF and partners calls upon the international community to renew its commitment to global PMTCT scale-up and make it a priority.

MAIN ISSUES

HIV testing and counselling as integral components of maternal care

HIV testing and counselling provided as part of the routine package of screening tests during pregnancy and delivery represent the main gateway to HIV prevention, care and treatment for most women of reproductive age. But too often, HIV testing has been either unavailable or not recommended to women during antenatal and delivery care. This lack of access to testing services leaves many women unaware of their HIV status.

Many national programmes have now shifted to the 'opt-out' approach in which HIV testing is recommended and women can specifically decline to be tested. WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommend that HIV testing and counselling be recommended by health-care providers as part of the normal standard of care for all pregnant women in antenatal, delivery and post-partum care settings in generalized epidemics.[10]

Botswana, in 2004, introduced provider-initiated HIV testing and counselling with the option to opt out as part of routine antenatal and delivery care. This policy, combined with the use of rapid testing with same-day results and the involvement of lay counsellors, resulted in an increase in the proportion of pregnant women tested from 27 per cent in 2002 to around 80 per cent in 2007.[11] Botswana focused its initial efforts on expanding PMTCT services to all public health facilities providing maternal and child health services.

The involvement of male partners in PMTCT has been found to increase service uptake and might help reduce some of the stigma surrounding women's use of such services. In Rwanda, remarkable efforts have been made to engage male partners of pregnant women in PMTCT interventions, particularly HIV testing. In 2007, nearly two thirds of male partners of pregnant women tested for HIV during antenatal and delivery care visits agreed to be tested themselves.[12]

In countries with concentrated epidemics, provider-initiated HIV testing and counselling should be recommended for women identified as being at high risk of HIV exposure. Efforts should be made at both the policy and service-delivery levels to facilitate access by women who are most at risk – particularly most-at-risk pregnant women – to HIV prevention, care, support and treatment services as well as to antenatal, delivery and post-partum care.

A continuum of care for women living with HIV

The ultimate goal of PMTCT is to reduce maternal and child mortality by delivering a comprehensive package that includes primary prevention of HIV infection among women of reproductive age, prevention of unintended pregnancies among women living with HIV, counselling and support on infant feeding, as well as antiretroviral therapy for mothers, cotrimoxazole prophylaxis for mothers and infants, and early infant diagnosis and initiation of antiretroviral treatment. PMTCT services should link operationally to maternal and child survival interventions – immunization; nutrition support, including the management of severe wasting and other forms of acute malnutrition; and prevention and treatment of pneumonia, diarrhoeal diseases and malaria – as well as sexual and reproductive health care to improve maternal health and treat HIV-infected mothers.

The linkages to child survival interventions are of the utmost importance because pneumonia, diarrhoeal diseases and malaria, often exacerbated by undernutrition, are major causes of death among HIV-infected infants and children. Adopting such a comprehensive approach calls for a strategic shift in perspective from only averting HIV infection in children to improving maternal and child survival.

In most resource-limited settings, the majority of women identified as HIV-positive have access to care and treatment, including antiretroviral therapy, only through referral to antiretroviral treatment clinics. But many of the needed services can and should be delivered within maternal,

neonatal and child health-care settings. Clinical and immunological assessment of women's eligibility for antiretroviral therapy, for example, can be delivered by trained health personnel as a component of routine antenatal care for pregnant women living with HIV.

HIV-positive pregnant women at an advanced stage of disease are at higher risk of transmitting HIV to their infants and are more likely to die themselves compared to women at an early stage.[13] Initiation of antiretroviral therapy for these women not only addresses their health needs; it also significantly reduces the risk of HIV transmission to their infants and can promote the survival of their children, regardless of the child's HIV status. The results of a recent study in Uganda show that among uninfected children under age 10, there was an 81 per cent reduction in mortality and a 93 per cent reduction in orphanhood if their HIV-infected parents were receiving antiretroviral therapy and cotrimoxazole prophylaxis, compared with children whose parents received no intervention.[14]

Women who become infected with HIV during pregnancy and lactation are more likely to pass on the virus to their infants than women who were infected before they became pregnant.[15] Primary prevention services should therefore give special attention to pregnant women who are not infected – and to keeping them uninfected throughout pregnancy, childbirth and breastfeeding. Many national programmes offer a primary prevention package for all women during antenatal care visits that includes health information and education, HIV counselling, family planning based on country policies, and couples testing and counselling on safer sex practices such as condom use. Retesting for pregnant women who previously tested negative, as is the policy in Brazil and Ukraine, should be considered based on available resources, especially in generalized epidemic settings.

There is emerging evidence that administering antiretrovirals to mothers throughout the breastfeeding period and extended antiretroviral prophylaxis to infants born to HIV-positive women can significantly reduce post-natal transmission.[16] In Mozambique, for example, provision of antiretroviral therapy to HIV-positive women up to six months after delivery resulted in very low rates of mother-to-child transmission: less than 2 per cent in infants at six months of age.[17] More information is needed, however, on the implications of such an approach for mothers' and children's health, as well as for their future treatment options, before it is recommended or scaled up.

Data from 32 countries of sub-Saharan Africa reveal that up to 61 per cent of people living with HIV who received antiretroviral therapy in this region in 2007 were female. However, access to antiretroviral therapy through PMTCT programmes for pregnant women living with HIV remains poor for various reasons, including limited access to CD4 cell count testing. In low- and middle-income countries where these data were available, only 12 per cent of pregnant women identified as HIV-positive during antenatal care visits were assessed to determine whether they were eligible to receive antiretroviral therapy for their own health.[18]

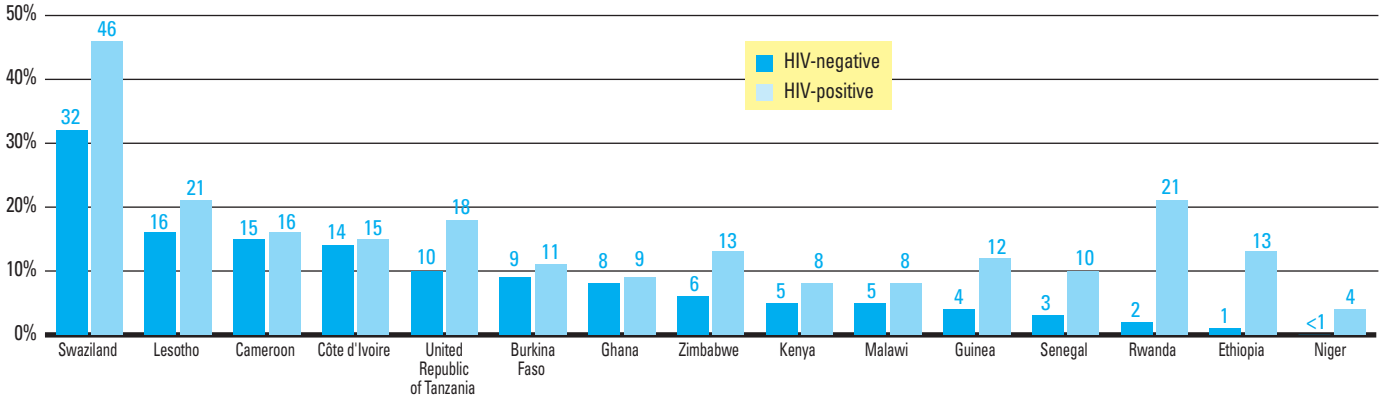
Scaling up antiretroviral therapy for women, especially pregnant women, in the context of PMTCT requires investment in facility improvement, laboratory equipment and human capacity-building within maternal, newborn and child health services. Timely initiation of antiretroviral therapy requires

Improving access to antiretroviral treatment for pregnant women living with HIV

With trained health-care providers and expanded laboratory infrastructure and capacity, immunological assessment can be added to routine antenatal and delivery care for HIV-positive pregnant women. In Malawi, CD4 cell count testing was expanded to all 28 districts and five referral hospitals in 2008 after a study found that CD4 cell counts are a more reliable way to assess women's eligibility for antiretroviral treatment than observing clinical signs and symptoms. Only 2 per cent of 724 pregnant women assessed clinically at eight antenatal clinics were found to be eligible for antiretroviral treatment for their own health, while 54 per cent of this same group of women assessed by CD4 cell counts were found to be eligible.[19]

Rwanda introduced more efficacious antiretroviral regimens for PMTCT, including antiretroviral therapy for eligible women, in 2005. At most facilities offering PMTCT services, pregnant women identified as HIV-positive are increasingly being assessed through CD4 cell count testing and receive appropriate treatment as needed. The installation of CD4 cell count testing equipment at sites around the country facilitates timely access to this test.[20]

Figure 4. Percentage of sexually active women aged 15–49 who used a condom at last sexual activity, by women's HIV status, 2003–2006



Source: Selected Multiple Indicator Cluster Surveys and Demographic and Health Surveys, 2003–2006.

clinical and immunological assessment of all HIV-infected pregnant women. PMTCT services are increasingly being implemented as the main entry point to a continuum of interventions intended to reach pregnant women, mothers and their children.

Even in resource-limited settings affected by conflict, PMTCT services can be efficiently provided. More than 20,000 mothers in the Kitgum and Pader districts of northern Uganda – a region affected by conflict for more than 20 years – have been reached with PMTCT services as part of a programme introduced in 2002. Coverage in these districts increased from 25 per cent in 2002 to 63 per cent in 2007, and 33 per cent of HIV-positive mothers received antiretrovirals for PMTCT. [21]

Primary prevention must become an even greater priority

Studies have suggested that increasing women's access to a package of primary prevention and family planning is the most cost-effective way to prevent HIV infection in infants,[22] and many national programmes are providing all women attending antenatal care with such a package. Some data indicate that health education and HIV counselling provided in the context of PMTCT could lead to the adoption of safer sex practices, such as condom use. Analysis of Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Survey (DHS) data from 15 countries in 2003–2006 show that women who are HIV-positive were more likely to use a condom during the last sexual intercourse than women who are HIV-negative (*Figure 4*).

The experience of programmes to prevent HIV infection in young people has shown that accurate information, good education and skills-building programmes can lead to significant risk reduction in this group.[23] PMTCT programmes should build on this experience to develop appropriate strategies that take into consideration the special needs of young people – and adolescent girls and young women in particular – related to pregnancy, the post-partum period and HIV infection. PMTCT services, as well, must be adolescent-sensitive in order to reach this age group.

Maternal and child health services, including PMTCT services, can be linked with male circumcision, including neonatal male circumcision and circumcision of HIV-negative male partners. These services can be delivered using a family-centred approach as part of an integrated programme of HIV prevention for mothers (both HIV-negative and HIV-positive) and, more broadly, for women of childbearing age, including adolescent girls. Implementation will need to be contextualized to the country situation and take into account the fact that investing in neonatal male circumcision will not result in tangible impacts for many years.

Sustained support for preventing mixed feeding

Supporting HIV-positive mothers to make appropriate infant feeding decisions can improve early child survival. Around one third of overall HIV mother-to-child transmission takes place in breastfed children up to two years of age.[24] Yet there are important health risks for the infant who is not breastfed. WHO and UNICEF recommend exclusive breastfeeding for infants of

mothers with HIV for the first six months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe.

Recent studies among women who received nevirapine found that the risk of transmission during the first four months of the infant's life is halved when the mother breastfeeds exclusively and avoids mixed feeding.[25] Modelling studies based on data from sub-Saharan Africa suggest that exclusive breastfeeding for six months, with promotion and support, would save nearly one in four HIV-exposed children, more than twice the number that would be saved with replacement feeding.[26]

Although breastfeeding is the norm in sub-Saharan Africa, exclusive breastfeeding is not necessarily so. An analysis of DHS surveys conducted during 2003–2006 in 12 countries in this region shows that only 31 per cent of HIV-positive women exclusively breastfeed their infants up to six months of age; among HIV-negative women, this figure is 38 per cent.[27]

PMTCT programmes should provide counselling and support on infant feeding to HIV-positive mothers during the period after birth in order to inform infant feeding choices that must be made at critical moments in infancy: around the time of early infant diagnosis of HIV at six weeks of age, and during weaning at around six months of age.

A rapid assessment in 2007 of HIV and infant feeding in Kenya, Malawi and Zambia found that the three countries have taken steps to revise infant feeding policies and strategies, and there is increased awareness of the need to address this issue within HIV programmes.[28] More definitive evidence on the safety and efficacy of infant feeding interventions within the context of PMTCT is anticipated in 2009.

PMTCT services can strengthen health systems

To be successful, PMTCT interventions require functioning health systems that provide quality care for maternal, neonatal and child health (MNCH), as well as sexual and reproductive health care. Rapid expansion of PMTCT services, especially antiretroviral regimens, requires antenatal, delivery and post-natal care services to be strengthened. Most countries that have made significant progress in scaling up PMTCT services have performing health systems with high coverage rates of antenatal care and skilled attendance at delivery.

In Ukraine, for example, the full integration of PMTCT interventions into MNCH programmes, free antenatal and delivery services, and high coverage of antenatal care and skilled birth attendance have been central to the success of scaling up PMTCT. In 2000, the Ministry of Health enacted a national policy of universal HIV testing with an opt-out option for all pregnant women upon registration at antenatal clinics and at the time of delivery. Overall, the rate of mother-to-child transmission has been reduced to 7 per cent in 2006, from 25 per cent in 2000, according to the Ministry.[29]

More than 40,000 primary health-care centres in Brazil offer PMTCT services including HIV testing and counselling. In 2007, 62 per cent of pregnant women were tested for HIV during pregnancy. The centres, however, are concentrated in urban settings and do not reach the north, where transmission rates are almost double the national average.[30]

In many countries, the provision of PMTCT services is constrained by human resource shortages, poor work conditions and limited laboratory capacity. However, implementation of PMTCT presents an opportunity to improve quality and increase uptake of antenatal, delivery and post-natal services. A recent survey conducted in Rwanda, for example, shows that pregnant women identified as HIV-positive through PMTCT services are more likely to deliver in health facilities than pregnant women with unknown HIV serostatus.[31]

Assessing the impact of PMTCT services requires clear, standardized approaches that take into account both HIV prevalence and the levels of child morbidity and mortality in the country. Data on the coverage of PMTCT services and of paediatric HIV care, support and treatment interventions are collected annually through an inter-agency collaborative process facilitated by UNICEF and WHO in partnership with national governments. Ongoing data collection is essential in tracking progress towards the scale-up of services, but as yet there is little information on the extent to which current interventions avert HIV infections in infants or improve child survival. A number of evaluations and studies have been completed with varying success to monitor the effectiveness of PMTCT programmes, but support is still needed for ongoing work to identify ways of evaluating the impact of national programmes so that successful interventions can be widely replicated in low- and middle-income countries.

2. PROVIDING PAEDIATRIC TREATMENT AND CARE

Despite the encouraging increase in the number of children on antiretroviral treatment, the youngest cohort of children exposed to the virus – those under age one – are not getting diagnosed and are missing out on treatment. As a result, large numbers of very young children are dying every year because of AIDS.

PROGRESS AND ACHIEVEMENTS

The number of children under age 15 in low- and middle-income countries who receive antiretroviral treatment rose dramatically, to almost 200,000 in 2007, up from around 127,000 in 2006 and 75,000 in 2005. The increase is occurring in every region of the world, with the most significant gains in sub-Saharan Africa (*Figure 5*).

It is nonetheless evident that those children currently on treatment still represent only a small proportion of those who need it. The most recent global estimates from WHO and UNAIDS report 2 million children under 15 years old with HIV infection and 370,000 new infections in 2007.[32] Coverage will need to be greatly expanded if the *Unite for Children, Unite against AIDS* goal of providing antiretroviral treatment, cotrimoxazole or both to 80 per cent of children in need by 2010 is to be met.

New evidence highlights early HIV diagnosis and antiretroviral treatment as particularly critical for infants with HIV. It indicates that a significant number of lives can be saved by initiating antiretroviral treatment for HIV-positive infants immediately after diagnosis within the first 12 weeks of life. The Children with HIV Early Antiretroviral Therapy (CHER) study from South Africa demonstrates a 76 per cent reduction in mortality when treatment was initiated within this time period.[33] Other studies have shown limited immune recovery and increased mortality even among children on antiretroviral treatment if it is initiated at more advanced stages of disease.[34] Clinical guidelines issued by WHO now recommend immediate initiation of antiretroviral therapy for all infants under one year of age diagnosed as infected with HIV rather than waiting until children show signs of infection.[35]

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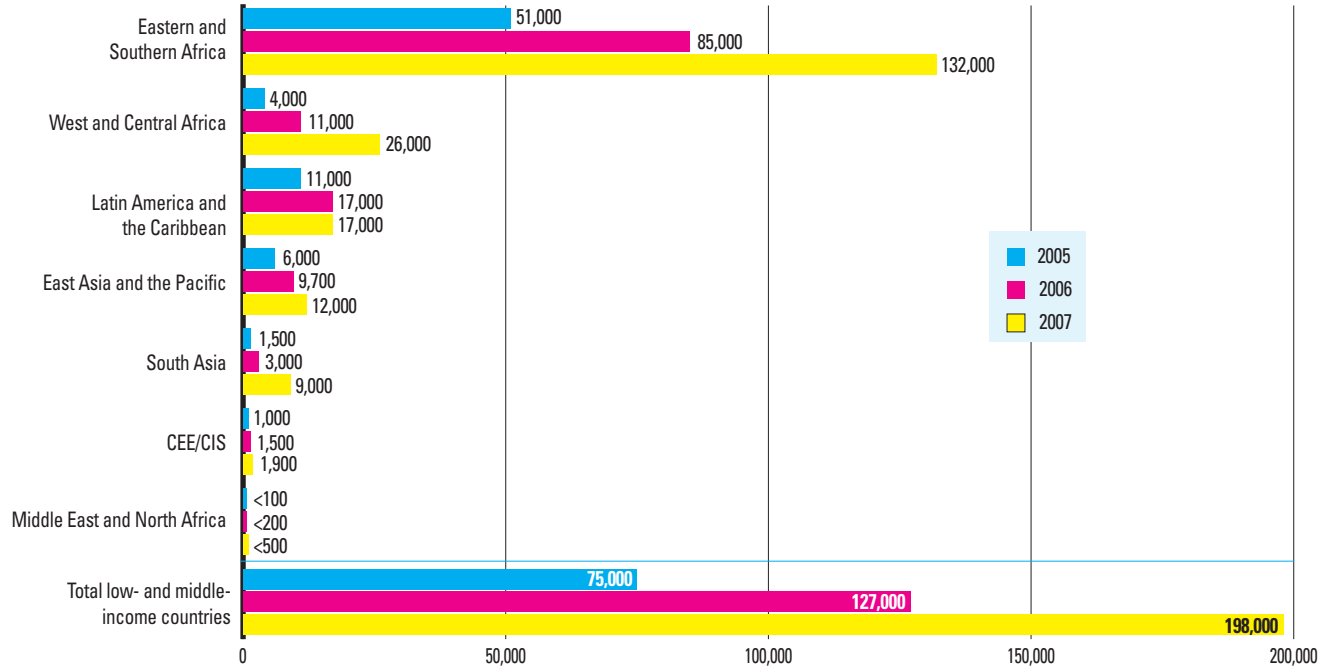
Figure 5. Number of children under 15 receiving antiretroviral therapy in low- and middle-income countries, 2005–2007



Note: Regional totals do not add up to the total for low- and middle-income countries because of rounding. The seven 'hyper-endemic' countries are all in the Eastern and Southern Africa region.

Source: UNICEF calculations based on data collected through the PMTCT and Paediatric HIV Care and Treatment Report Card process and reported in *Towards Universal Access: Scaling up HIV services for women and children in the health sector – Progress Report 2008* (UNICEF, UNAIDS, WHO), pp. 34–42. Regions were recalculated according to UNICEF classification of regions.

Numerous partners – including the Baylor International Pediatric AIDS Initiative, the Clinton Foundation HIV/AIDS Initiative, Columbia University's International Center for AIDS Care and Treatment Programs, the Elizabeth Glaser Pediatric AIDS Foundation, PEPFAR, UNICEF and WHO – have identified early HIV diagnosis as a priority activity in child health programming and have contributed towards its implementation. The US Centers for Disease Control and Prevention (CDC), for example, are helping to build national and regional laboratory capacities to facilitate HIV-related diagnosis in infants and to monitor disease progression and treatment response (*see box*).

Integrated laboratory training

In resource-limited countries with high burdens of infectious disease, laboratory services and skilled staff are critically needed to provide diagnostic testing that is accessible, appropriate and of high quality. In response to this need, PEPFAR has recently allocated funding, through the Global AIDS Program at the US Centers for Disease Control and Prevention, for the establishment of an African Centre for Integrated Laboratory Training. Located in Johannesburg, the Centre offers hands-on training to laboratory staff in the region. After needs assessments in 10 resource-limited African countries, PCR testing for HIV DNA in infants was identified as a priority issue and was the focus of an initial course offered in September 2008.

MAIN ISSUES

Early infant diagnosis and early access to care and treatment

Children under one year old are among those most vulnerable to HIV and AIDS and traditionally among the least served. Evidence demonstrates that early initiation of antiretroviral treatment in infants with HIV can save lives. Yet very few children under age one are currently receiving such treatment.

Recent studies find that the median age at which children with HIV begin antiretroviral treatment is between five and nine years old.[36] This has serious repercussions: One third of HIV-infected children without access to antiretroviral treatment die by the age of one year, and half by age two.[37]

In addition, late commencement of treatment may mean that the child's immune system is already severely compromised when the treatment is started. One important study in the United States showed that infants and children started on antiretroviral treatment when they were already severely immunodeficient never regained normal levels of immune functioning even after five years on treatment.[38] Another study, in sub-Saharan Africa, showed that such infants and children are significantly more likely to die than those initiated on treatment at an earlier stage.[39]

Most infants with HIV are not treated because health workers are not aware that the child was exposed to HIV; this may be due to a lack of information about the child's HIV status or because systems were not in place to transmit that information to the health worker. Even when information about the child's status is available, the child may not be referred for early infant HIV testing, or PCR-based HIV diagnosis may not be locally available. In 2007, only 8 per cent of children born to HIV-positive women were tested before they were two months old.[40] There are no clear data on how many of these children tested positive or actually began antiretroviral therapy, an illustration of the critical gap in data covering children's access to HIV and AIDS services.

Several countries have revised child health cards to include HIV-related information, making tracking of exposed children easier and increasing the likelihood that infants known to be exposed to HIV are referred for virological testing, then early treatment if needed. Many countries have high levels of immunization coverage, and the age at which infants receive their first dose of diphtheria, pertussis, tetanus immunization (DPT1) – at or around six weeks old – is an ideal time for early virological testing for HIV.

Zambia began documenting HIV status on child health cards in 2006. Following the inclusion of this information, the number of HIV-exposed children benefiting from a virological test increased from 1,931 in 2006 to 7,664 in 2007 and 6,000 in the first six months of 2008 alone, according to government data.[41] These cards have also helped HIV-exposed children receive other critical interventions such as cotrimoxazole preventive therapy and nutritional support. For countries to be able to provide these services, however, health-care workers need to know if a child is exposed to HIV.

Another modality for scaling up diagnosis of HIV in young children takes advantage of child health days, organized in many countries to deliver health and nutrition services on a large scale. During child health days in Lesotho in 2007, more than 4,400 children were tested for HIV (including with PCR through dried blood spot specimen collection) and screened for tuberculosis and malnutrition. Nearly 100 per cent of participants (adults and children) were tested. Overall HIV prevalence among children was 3 per cent, and children who tested positive were immediately referred to appropriate care at the nearest antiretroviral treatment clinic.[42] As a model for provider-initiated HIV testing, the Lesotho experience is important to highlight and discuss because of its high participation rate and apparent effectiveness – and also because such experiences raise crucial questions about achieving a balance between ensuring access to care and treatment for the infant and the implicit testing of mothers when children are tested.

Several countries are rapidly building national capacity for infant diagnosis of HIV so that children do not have to wait as long to know if they are infected and require treatment. In 2007, 30 low- and middle-income countries used dried blood spot filter paper to collect specimens for PCR testing for HIV DNA in infants, up from 17 countries in 2005.[43] Many of these countries – Botswana, Kenya, Malawi, Mozambique, Rwanda, South Africa, Swaziland and Zambia – are in sub-Saharan Africa, the region with the largest number of exposed infants. Through the implementation of testing networks using dried blood spot filter paper, these countries have made virological testing possible even in remote rural areas.

The Clinton Foundation HIV/AIDS Initiative has placed a special emphasis on scaling up early infant diagnosis through dried blood spot PCR testing in heavily affected areas (*see box*). UNITAID, through its support to both PMTCT and paediatric HIV care and treatment, is providing reagents and other commodities for PCR testing for HIV DNA to a number of countries.

The Clinton Foundation HIV/AIDS Initiative's contributions to scaling up early infant diagnosis

The Clinton Foundation HIV/AIDS Initiative supports the expansion of early infant diagnosis in 29 countries through the donation of commodities with UNITAID funding, as well as by providing technical assistance to strengthen governments' capacity to run tests, establish sample transport networks and train health-care workers to ensure that children who test positive are referred immediately for antiretroviral treatment. The initiative has helped make DNA PCR reagents more affordable and has facilitated procurement and distribution. In 2007, the number of sites providing early infant diagnosis in programme countries grew from approximately 200 to more than 1,400, and 200,000 DNA PCR tests were conducted.[44]

Many children with HIV, however, are identified only when they become very sick. A 2006 study of referral patterns for HIV care and treatment for children under age 15 in Malawi found that only 1 per cent of referred children came from PMTCT services. The vast majority, 80 per cent, came from children's wards or nutritional rehabilitation units. To address this issue, the Ministry of Health has begun to routinely test sick children of unknown HIV-exposure status; 35 per cent of those tested have had positive test results, and of those, a large number were started on antiretroviral therapy.[45]

For many children with HIV, serious illness can be delayed or prevented through the use of the common antibiotic cotrimoxazole against opportunistic infections and malaria. Cotrimoxazole should be started as early as possible in infants who have been exposed to HIV or are infected. Yet, despite its efficacy and crucial role in saving children's lives, it is estimated that in 2007 cotrimoxazole prophylaxis was started in only 4 per cent of infants under two months of age born to HIV-positive women.[46] Child health cards with HIV-specific information can prompt health workers to initiate this critical intervention in a timely manner. UNICEF and WHO, with UNITAID support and in collaboration with the Clinton Foundation in several countries and the US Government in others, are providing donations of cotrimoxazole for use as prophylaxis in HIV-exposed and infected populations in countries of sub-Saharan Africa and South Asia.

Early infant diagnosis and early access to care and treatment, including cotrimoxazole and antiretrovirals, must be part of a broader approach to HIV care and treatment, including routine monitoring and adherence support. They must also be fully integrated into the broad spectrum of child survival and based on a comprehensive package of care – including optimal infant feeding, growth monitoring, immunization and other essential child survival interventions – as well as good-quality HIV-specific care that offers drugs (both antiretrovirals and cotrimoxazole), routine monitoring and adherence support.

The push to place greater numbers of HIV-infected infants on treatment means an increased need for the development of more and cheaper antiretroviral treatments suitable for the youngest populations. UNICEF, WHO and partners in the *Unite for Children, Unite against AIDS* initiative continue to talk with manufacturers and advocate for this increased availability.

Improved treatment coverage for children will also require better estimates of HIV infection and treatment needs. UNICEF, WHO and partners met in New York in July 2008 with the UNAIDS Reference Group on Estimates, Modelling and Projections to review epidemiological assumptions for estimating the numbers of children needing treatment. Estimated antiretroviral needs for children are being recalculated based on revised assumptions and estimates of mother-to-child transmission rates, the availability and use of new PMTCT regimens, and new WHO recommendations on eligibility for antiretroviral therapy in infants. The recalculated estimates, which will be available in 2009, will facilitate the setting of national and subnational targets for the youngest patients in the epidemic and should ultimately increase their access to life-saving treatment.

Quality improvement initiatives

Countries are using a number of simple quality-improvement tools with children that have been utilized successfully with adults, including visual prompts and reminders to clinicians

to provide routinely needed services and better documentation. Initial work is taking place in Botswana, Guyana and Uganda to apply quality improvement principles to health-care delivery to children as part of broader child survival measures.

Improving the quality of care in Uganda

In 2007, UNICEF teamed up with the Ministry of Health, the CDC and HIVQUAL International to support the application of quality improvement methods to basic child survival and HIV care in Uganda. One facility in the northern part of the country, the Lacor Hospital, noted that no children under age five were documented as routinely having their growth monitored – an essential intervention – and subsequently implemented a number of simple measures over the first six months of 2008. These included introducing growth monitoring charts, encouraging patients to bring their children in for monitoring when they came for prescription refills, and improving documentation. During this period, the proportion of children whose growth was monitored increased to more than 70 per cent. Other quality improvements have included the provision of additional scales for growth monitoring and making growth charts readily available as part of patient records. Systems have been redesigned to collect CD4 test specimens on site, patients are escorted to the laboratory to ensure that lab tests are performed on schedule, and results of CD4 and tuberculosis tests are followed up.[47]

Programming for children in conflict or emergency settings

In situations of conflict and emergency, it is essential to maintain the delivery of HIV services and access to life-saving interventions for children and their families affected by HIV and AIDS. During the unrest following the 2007 elections in Kenya, for example, an immediate concern related to the management of antiretroviral treatment for people living with HIV. In an effort led by the Ministry of Health through its National Programme for AIDS and Sexually Transmitted Infections, drugs were pre-positioned, staff were deployed in different areas around the country to support rapid access and service delivery, and an advisory was issued in the major daily newspapers, complemented by radio announcements in local languages and in English. At the same time, provincial and district AIDS coordinators were equipped to coordinate the intervention and liaise with civil society organizations engaged in humanitarian activities.

Following the devastating earthquake affecting China's Sichuan province in 2008, public information and announcements were disseminated as part of a communication strategy, including the locations where treatment, care and support services could be obtained. A newsletter linked local non-governmental organizations with people living with HIV in earthquake areas. New relationships to assist in the care and treatment of women and children living with HIV continued into the recovery phase, with support from UNICEF and civil-society partners.

Young people living with HIV

The many children and young people now living with HIV face particular challenges: accepting their HIV status and disclosing it to family, peers and others; maintaining adherence to treatment and overall medical care; and coping with feelings of isolation and stress.[48] Adolescents face the additional challenge of addressing their emerging sexuality, including having to disclose their HIV status to sexual partners and avoid high-risk behaviours.

In a qualitative study sponsored by WHO and UNICEF examining psychosocial issues facing adolescents and young people living with HIV, 41 per cent of respondent organizations working with young people with HIV identified adherence as a principal concern.[49] A separate study comparing adolescents (aged 11–19) and adults who initiated antiretroviral therapy

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Towards a comprehensive action agenda for young people living with HIV

In a study of 732 perinatally HIV-infected adolescents aged 15–19 in four districts of Uganda, 52 per cent of the respondents reported that they were currently in a relationship, 33 per cent had already had sex, and 40 per cent of those not sexually active reported a desire to have sex. Among those who reported having sex, only 37 per cent had used a method to prevent HIV infection. Of the sexually active female adolescents, 41 per cent had been pregnant at least once and 73 per cent of them chose to continue their pregnancies.

The study found that disclosing serostatus to friends was a major fear for 51 per cent of those surveyed; about 38 per cent of respondents who were in a relationship had disclosed their HIV status to partners. Some expressed anxiety about whether they would have meaningful sexual relationships, be loved despite their status or be able to have children.

The study identified several priority areas for programmatic action, including:

- Strengthening prevention for sexually active HIV-positive adolescents, including increased information and skills to help them negotiate disclosure and utilize protection correctly and consistently.
- Making pregnancy safer for adolescents with HIV, including through access to a full range of antenatal care that provides PMTCT services.
- Training service providers and counsellors on methods to discuss sexuality with adolescents, including those with HIV, in an engaging and respectful way, and encouraging parents to discuss these issues with adolescents.
- Supporting adolescents and young people with a full range of adolescent-friendly services as they transition from paediatric to adult clinics.
- Strengthening adolescent support groups, which can be very effective in skills building and for obtaining critical information about safer sexual activity.
- Improving the life skills of adolescents with HIV, including how to make informed and responsible choices.

The study was carried out by Frontiers in Reproductive Health of the Population Council and TASO with support from the United States Agency for International Development (USAID) and the Ford Foundation.[51]

between 1999 and 2006 for virological outcome and levels of adherence found that adolescents were less likely to achieve 100 per cent adherence at 6 months (29 per cent vs. 49 per cent) or 12 months (15 per cent vs. 34 per cent).[50]

Issues associated with dating and sexual relationships, including disclosure of HIV status to partners, are also of concern for young people living with HIV (*see box*).

Programmes in several countries are now addressing the special challenges these young people face. In Mali, for example, children and adolescents being treated at the Gabriel Touré Hospital in Bamako learn of their HIV status over the course of several group sessions with their parents or guardians. The methods of disclosure are age-appropriate and accompanied by psychosocial support for the child as needed. In Uganda, The AIDS Support Organization (TASO) runs peer support groups for adolescents on treatment. Through group discussion, recreational activities, music, dance, drama and writing, participants share information, support one another in their experiences – of stigma, peer pressure and disclosure of HIV status, among others – and learn to advocate for their needs. In Botswana, the Botswana-Baylor Children's Clinical Centre of Excellence is developing interventions to provide psychosocial support to adolescents living with HIV.

The response to young people living with HIV also presents an important opportunity for collaboration across two 'Ps': paediatric treatment and care, and preventing infection among adolescents and young people (*see Chapter 3*).

3. PREVENTING INFECTION AMONG ADOLESCENTS AND YOUNG PEOPLE

Across the globe, a renewed emphasis on prevention presents an important opportunity to ensure that adolescents and young people benefit from prevention efforts that take local realities into consideration. There is strong consensus that combination prevention – integrating behavioural, structural and biomedical approaches – works.

PROGRESS AND ACHIEVEMENTS

HIV prevalence among young people aged 15–24 is declining in many countries, in some of them significantly. HIV prevalence among young women aged 15–24 who are attending antenatal clinics has declined since 2000–2001 in 14 of the 17 countries with sufficient data to determine trends. In seven of these countries, prevalence in this group declined by at least 25 per cent, the global target set for 2010 at the UN General Assembly Special Session on HIV/AIDS (UNGASS) in 2001.[52]

Several countries with high HIV prevalence have experienced declines in risky behaviours, including the initiation of sex before age 15, sex without condoms and sex with multiple partners. Yet a significant number of young people continue to be infected with HIV; in the 15-and-older age group, 45 per cent of all new cases in 2007 were found among those 15–24 years old.[53]

Table 1. Young people aged 15–24 living with HIV, 2007

Region	Female	Male	Total
Sub-Saharan Africa	2,550,000	860,000	3,400,000
South Asia	300,000	390,000	690,000
Latin America and the Caribbean	160,000	240,000	400,000
East Asia and the Pacific	210,000	360,000	580,000
CEE/CIS	120,000	220,000	340,000
Middle East and North Africa	55,000	43,000	98,000
Total	**3,400,000**	**2,100,000**	**5,500,000**

Note: Some numbers do not add up to totals because of rounding.

Source: UNAIDS/WHO, unpublished estimates, 2008.

On average, about 30 per cent of males and 19 per cent of females aged 15–24 in developing countries have comprehensive and correct knowledge about HIV and how to avoid transmission.[54] These knowledge levels are far below the UNGASS Declaration of Commitment's goal of comprehensive HIV knowledge of 95 per cent among young people by 2010.

MAIN ISSUES

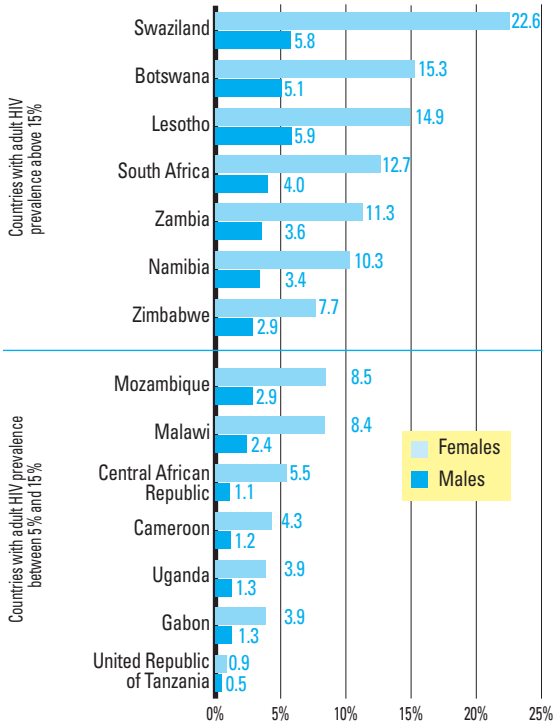
Vulnerability of girls and young women

There is strong consensus based on evidence that girls and young women remain disproportionately vulnerable to HIV infection in sub-Saharan Africa, particularly in the hyper-endemic countries, where prevalence is greater than 15 per cent (*Figure 6*). In Southern Africa, adolescent women are 2 to 4.5 times more likely to be infected than males of the same age.[55] Addressing the vulnerability of girls is a priority focus of key development partners, including the Global Fund, as well as the UNAIDS secretariat and co-sponsors.

An in-depth analysis of DHS data from five countries – Cameroon, Swaziland, Uganda, the United Republic of

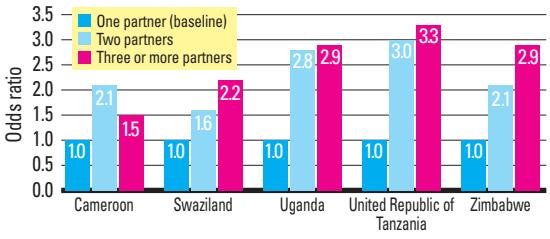
Tanzania and Zimbabwe – found a significant association between a young woman's HIV status and the number and age of her partners. Young women aged 15–24 were more likely to be infected with HIV when they had multiple partners (*Figure 7*) and when their partners were older (*Figure 8*).

Figure 6. HIV prevalence among young people aged 15–24, 2007



Source: Joint United Nations Programme on HIV/AIDS, *2008 Report on the Global AIDS Epidemic*, Annex 1.

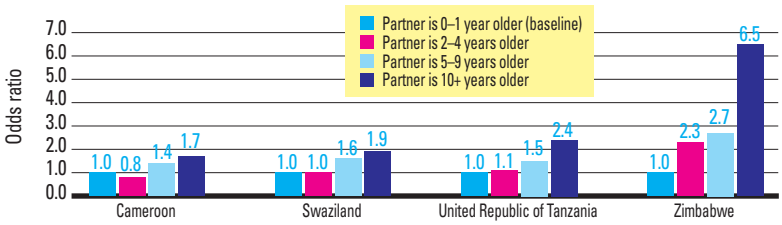
Figure 7. Risk of HIV infection among young women aged 15–24, by the number of partners in her lifetime, 2003–2006



Note: The odds ratio compares the magnitude of the association of HIV infection between the comparison group and the baseline group. In this chart, the comparison groups are women with two partners and women with three or more partners; the baseline group is women with one partner. An odds ratio of 1.0 indicates the HIV infection rate is equal in the two groups; an odds ratio of greater than 1.0 indicates the HIV infection rate is higher in the comparison group than in the baseline group, and an odds ratio of less than 1.0 means the HIV infection rate is lower in the comparison group than in the baseline group. For example, in Swaziland, women with two partners are 1.6 times more likely to be infected with HIV compared to women with one partner; women with three or more partners are 2.2 times more likely to be infected compared with women with one partner.

Source: Preliminary analysis of DHS and MICS data (2003–2006) by UNICEF and Macro International, 2008.

Figure 8. Risk of HIV infection among young women aged 15–24, by age difference with last sexual partner, 2003–2006



Note: The odds ratio compares the magnitude of the association of HIV infection between the comparison group and the baseline group. In this chart, the comparison groups are women whose partners are 2–4 years older, women whose partners are 5–9 years older and women whose partners are 10+ years older; the baseline group is women whose partners are 0–1 year older. An odds ratio of 1.0 indicates the HIV infection rate is equal in the two groups; an odds ratio of greater than 1.0 indicates the HIV infection rate is higher in the comparison group than in the baseline group, and an odds ratio of less than 1.0 means the HIV infection rate is lower in the comparison group than in the baseline group. For example, in Swaziland, women whose partners are 2–4 years older are equally likely to be infected with HIV as women whose partners are 0–1 year older; women whose partners are 5–9 years older are 1.6 times more likely to be infected as women whose partners are 0–1 year older.

Source: Preliminary analysis of DHS and MICS data (2003–2006) by UNICEF and Macro International, 2008.

In the Caribbean, girls and women comprise 50 per cent of people aged 15 and older living with HIV, and in some countries HIV prevalence rates among young women aged 15–24 are two to three times higher than for men of the same age group.[56] In this region, HIV is spread primarily through heterosexual transmission, with commercial sex and sexual exploitation having a significant role in many countries.

Urgent attention is needed to increase understanding of this vulnerability and to reduce it, taking into account the greater HIV risks to girls of multiple concurrent partnerships, intergenerational sex, transactional sex, and violence against women and girls. At a June 2008 technical meeting on young women's vulnerability to HIV infection in Southern Africa, sponsored by UNAIDS and the Reproductive Health and HIV Research Unit of the University of the Witswatersrand, Graça Machel, the international advocate for women's and children's rights, spoke of what she called the lack of empowerment and choice in the region, and called for reflection on and transformation of the cultural practices and attitudes that place girls at risk. The meeting stressed the need for communities to advocate zero tolerance for gender-based violence and recommended prioritizing secondary-school education for girls and economic empowerment of young women.[57]

Countries are responding to the evidence about girls and HIV. Zimbabwe, for example, has developed a national behaviour change communication strategy with a strong focus on gender issues. A key issue highlighted in the strategy is that sexual relations between young women and men who are five or more years older is the major factor in the spread of HIV to the younger generation. The strategy recognizes that sexually active young people need support in avoiding multiple partnerships and in using condoms, and that young people who are not sexually active need support in delaying sexual initiation.[58]

The 'Woman to Woman Initiative on HIV', launched in 2007 in Somalia, supported women's non-governmental organizations to reach some 31,000 women – including female heads of households, women who were internally displaced because of the emergency and adolescent girls – with correct information and risk-reduction measures. Results suggest that participants gained new knowledge, mastered certain life skills and are now more likely to provide care and support for people living with HIV.[59]

HIV risk among adolescents and young people in low-prevalence and concentrated epidemics

HIV risk among adolescents and young people in countries where prevalence is low and the epidemic is concentrated in specific populations is now well documented. In Central and Eastern Europe, seven countries have collected disaggregated data on risk behaviour among the most-at-risk boys and girls (*see box*). Further, legislative reviews are promoting discussion of most-at-risk adolescents and young people and related ethical issues.

In Egypt, a behavioural surveillance study focusing on children and adolescents living or working on the street in two cities is providing baseline evidence for targeted intervention programmes. Many of these children aged 15–17 in Alexandria (61 per cent) and Greater Cairo (52 per cent) are engaged in at least two risky behaviours. Harassment and ill-treatment by the police, as well as physical and sexual abuse, are among the problems experienced by the children. A combination of responses is therefore required to address root causes and change behaviours; these include initiatives with relevant ministries and the police to increase protection and access to services.[60]

Prevention in national HIV and AIDS strategic plans

National HIV and AIDS strategic plans need to have a strong focus on prevention, taking into account assessments of young people's risk and vulnerability. In Malaysia, a five-year National Strategic Plan on HIV/AIDS (2006–2010) covers issues from young people's vulnerability to the delivery of health-care services and antiretroviral treatment and provides funding for programmes with marginalized and most-at-risk populations; the plan was developed and drafted with the involvement of civil society. In South Asia, four countries with low levels of epidemic – Afghanistan, Bhutan, Maldives and Sri Lanka – finalized or approved national strategic plans in 2007 that readjusted efforts to focus on prevention for people most at risk, especially adolescents engaging in high-risk behaviour.

UNAIDS, the United Nations Population Fund (UNFPA), UNICEF and WHO have been promoting a focus on HIV prevention among young people in national plans in a number of countries in Eastern and Southern Africa, including Botswana, Lesotho, Namibia and Swaziland, and encouraging young people's participation in such plans. Malawi has developed a national acceleration plan for prevention for young people that takes advantage of better evidence and improved coordination. In Namibia, a prevention subcommittee prioritizing young people has been established under the national coordination structure, and the subnational response includes a focus on most-at-risk adolescents.

Young people are a component of the national HIV strategic plans of 22 countries in West and Central Africa, a region

Adolescents and risk in Central and Eastern Europe

A seven-country project in Central and Eastern Europe, conducted in partnership with the London School of Hygiene & Tropical Medicine and UNICEF, looked at adolescent risk behaviour in the region – including injecting drug use, unprotected sex between males, and sex in exchange for gifts and money – and awareness and use of services. Preliminary survey results being shared with governments show that in Bosnia and Herzegovina, injecting drug users aged 18–24 – most of whom had initiated drug use prior to age 18 – were likely to engage in multiple risk behaviours.[61] These results, along with the high levels of hepatitis C virus and low levels of HIV and syphilis in the target population, suggest an opportunity for rapid scale-up of harm-reduction services. In Ukraine, survey data corroborated earlier findings in a study of children and young people living or working on the street that they had all been subject during their lives to some form of serious trauma, such as violence, abuse and sexual or labour exploitation.[62] In Serbia, indicators on most-at-risk adolescents have been included in studies by the Global Fund to Fight AIDS, Tuberculosis and Malaria to establish national baseline data, and the information will be updated every two years as part of the Global Fund's monitoring system.

with generalized and potentially mixed epidemics. But there is a need for specific plans that focus on risk, vulnerability and disparities among young people both in school and out of school. Such plans have been elaborated in Cameroon, the Democratic Republic of the Congo and Nigeria. In Cambodia, the second National Strategic Plan for HIV (2008–2010) prepared by the Ministry of Education, Youth and Sport aims to increase coverage and quality of HIV education for children and youth who are especially vulnerable and at higher risk; a National Strategic Plan on Women, the Girl Child and HIV and AIDS (2008–2012) includes a focus on family values and social cohesion.

The lack of data is a major constraint on responding appropriately to young people's need for information on how to prevent HIV. Strategic information on the epidemic and the social factors driving it should inform and support programme and policy decision-making to achieve national goals. National strategic plans also should take into consideration such salient factors as poverty, gender inequalities and human rights violations associated with the epidemic.

In regions with low prevalence and concentrated epidemics, such as CEE/CIS, there is growing recognition that national HIV strategic plans need to include a focus on targeted interventions for most-at-risk adolescents and young people. In Ukraine, such adolescents are now recognized as needing special attention in the newly approved National HIV/AIDS Concept and Programme 2009–2013, and advocacy is ongoing to ensure the full integration of a focus on adolescents and young people at risk. Processes to integrate a similar focus in strategic review and drafting of plans are also under way in Albania, Moldova and Romania. The expanded UN Inter-Agency Task Team on HIV and Young People, particularly through its working group on young people most at risk, emphasizes the need for strategic information, disaggregated by age and sex, and evidence-informed programmes tailored to local realities and developed with the participation of such young people.[63]

Adolescent participation in local programming

The involvement of adolescents and young people in the planning, design, implementation, monitoring and evaluation of interventions that affect them is crucial, and significantly more work is needed to ensure their meaningful participation in local programming, with attention to engaging those most at risk. But there are some important examples of what is possible.

In Mali, adolescents were actively involved in the design and implementation of the country's first situation analysis of young people and HIV and AIDS. Trained in simple qualitative research techniques and the rights-based approach, they developed tools and questionnaires based on their own priorities and helped undertake field research that led to some of the key findings.

In Brazil, young people participate in implementing the Health and Prevention in Schools Programme, and many of the delegates to the national congress on health and prevention in schools in 2008 were young people. A young person now represents youth at the decision-making council for civil society in the National AIDS Programme. In 2007, young people living with HIV launched *Escuta só!* (*Listen up!*), a magazine and website that seeks to break through HIV-related stigma and prejudice.

In Uganda, the Straight Talk Foundation, a non-governmental organization focusing on health communication, has made participation of adolescents and young people a cornerstone of its work. Young people are part of all aspects of its programmes and work on the 3,400 radio shows annually that include interviews by and for young people.

The education sector

In generalized epidemic settings where children are in school, the education sector is a crucial avenue for reaching adolescents with the gender-sensitive information and skills that are a necessary part of preventing the spread of HIV. There is strong evidence that school-based sex education can be effective in changing the knowledge, attitudes and practices that lead to risky behaviour.

HIV components within life skills-based education are now a part of many education sector responses to the epidemic, and these responses are increasingly being tailored to specific national and local needs, based on evidence. Evaluations are under way to assess the efficacy of such interventions in Lesotho, Namibia and Zambia, and frameworks of life skills-based education that specifically address HIV prevention and the factors driving the epidemic are being developed in Botswana and the United Republic of Tanzania.

The HIV Alert School model

The HIV Alert School model has been adopted in Ghana as a national strategy for school-based HIV prevention. The model was developed in five regions of the country, where 40 per cent of schools are certified as 'HIV Alert'. Teachers in these schools are trained in behaviour change education for children. Parent-teacher associations and school management committees discuss HIV and AIDS as part of their regular meetings. An annual assessment and award process helps ensure that an HIV Alert School strives to maintain its status while motivating non-participating schools to seek certification. As of early December 2007, 131,572 teachers – 95 per cent of those in primary and junior secondary grades – had received training on the programme.[64]

An important breakthrough in 2008 was the signing by Ministers of Education and Health from Latin American and Caribbean countries of a historic declaration pledging support to multisectoral strategies to provide comprehensive sex education as part of school curricula, as well as activities to promote sexual health. The declaration was signed at the conclusion of the First Meeting of Ministers of Education and Health to Prevent HIV in Latin America and the Caribbean. Most countries in this region offer sex education at all levels of schooling, although there are significant differences in legislation, the scope and appropriateness of what is taught and the effectiveness of curricula.[65]

The education sector has a significant role in making sure that schools are safe places for children and adolescents, and policies need to be in place to ensure that students who are living with HIV can exercise their right to education in an enabling and supportive environment. Notably, Jamaica's National Policy for HIV/AIDS Management in Schools has the goal of promoting effective prevention and care within the educational setting.

The education sector's response needs to be part of a comprehensive approach to prevention that covers HIV prevention, treatment, care and support, and addresses the societal and cultural factors driving HIV infection at the individual and community levels and in the wider environment.

Male circumcision

Male circumcision, with full attention to safety, needs to be introduced as an additional strategy in a comprehensive package of prevention measures that includes condom use, reduction in number and concurrency of partners, and delaying the onset of sexual activity. In Swaziland, strategies are emerging on how best to reach adolescents through their schools and communities with accurate and relevant information about male circumcision. Activities include awareness raising among parents, making male circumcision available during school holidays, training staff to be 'youth-friendly' and reducing the cost of the procedure. Male circumcision can provide an important entry point for promoting safer sex practices, improving sexual and reproductive health and contributing to positive gender attitudes and behaviours.[66]

A September 2008 consultation on male circumcision in the Eastern and Southern Africa region, organized by the UN Inter-Agency Working Group on Prevention with the participation of youth organizations, recommended young people's involvement in the review and development of policies and strategies, in national mobilization efforts to increase demand for male circumcision and in the development of information materials. The consultation also recommended that male circumcision become part of countries' adolescent sexual and reproductive health strategies, thus having the potential to 're-energize' adolescent-friendly health services, among several other recommendations. Following the consultation, young people participated in the preparation of a question-and-answer document on male circumcision for use with other young people.[67]

HIV prevention in situations of emergency

Northern Sudan provides an example of how vulnerable populations in emergency situations are being reached. As part of a mass communication campaign for behaviour change in communities and camps for internally displaced people, young peer educators and community workers were mobilized to lead activities and share information on HIV transmission and prevention. The campaign was launched in 2007 by UNICEF in cooperation with the National AIDS Programme and the Federal Ministry of Information.

4. PROTECTION AND CARE FOR CHILDREN AFFECTED BY AIDS

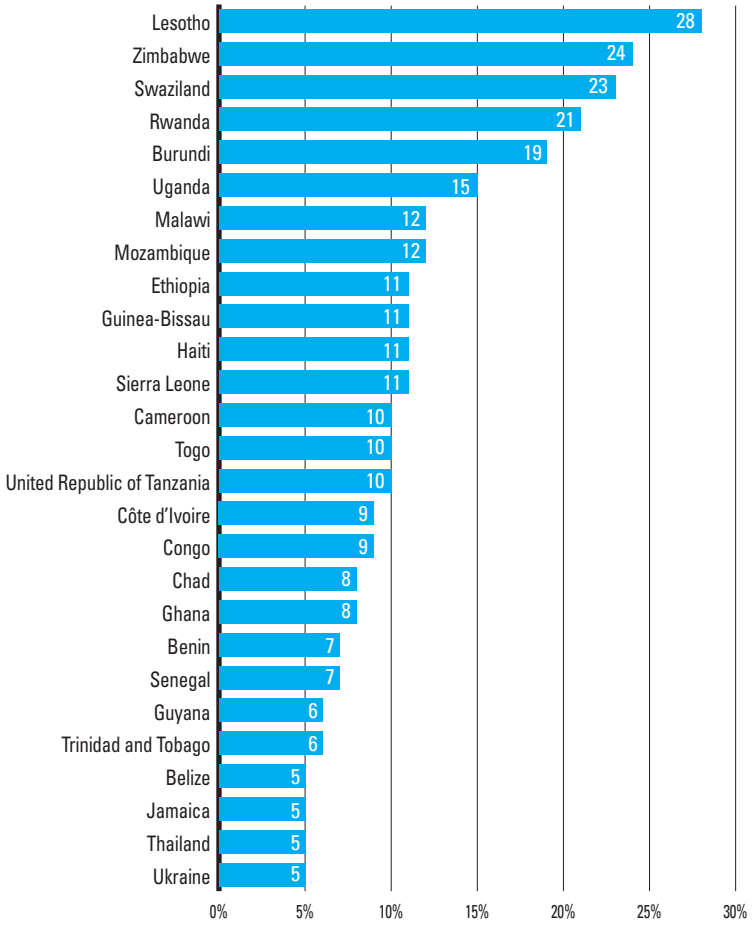
There is growing evidence in support of programming that is AIDS-driven – but not AIDS-exclusive – and that will assist all vulnerable children, including those affected by AIDS.

PROGRESS AND ACHIEVEMENTS

Worldwide in 2007, there were an estimated 15 million children who had lost one or both parents to AIDS, including nearly 12 million children in sub-Saharan Africa.[68] Many millions more were orphaned due to other causes. An analysis of recent household survey data in 47 countries shows that orphanhood from all causes exceeds 5 per cent in many countries and is over 20 per cent in Lesotho, Rwanda, Swaziland and Zimbabwe (*Figure 9*). Orphaning rates are lowest in countries of CEE/CIS.

AIDS is not the only cause of orphanhood. As of 2007, an estimated 47.5 million children in sub-Saharan Africa had lost one or both parents to any cause. For example, in Burundi and Rwanda, where the levels of orphanhood from all causes were 19 per cent and 21 per cent, respectively, orphanhood is more likely to result from armed conflict than from the epidemic.[69]

Figure 9. Percentage of children under 18 who have lost one or both parents, in countries with HIV prevalence greater than 1 per cent, 2003–2007



Source: UNICEF, *Progress Report for Children Affected by HIV and AIDS*, draft dated June 2008.

Considerable variability exists in orphan-related vulnerability, making programme targeting problematic. There is, however, growing consensus among most practitioners and policymakers that responses should be AIDS-sensitive – but not AIDS-exclusive – and that a focus should be on strengthening social protection systems. The AIDS epidemic has highlighted the vulnerabilities facing many children; in the most affected regions, addressing those vulnerabilities also reaches those children more directly affected by AIDS.

National-level responses for orphans and other vulnerable children have been increasing since the 1990s, and nearly 50 countries globally are developing some type of AIDS-sensitive response. It is estimated that 32 countries have developed or finalized national plans of action (NPAs) with benefits for orphans and vulnerable children.[70]

Countries of Eastern and Southern Africa have generally made the most progress in developing and implementing national responses, while programming for orphans and vulnerable children is relatively new in West and Central Africa. In the East Asia and Pacific region, Cambodia, Malaysia, Papua New Guinea and Viet Nam are in the process of drafting national plans. In South Asia, India was the first country to establish a national response to children affected by HIV and AIDS.[71]

But the process of developing NPAs has generally been slow, and implementation at scale is lacking. The often limited capacity of governments and implementing partners and lengthy periods for plan development (three to seven years or more) are major challenges identified by a working group of the Inter-Agency Task Team on Children and HIV and AIDS in a paper documenting evidence and lessons learned from the development and implementation of national plans.[72]

Insufficient resources for implementing NPAs are reflected in the levels of social assistance provided to vulnerable households. In 18 countries where household surveys were conducted between 2005 and 2007, the proportion of orphans and vulnerable children whose households received basic external support ranged between 1 per cent in Sierra Leone and 41 per cent in Swaziland, with a median value of 12 per cent (*Table 2*). Such support included education assistance, medical care, clothing, financial support and psychosocial services. The *Unite for Children, Unite against AIDS* goal is to reach 80 per cent of children most in need with services by 2010.

Table 2. Percentage of orphans and vulnerable children whose household received basic external support, 2005–2007

Country	Percentage	Survey
Swaziland	41	DHS (2006)
Zimbabwe	31	DHS (2005–2006)
Thailand	21	MICS (2005–2006)
Malawi	19	MICS (2006)
Namibia	17	DHS (2006–2007)
Zambia	16	DHS (2007)
Jamaica	15	MICS (2005)
Guyana	13	MICS (2006–2007)
Rwanda	13	DHS (2005)
Uganda	11	DHS (2006)
Cameroon	9	MICS (2006)
Côte d'Ivoire	9	AIS (2005)
Democratic Republic of the Congo	9	DHS (2007)
Guinea-Bissau	8	MICS (2006)
Central African Republic	7	MICS (2006)
Togo	6	MICS (2006)
Haiti	5	DHS (2005)
Sierra Leone	1	MICS (2006)

Source: Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and AIDS Indicator Surveys (AIS), 2005–2007.

MAIN ISSUES

Effective programming reinforces support systems

Assistance to orphans and vulnerable children continues to be carried out primarily by families, faith-based groups and other small organizations, and successful programming reinforces the capacity of these support systems. Governments have an important role in coordinating these efforts. In Zimbabwe, in March 2007, the Government began distributing funding pooled from all major donors to a broad network of 26 civil society organizations, which then managed more than 150 other partners and implementing agencies to provide services to orphans and other vulnerable children. As of March 2008, the programme had reached 165,980 children, surpassing its first-year target, according to a report issued by the Government with UNICEF.[73]

Several donors – including the Global Fund to Fight AIDS, Tuberculosis and Malaria, Irish Aid, PEPFAR and the UK Department for International Development – have increased resources for HIV and AIDS, which signifies opportunities for better support to vulnerable children and families. But donors' different approaches to aid delivery, with some funding civil society more directly and others supporting sector-wide approaches and government systems, must be coordinated nationally to ensure complementarities of interventions.[74] The Paris Declaration, endorsed in 2005, outlines ways in which international aid should be delivered.[75]

Not all vulnerable children are orphans

The overall situation of children's vulnerability is complex and needs to be analysed within specific country and local contexts. An analysis of household surveys in 36 countries found, for example, that in many countries children who are orphaned are worse off than other children in relation to certain indicators of child development – nutritional status, school attendance, sexual debut – but in other countries they are equally well or better off.[76]

Some of this inconsistency can be explained by the situational context. For example, in countries with moderate levels of wasting, there were quite large differentials between orphans and non-orphans, but if there was a high level of wasting in a country, all children were affected. Similarly, in countries with high levels of overall school attendance nearly the same percentages of both orphans and non-orphans attended school, but in countries with lower levels of school attendance many countries showed large disparities between orphans and non-orphans.

The same study assessed an expanded set of 37 potential indicators of vulnerability for nine countries. It found that the indicators most consistently revealing of vulnerability were asset ownership, household wealth status and education level of adults in the household. A similar result is highlighted by a 2008 study in Eastern and Southern Africa involving DHS data from 11 countries, which found that orphan vulnerability "was frequently and substantially outweighed by other factors," such as whether the child lives in an urban or rural location, or whether the household is rich or poor. As such, "a single-minded focus on orphan–non-orphan disparities within each region runs the risk of losing sight of the bigger disparities within the country, and the related policy implications."[77]

The shift towards inclusive programming to help all vulnerable children, including those directly affected by AIDS, is having an impact. The growing call for a broader, more inclusive definition of vulnerability is reflected in many countries' national plans of action in Eastern and Southern Africa. In Zimbabwe, for example, a new programme of support to the National Plan of Action for Orphans and Other Vulnerable Children accepts a wide definition of vulnerability beyond orphanhood and vulnerability due to AIDS.[78]

This shift also addresses problems observed across a variety of countries and programmes where there is perceived inequality in favour of orphans (sometimes called the 'lucky orphan syndrome') or where children singled out as orphans become the object of social stigma.

Social protection can have a positive effect on households and children

Social protection has been defined as "public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups."[79] Measures for social protection include social transfers, social welfare services and social policies.

UNICEF and other agencies are examining how 'child-sensitive' social protection measures can be designed with children's development, well-being and protection in mind, and how they can address the higher risk of exclusion for children in marginalized communities and for children who are additionally excluded due to gender, disability, HIV and AIDS, and other factors.

Specific 'AIDS-sensitive' social protection interventions for children include cash transfers, social work, early childhood development and alternative care. Cash transfers are increasingly promoted as a cost-effective approach to assist poor and vulnerable households. Cash allows families affected by illness to access the support they need, when they need it, and regular transfers can help keep children in school who would otherwise have to work to assist the

family. Linking transfers with social welfare services can increase their reach and effectiveness.

The Livingstone Accord (March 2006) committed 13 countries in Eastern and Southern Africa, under the auspices of the African Union, to develop national social protection strategies and integrate them into development plans and budgets. A follow-up meeting, the First Conference of Ministers in Charge of Social Development, took place in October 2008 in Namibia, where social policy and social protection featured prominently in the agenda.

Social welfare sectors are most often responsible for coordinating services for vulnerable children and families, including the management and delivery of cash transfers. But welfare ministries often lack the capacity and resources to effectively coordinate and oversee the full range of family support and child protection services that fall within their mandate.

The growing momentum towards consolidating a social protection agenda and reaching out to all vulnerable children, including those affected by AIDS, represents a key opportunity to address the capacity and organizational weaknesses of social welfare sectors. Some countries have already taken steps to improve welfare sector capacity.

The need to reduce fragmentation and duplication in the social welfare system in Brazil, for example, led to institutional changes and the creation of the Ministry of Social Development. In Chile, the establishment of a comprehensive social protection system, Chile Solidario, has led to strengthened investments in social work capacity and reorganization of the delivery of social programmes and services to facilitate access by poor families. In South Africa, a social security agency has been created to administer the national cash transfer programme, which will help free up the social welfare ministries to address their core mandate of child protection, alternative care and social welfare service coordination.
A common element to the successful institutionalization and scale-up of child-sensitive social protection has been leadership at a high governmental level.[80]

Cross-referral between faith-based and community groups and government social services is seldom undertaken, yet it is one clear way to expand the coverage and capacity of both sectors. The Church Alliance for Orphans (CAFO), for example, with a membership of 380 local congregations and faith- and community-based organizations in Namibia, plays a key advocacy role with the Government, particularly with the Ministry of Gender Equality and Child Welfare. The Ministry leads a permanent task force on orphans and vulnerable children; a subcommittee on care and support is chaired by CAFO's Executive Director.[81]

Schools play an important role

Schools continue to be vital places where children affected by AIDS – and all children – can find protection and support, and schools often serve as entry points for children in need to receive health services and meals. The right to education is crucial, as access to schooling helps children affected by HIV and AIDS cope with their situation and regain a sense of normalcy and stability in their lives. The protective nature of schooling is, however, dependent on safeguarding rights within education and providing safe and inclusive learning environments that minimize the distance from homes and have access to safe water and sanitation.

Gender can frequently be associated with vulnerability, and vulnerable girls, in particular, need protection. School fees represent an obstacle to education for many families, and the abolition of school fees has led to increased school enrolment among vulnerable children, especially girls, in several countries.[82]

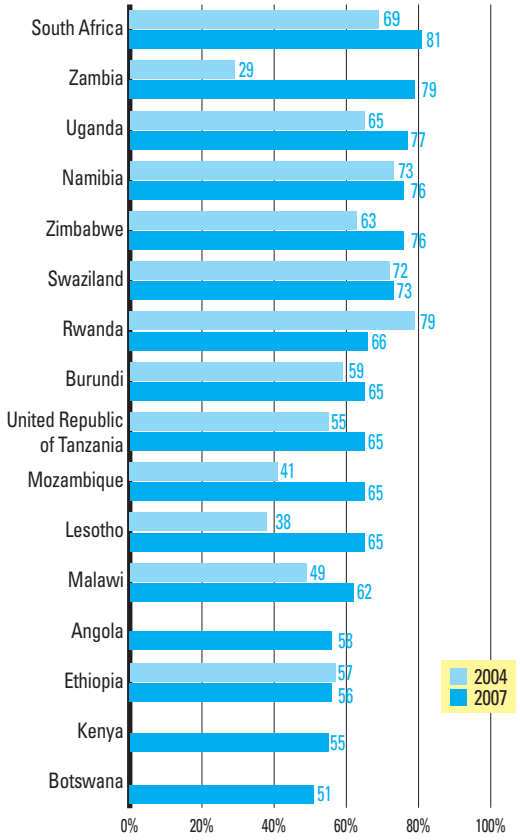
Ministries of education throughout Eastern and Southern Africa are working with external partners and non-governmental organizations to better coordinate school-based interventions. Examples include Circles of Support, Schools as Centres of Care and Support, and Learning Plus. The Media in Education Trust Africa, the Open Society Institute, the United Nations Educational, Scientific and Cultural Organization (UNESCO), UNICEF and the World Bank are among the organizations and agencies that support such initiatives.

It is also crucial to maintain and reinforce life-skills learning for reducing vulnerabilities and risks and increasing coping abilities and psychosocial well-being. Cooperation among teachers, local leaders and community members can help identify particularly vulnerable children for more intensified and targeted support. In Lesotho, the Ministry of Education and Training has developed a specific plan to provide educational opportunities and assistance for orphans and other children considered to be vulnerable. Other ministries, including the Ministry of Health

and Social Welfare and the Ministry of Justice and Human Rights and Correctional Services, have also developed policies that incorporate the needs of orphans and vulnerable children.

The participation of HIV-infected parents in antiretroviral regimens can have important benefits for their children's education. Household data from Kenya indicate that the number of hours children are in school each week increases by 20 per cent within six months of initiation of antiretroviral treatment for an adult household member. Similarly, children living in such households experience sharp improvements in their nutritional status as measured by quantitative assessments once an adult household member begins treatment.[83]

Figure 10. OVC Policy and Planning Effort Index: Total scores in countries of Eastern and Southern Africa, 2004–2007



Note: Angola, Kenya and Botswana were not included in the 2004 OPPEI Survey.

Source: UNICEF, 'Report on Progress in the National Response to Orphans and Other Vulnerable Children in Sub-Saharan Africa: The OVC Policy and Planning Effort Index (OPPEI) Survey', 2007.

The challenges of mounting a national response

The OVC [orphans and vulnerable children] Policy and Planning Effort Index (OPPEI) Survey measures eight components of an effective national response. The 2007 survey found that national situation analyses, consultative processes, coordinating mechanisms and national action plans had improved over 2004, while the least progress had occurred in the areas of monitoring and evaluation, legislative review, policy and resources.[84]

Out of a possible score of 100 per cent, OPPEI scores in Eastern and Southern Africa in 2007 ranged from 51 per cent in Botswana to 81 per cent in South Africa (*Figure 10*). In this region, Zambia made the most progress, scoring 79 per cent in 2007. OPPEI scores in the West and Central Africa region ranged from 35 per cent in the Democratic Republic of the Congo to 87 per cent in Mali.

That monitoring and evaluating the situation of orphans and vulnerable children is one of the weakest areas of national responses for these children was also found by the 2004 OPPEI. Challenges include fragmented efforts and limited coordination among governments, implementers and partners.

But the evidence base for effective programming in the area of protection and care for children affected by AIDS is improving. A UNICEF assessment of key indicators of the status of orphans and vulnerable children in 2008 shows the availability of more data in more areas compared to the previous assessment in 2006.[85] The increased availability of data is a result of improvements in the design of such surveys as the DHS, MICS and AIDS Indicator Surveys (AIS) that make them more sensitive to relevant indicators.

Nonetheless, more work is needed to ensure that enough data exist to effectively inform programming in this area. Data for the indicators for food security, psychological health, connection with an adult caregiver and children outside of family care have not generally been collected. In addition, the regions of CEE/CIS, Latin America and the Caribbean, the Middle East and North Africa, and South Asia have very limited or no data for most of the indicators.

The Monitoring and Evaluation Working Group of the Inter-Agency Task Team on Children and HIV and AIDS has put together a guidance document for developing and operationalizing a monitoring and evaluation system for the national response for orphans and vulnerable children.[86] Additional efforts are needed, however, to successfully plan, monitor and evaluate multisectoral responses at national and subnational levels.

CONCLUSIONS

It is hoped that current and future efforts in response to the HIV and AIDS epidemic will be supplemented by endeavours to 'know your children' – and that in knowing children and young people better and how AIDS affects them, and by understanding the implication of evidence and best practices for their care, the second and third generations of children affected by AIDS will not lead to a fourth.

The *Third Stocktaking Report* calls for several focused, concrete, achievable actions that can bear fruit in the next one to three years, and that can significantly improve prospects for children and women and help nations towards their goals. These initiatives involve changes in thinking, as well as concrete action.

- **Scale up programmes that provide early diagnosis of infants exposed to HIV and treatment of children who are infected.** Early initiation of treatment can significantly reduce AIDS-related mortality in infants and young children, underscoring the urgent need to expand access to virological testing for infants and start them promptly on treatment. Scaling up in most countries will require the strengthening of laboratory capacity, provision of equipment and ensuring a reliable supply of reagents, the training of service providers and the establishment of networks that effectively link diagnosis with care. National policies will need to be revised to include guidelines for early diagnosis and treatment targets. Infants diagnosed with HIV will require new fixed-dose combination medicines appropriate to the youngest populations. There is a need to develop and use innovative mechanisms such as mobile phones to reach families in a timely manner when test results are positive. Time is of particular importance for the youngest children, in whom rapid disease progression leads to early death.
- **Expand access to antiretroviral drugs for pregnant women in need of treatment.** Pregnant women infected with HIV need access to the best regimens possible for their own health, for the survival of their children and to prevent transmission of the virus to their infants. Treatment can be effectively provided through a decentralized health systems approach, and ministries of health must provide the necessary policy guidance that takes into consideration the implications for maternal, newborn and child health services, including the effective use of resources. Antiretroviral treatment for women's own health requires repositioning PMTCT as a vital component of both maternal and child survival. Programme assessment should therefore consider not just service uptake but impact in terms of mothers' and children's lives saved.
- **Integrate HIV and AIDS services with primary health-care programmes.** HIV prevention, diagnosis, care and treatment should be integrated within existing health infrastructure for antiretroviral treatment sites and maternal, neonatal and child health (MNCH) care services. PMTCT should be available in all antenatal care and MNCH services. Integration allows for reaching more children and women with interventions. It also reduces stigma attached to AIDS-only facilities. Infants exposed to HIV can be identified and referred for testing, cotrimoxazole treatment can be initiated for children in need, and adherence to treatment can be supported during routine well-child visits, scheduled

immunization visits and in other settings. Health policies at national and subnational levels may need to be reviewed to improve linkages between HIV and AIDS and child survival interventions, family planning based on national policies, and services to prevent and treat sexually transmitted infections and tuberculosis, as well as to improve programme management and coordination.

- **Accelerate efforts to support optimal and safe infant and young child feeding practices.** The quality of counselling provided by health-care providers and lay counsellors as it relates to infant feeding and HIV in many countries will need to be improved in line with new evidence on infant feeding and AIDS-related mortality and in light of the global food crisis. Counsellors will need to be retrained to be able to provide clear guidance on infant feeding options, including exclusive breastfeeding and appropriate weaning foods. Programmes should engage communities in promoting safe feeding practices and supporting mothers' choices, and policies should facilitate the exercise of appropriate infant feeding options depending on individual circumstances.

- **Make prevention programmes more relevant to the needs of adolescents and young people.** Prevention approaches must respond to evidence and understanding of the epidemic in different contexts and be tailored to the specific needs of adolescents and young people. Prevention policies and programmes targeted for adolescents and young people engaging in high-risk behaviours are a critical priority where such behaviours as injecting drug use, men having sex with men, intergenerational sex and sex work are driving HIV transmission. A supportive policy environment will facilitate the work of the education sector in adapting and updating life skills-based programmes in schools, especially where their content covers potentially sensitive issues. National strategic plans with a focus on HIV prevention should include clear targets and mechanisms

for monitoring progress. Evaluation is needed, as well, to assess the impact of HIV prevention efforts through the mass media, sports and celebrity involvement.

- **Combine prevention strategies for a more effective response.** A broad range of prevention strategies is available and best used in combination to ensure that the specific needs of adolescents and young people at risk are met. To be effective, HIV prevention programmes must combine information, life skills and behavioural change activities with actions to address the social issues that make adolescents and young people vulnerable to HIV and lead them to engage in risky behaviours. Although male circumcision has been shown to contribute to reducing HIV risk among men, it should be seen as an additional strategy rather than as a substitute for current prevention measures such as condom use, reduction in number of partners and delay of sexual activity.
- **Understand and address the greater vulnerability of girls.** Along with working to change individual behaviour, national governments and partners must openly address the social and cultural factors driving the particular vulnerability of girls, such as concurrent partnerships, intergenerational sex, transactional sex, and violence against women and girls. Being in school reduces the risk of HIV infection among girls, so efforts to keep girls in school until secondary-school graduation must be intensified.
- **Prioritize the collection and disaggregation of high-quality data.** Quantitative and qualitative data are essential to identify the populations most at risk, understand trends and evaluate prevention programmes. Data that are disaggregated by such factors as age, sex, marital status, wealth quintile and geographical location (urban or rural) can be informative for better programming. Improved knowledge about the under-5 and 15–18 age groups and the most at risk among them can inform the development of strong national strategies that are crucial to effective and continued prevention, care and treatment.

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- **Invest in the social sector to improve protection of the most vulnerable children.** The global response to the AIDS epidemic can drive efforts for better support and protection not just for children affected by HIV and AIDS but for all of the most vulnerable children. Efforts and investment should be directed towards increasing access to basic services, ensuring appropriate alternative care, and providing social support and protection from abuse and neglect. Social cash transfers in particular can act as a protective mechanism for recipient households in the context of rising food prices. Partnerships with civil society can help support the capacity of families and communities to care for vulnerable children and minimize the need for care in institutional settings.

Know your children

Finally, this *Third Stocktaking Report* acknowledges the efforts by all those working in response to the HIV and AIDS epidemic to 'know your epidemic' and respond accordingly. It is hoped that these efforts will be supplemented by endeavours to 'know your children' – and that in knowing children and young people better and how AIDS affects them, and by understanding the implications of evidence and best practices for their care, the second and third generations of children affected by AIDS will not lead to a fourth.

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ANNEX

NOTES ON THE DATA

DATA SOURCES AND COMPILATION

The data and analyses presented in this *Third Stocktaking Report* are derived from information in UNICEF's global databases and compiled from various sources, including nationally representative data collected from household surveys, e.g., Demographic and Health Surveys, Multiple Indicator Cluster Surveys and Reproductive Health Surveys; national programme service statistics collected annually by UNICEF and WHO through a standard PMTCT and paediatric HIV care and treatment questionnaire, on behalf of the Inter-Agency Task Team on Prevention of HIV Infection in Pregnant Women, Mothers and their Children; country estimates of HIV care and treatment needs modelled by UNAIDS and WHO; and the United Nations Population Division country estimates of the number of annual births.

Detailed information about the household surveys is available at <www.measuredhs.com> and <www.childinfo.org>, and technical descriptions of the epidemiological methodology used to estimate HIV care and treatment needs are available at <www.unaids.org>.

These data allow for a comprehensive assessment of progress being made towards the international goals of universal access to HIV prevention, care, treatment and support for children and women.

The PMTCT and Paediatric HIV Care and Treatment Report Card collects data for a 12-month period, January–December. For 2007, however, a few countries did not report on the entire 12-month period, so UNICEF, WHO and UNAIDS used these countries' available partial data to project coverage for the entire year, January–December 2007. Details about the specific countries are available in *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008*. This report uses the actual service coverage numbers as reported by most countries for the 12-month period of January–December 2007.

ESTIMATES ON HIV CARE AND TREATMENT NEEDS OF PREGNANT WOMEN AND CHILDREN

In August 2008, UNAIDS and WHO released new global estimates for 2007 of the numbers of people living with HIV, new infections and AIDS deaths. UNAIDS in 2007 refined the HIV and AIDS estimation methodology to reflect more reliable data available from population-based surveys and expanded national sentinel surveillance systems in a number of countries. As a result, UNAIDS has retrospectively generated new estimates for the past years based on the refined methodology. To achieve consistency and establish a comparative measurement of progress, trend analyses must be recalculated using only the newly generated estimates.

Similarly, global estimates of the number of women needing PMTCT services have been refined, and the coverage rates reported for 2004, 2005 and 2006 have thus been recalculated using the newly generated estimates. Estimates on the HIV care and treatment needs of children under 15 years old were not available at the time of publication. As a result, only the actual numbers of children reported to be receiving specific HIV-related interventions are presented in this report.

Overall, new estimates by UNAIDS and WHO of PMTCT coverage, the number of children living with HIV and the number of children orphaned by AIDS for 2007 are lower than estimates published in previous reports; the differences between these newly generated estimates and previously published estimates are not related to trends over time, and therefore the new and previous estimates are not comparable. Nor are other revised estimates comparable to estimates published in previous years. For example, it is incorrect to conclude that the estimated number of children living with HIV has decreased from 2.3 million in 2006 to 2.0 million in 2007 given that these estimates are not derived from trends over time but from more refined epidemiological modelling procedures. Trends over time may be assessed, however, using UNAIDS methodological revisions applied retrospectively to earlier HIV prevalence data.

More details on the HIV estimates methodology can be found at <www.unaids.org>.

GOAL 1. Preventing mother-to-child transmission of HIV in low- and middle-income countries

	Estimated adult HIV prevalence rate (%) (15–49 years), 2007	Antenatal care coverage (%), 2000–2007*	Annual number of births, 2007 (thousands)	Estimated number of HIV-infected pregnant women, 2007			Reported number of HIV-infected pregnant women who received ARVs for PMTCT, 2007#	Estimated percentage of HIV-infected pregnant women who received ARVs for PMTCT, 2007**		
				Estimate	Low estimate	High estimate		Estimate	Low estimate	High estimate
Afghanistan	–	16	1,314	–	–	–	0	–	–	–
Albania	–	97	52	–	–	–	–	–	–	–
Algeria	0.1	89	704	<500	<200	660	19	–	3	12
Angola	2.1	80	810	18,000	13,000	22,000	1,645	9	7	13
Antigua and Barbuda	–	100	0	–	–	–	–	–	–	–
Argentina	0.5	99	693	1,700	1,200	2,400	2,193	–	93	>95
Armenia	0.1	93	37	<100	<100	<100	6	–	19	45
Azerbaijan	0.2	77	134	<100	<100	<200	6	–	4	17
Bahamas	3.0	98	6	–	–	–	77 b	–	–	–
Bahrain	–	–	13	–	–	–	–	–	–	–
Bangladesh	–	51	3,998	<500	<200	<500	5 a	–	1	4
Barbados	1.2	100	3	–	–	–	–	–	–	–
Belarus	0.2	99	91	<100	<100	<200	127	–	90	>95
Belize	2.1	94	7	<200	<100	<500	55	–	24	64
Benin	1.2	84	365	4,500	3,900	5,300	1,830	40	35	47
Bhutan	0.1	88	12	–	–	–	–	–	–	–
Bolivia	0.2	79	263	<200	<200	<500	34	–	13	24
Bosnia and Herzegovina	<0.1	99	34	–	–	–	0	–	–	–
Botswana	23.9	97	47	11,000	10,000	12,000	12,419	>95	>95	>95
Brazil	0.6	97	3,706	8,600	5,600	13,000	6,188	–	49	>95
Brunei Darussalam	–	–	8	–	–	–	–	–	–	–
Bulgaria	–	–	68	–	–	–	1	–	–	–
Burkina Faso	1.6	85	654	8,300	6,800	10,000	1,480	18	15	22
Burundi	2.0	92	399	7,800	5,100	10,000	1,102	14	11	22
Cambodia	0.8	69	382	1,600	1,200	2,000	505	–	25	41
Cameroon	5.1	82	649	34,000	22,000	42,000	7,516 b	22	18	34
Cape Verde	–	98	15	–	–	–	51	–	–	–
Central African Republic	6.3	69	158	11,000	9,800	12,000	3,714 b	34	30	38
Chad	3.5	39	492	18,000	10,000	22,000	254 a	1	1	2
Chile	0.3	–	250	<500	<500	500	117	–	23	45
China	0.1	90	17,374	6,800	4,300	11,000	593 c	–	6	14
Colombia	0.6	94	876	2,500	1,600	3,700	144	–	4	9
Comoros	<0.1	75	28	<100	<100	<100	0	–	0	0
Congo	3.5	86	133	4,400	3,400	5,400	240	5	4	7
Cook Islands	–	–	0	–	–	–	–	–	–	–
Costa Rica	0.4	92	80	<200	<100	<500	21 a	–	9	25
Côte d'Ivoire	3.9	85	687	28,000	21,000	34,000	3,240 b	12	9	16
Croatia	<0.1	–	41	–	–	–	2	–	–	–
Cuba	0.1	100	118	<100	<100	<200	41	–	37	>95
Democratic People's Republic of Korea	–	–	317	–	–	–	–	–	–	–
Democratic Republic of the Congo	–	85	3,118	38,000	33,000	46,000	3,435	9	8	10
Djibouti	3.1	92	24	820	610	1,000	52 a	6	5	9
Dominica	–	100	0	–	–	–	1	–	–	–
Dominican Republic	1.1	99	231	1,600	1,200	2,200	795	–	36	65
Ecuador	0.3	84	283	<500	<500	800	268	–	34	>95
Egypt	–	70	1,840	<200	<200	<500	5	–	2	4
El Salvador	0.8	86	158	650	<500	1,100	130	–	12	32
Equatorial Guinea	3.4	86	20	710	530	950	103 a	14	11	20
Eritrea	1.3	70	191	2,500	1,600	4,000	168 b	7	4	11
Ethiopia	2.1	28	3,201	66,000	58,000	74,000	4,888	7	6	8
Fiji	0.1	–	18	<100	<100	<100	7	–	82	>95
Gabon	5.9	94	34	2,300	1,600	3,500	494	21	14	32
Gambia	0.9	98	60	510	<500	800	133 b	–	17	58
Georgia	0.1	94	48	<100	<100	<100	22	–	41	>95
Ghana	1.9	92	703	14,000	12,000	16,000	2,896	21	18	24
Grenada	–	100	2	–	–	–	7	–	–	–
Guatemala	0.8	84	449	5,300	3,200	8,100	373	–	5	12
Guinea	1.6	82	377	6,200	5,000	8,600	679 b	11	8	14
Guinea-Bissau	1.8	78	84	1,500	1,000	2,100	349	24	17	34
Guyana	2.5	81	13	<500	<200	<500	144 a	–	29	>95
Haiti	2.2	85	270	5,100	4,200	6,100	1,107	22	18	26
Honduras	0.7	92	200	650	<500	1,200	220	–	19	79
India	0.3	74	27,119	64,000	37,000	92,000	8,816	–	10	24
Indonesia	0.2	93	4,386	3,300	2,100	5,300	89	–	2	4

GOAL 1. Preventing mother-to-child transmission of HIV in low- and middle-income countries

	Estimated adult HIV prevalence rate (%) (15–49 years), 2007	Antenatal care coverage (%), 2000–2007*	Annual number of births, 2007 (thousands)	Estimated number of HIV-infected pregnant women, 2007			Reported number of HIV-infected pregnant women who received ARVs for PMTCT, 2007#	Estimated percentage of HIV-infected pregnant women who received ARVs for PMTCT, 2007**		
				Estimate	Low estimate	High estimate		Estimate	Low estimate	High estimate
Iran (Islamic Republic of)	0.2	–	1,441	1,300	940	1,800	22	–	1	2
Iraq	–	84	935	–	–	–	–	–	–	–
Jamaica	1.6	91	55	<500	<500	640	292 b	–	45	>95
Jordan	–	99	154	–	–	–	2	–	–	–
Kazakhstan	0.1	100	297	<200	<100	<500	126	–	30	>95
Kenya	–	88	1,479	76,000	66,000	86,000	52,858 b	69	61	80
Kiribati	–	–	0	–	–	–	–	–	–	–
Kuwait	–	–	51	–	–	–	–	–	–	–
Kyrgyzstan	0.1	97	115	<100	<100	<200	3	–	2	8
Lao People's Democratic Republic	0.2	27	157	<200	<100	<500	24	–	9	36
Lebanon	0.1	96	74	<100	<100	<100	–	–	–	–
Lesotho	23.2	90	59	12,000	11,000	14,000	3,966	32	29	36
Liberia	1.7	85	189	3,100	2,400	3,900	224	7	6	9
Libyan Arab Jamahiriya	–	–	145	–	–	–	–	–	–	–
Madagascar	0.1	80	722	<500	<500	760	25	–	3	9
Malawi	11.9	92	573	73,000	64,000	82,000	23,158	32	28	36
Malaysia	0.5	79	555	1,300	770	2,000	183	–	9	24
Maldives	–	81	7	<100	<100	<100	–	–	–	–
Mali	1.5	70	595	8,600	6,800	11,000	1,018	–	10	15
Marshall Islands	–	–	0	–	–	–	–	–	–	–
Mauritania	0.8	64	102	<500	<500	770	45	–	6	20
Mauritius	1.7	–	19	<200	<100	<500	19	–	6	23
Mexico	0.3	–	2,088	3,100	2,000	4,900	146 a	–	3	7
Micronesia (Federated States of)	–	–	3	–	–	–	–	–	–	–
Moldova, Republic of	0.4	98	43	<100	<100	<200	73	–	51	>95
Mongolia	0.1	99	49	<100	<100	<100	0	–	0	0
Montenegro	–	97	8	–	–	–	1	–	–	–
Morocco	0.1	68	641	<500	<500	550	42	–	8	18
Mozambique	12.5	85	855	97,000	81,000	120,000	44,975	46	39	56
Myanmar	0.7	76	891	4,500	2,900	7,100	1,280 b	–	18	43
Namibia	15.3	95	53	9,400	7,600	11,000	6,022 a	64	53	80
Nauru	–	–	0	–	–	–	–	–	–	–
Nepal	0.5	44	796	1,500	990	2,300	36	–	2	4
Nicaragua	0.2	90	140	<200	<100	<500	43	–	15	44
Niger	0.8	46	701	3,300	2,100	5,000	1,006 b	–	20	47
Nigeria	3.1	58	5,959	190,000	130,000	240,000	12,278	7	5	10
Niue	–	–	0	–	–	–	–	–	–	–
Occupied Palestinian Territory	–	99	145	–	–	–	–	–	–	–
Oman	–	100	58	–	–	–	–	–	–	–
Pakistan	0.1	61	4,446	2,300	1,500	3,700	5	–	<1	<1
Palau	–	–	0	–	–	–	–	–	–	–
Panama	1.0	–	70	<500	<500	510	71 b	–	14	29
Papua New Guinea	1.5	–	190	1,900	1,800	2,100	84	4	3	5
Paraguay	0.6	94	153	<500	<500	830	141 b	–	17	57
Peru	0.5	91	584	1,300	890	1,800	502	–	28	56
Philippines	–	88	2,295	<200	<200	<500	1	–	<1	<1
Qatar	–	–	14	–	–	–	–	–	–	–
Republic of Korea	<0.1	–	448	–	–	–	–	–	–	–
Romania	0.1	94	211	<500	<200	<500	68	–	22	42
Russian Federation	1.1	–	1,515	7,300	4,500	11,000	6,419	–	59	>95
Rwanda	2.8	94	435	11,000	9,100	13,000	6,485 b	60	51	71
Saint Kitts and Nevis	–	100	1	–	–	–	–	–	–	–
Saint Lucia	–	99	3	–	–	–	11	–	–	–
Saint Vincent and the Grenadines	–	95	2	–	–	–	–	–	–	–
Samoa	–	–	5	–	–	–	–	–	–	–
Sao Tome and Principe	–	97	5	–	–	–	22	–	–	–
Saudi Arabia	–	–	618	–	–	–	–	–	–	–
Senegal	1.0	87	439	4,400	3,000	6,300	264	–	4	9
Serbia	0.1	98	127	<100	<100	<200	2 a	–	2	5
Seychelles	–	–	3	–	–	–	–	–	–	–
Sierra Leone	1.7	81	268	4,400	3,100	6,200	919	21	15	29
Singapore	0.2	–	37	–	–	–	–	–	–	–
Solomon Islands	–	–	15	–	–	–	–	–	–	–
Somalia	0.5	26	377	940	510	1,700	11	–	<1	2

GOAL 1. Preventing mother-to-child transmission of HIV in low- and middle-income countries

	Estimated adult HIV prevalence rate (%) (15–49 years), 2007	Antenatal care coverage (%), 2000–2007*	Annual number of births, 2007 (thousands)	Estimated number of HIV-infected pregnant women, 2007			Reported number of HIV-infected pregnant women who received ARVs for PMTCT, 2007#	Estimated percentage of HIV-infected pregnant women who received ARVs for PMTCT, 2007**		
				Estimate	Low estimate	High estimate		Estimate	Low estimate	High estimate
South Africa	18.1	92	1,092	220,000	180,000	260,000	127,164 b	57	49	69
Sri Lanka	–	99	292	<100	<100	<100	1 a	–	1	3
Sudan	1.4	60	1,230	18,000	12,000	26,000	9 d	<1	<1	<1
Suriname	2.4	90	9	<200	<100	<200	35 a	–	18	57
Swaziland	26.1	85	33	13,000	12,000	15,000	8,772	67	60	74
Syrian Arab Republic	–	84	535	–	–	–	0	–	–	–
Tajikistan	0.3	77	186	<200	<100	<500	9	–	2	11
Thailand	1.4	98	932	10,000	6,400	15,000	9,352	–	62	>95
The former Yugoslav Republic of Macedonia	<0.1	94	22	–	–	–	–	–	–	–
Timor-Leste	–	61	48	–	–	–	2	–	–	–
Togo	3.3	84	245	8,000	6,300	10,000	705	9	7	11
Tonga	–	–	3	–	–	–	–	–	–	–
Trinidad and Tobago	1.5	96	20	–	–	–	–	–	–	–
Tunisia	0.1	92	173	<100	<100	<100	1	–	1	3
Turkey	–	81	1,381	–	–	–	4 a	–	–	–
Turkmenistan	<0.1	99	109	–	–	–	0 a	–	–	–
Tuvalu	–	–	0	–	–	–	–	–	–	–
Uganda	5.4	94	1,445	78,000	68,000	92,000	26,484	34	29	39
Ukraine	1.6	99	419	5,200	3,800	6,700	3,046	–	45	79
United Arab Emirates	–	–	71	–	–	–	–	–	–	–
United Republic of Tanzania	6.2	78	1,600	100,000	91,000	110,000	31,863	32	29	35
Uruguay	0.6	–	51	<200	<100	<500	53 a	–	20	76
Uzbekistan	0.1	99	623	<500	<200	840	95	–	11	68
Vanuatu	–	–	7	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	–	94	597	2,300	1,300	4,600	310 a	–	7	24
Viet Nam	0.5	91	1,653	3,900	2,400	6,400	744	–	12	31
Yemen	–	41	860	–	–	–	2	–	–	–
Zambia	15.2	93	473	76,000	68,000	86,000	35,314	47	41	52
Zimbabwe	15.3	94	373	52,000	48,000	57,000	15,381	29	27	32
SUMMARY INDICATORS										
Sub-Saharan Africa	5.0 †	72 †	30,323 †	1,300,000	1,200,000	1,400,000	446,000	34	32	37
Eastern and Southern Africa	7.8 †	72 †	14,268 †	930,000	860,000	1,000,000	403,000	43	40	47
West and Central Africa	2.6 †	71 †	16,056 †	390,000	320,000	450,000	43,000	11	10	13
Middle East and North Africa	0.3 †	72 †	9,726 †	21,000	15,000	29,000	<200	1	<1	–
South Asia	0.3 †	68 †	37,986 †	69,000	40,000	97,000	8,900	13	9	22
East Asia and Pacific	0.2 †	89 †	29,773 †	34,000	27,000	44,000	13,000	38	30	48
Latin America and Caribbean	0.6 †	94 †	11,381 †	36,000	30,000	45,000	13,000	36	29	43
CEE/CIS	0.8 †	90 †	5,560 †	14,000	10,000	18,000	10,000	71	56	>95
Low- and middle-income countries	–	–	–	1,500,000	1,400,000	1,600,000	491,000	33	31	35
Developing countries	0.9 †	77 †	122,266 †	–	–	–	–	–	–	–
World	0.8 †	77 †	135,770 †	–	–	–	–	–	–	–

DEFINITIONS OF THE INDICATORS

Estimated adult HIV prevalence rate: Percentage of adults (15–49 years old) living with HIV as of 2007.

Antenatal care coverage: Percentage of women (15–49 years old) attended at least once during pregnancy by skilled health personnel (doctors, nurses or midwives).

Annual number of births: Estimated number of live births in 2007.

Estimated number of HIV-infected pregnant women: Estimated number of pregnant women living with HIV as of 2007.

Reported number of HIV-infected pregnant women who received ARVs for PMTCT: Number of women testing HIV-positive during visits to antenatal clinics who were provided with antiretroviral therapy (ARVs) to prevent mother-to-child transmission.

Estimated percentage of HIV-infected pregnant women who received ARVs for PMTCT: Calculated by dividing the reported number of HIV-infected pregnant women who received ARVs for PMTCT by the estimated unrounded number of HIV-infected pregnant women in 2007. The point estimates and ranges are given for countries with a generalized epidemic, whereas only ranges are given for countries with a low or concentrated epidemic. Ranges in coverage estimates are based on plausibility (uncertainty) bounds in the denominator, i.e., low and high estimated number of HIV-infected pregnant women.

MAIN DATA SOURCES

Estimated adult HIV prevalence rate: UNAIDS, *2008 Report on the Global AIDS Epidemic.*

Antenatal care coverage: UNICEF, *The State of the World's Children 2009.*

Annual number of births: UNICEF, *The State of the World's Children 2009.*

Estimated number of HIV-infected pregnant women: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

Reported number of HIV-infected pregnant women who received ARVs for PMTCT: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

Estimated percentage of HIV-infected pregnant women who received ARVs for PMTCT: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

NOTES

– Data not available.

* Data refer to the most recent year available during the period specified in the column heading.

** United Nations General Assembly Special Session on HIV/AIDS (2001) indicator.

\# Most countries have reported data for a full 12-month period in 2006 or 2007 (see note b). Fifteen countries reported data for 2006; these data reflect a 12-month period and the values are therefore not projected.

a Reporting period is from Jan.–Dec. 2006.

b Data were reported for a period of less than 12 months in 2007; values are projected to a 12-month period, based on the monthly value. Following are countries for which the numbers of HIV-infected pregnant women who received ARVs for PMTCT are projected, with months reported and reported values: Bahamas, Jan.–Sept. 2007: 58; Cameroon, Jan.–Oct. 2007: 6,263; Central African Republic, Jan.–June 2007: 1,857; Côte d'Ivoire, Jan.–July 2007: 1,890; Eritrea, Jan.–Oct. 2007: 140; Gambia, Jan.–Sept. 2007: 100; Guinea, Jan.–Sept. 2007: 509; Jamaica, Jan.–June 2007: 146; Kenya, Jan.–June 2007: 26,429; Myanmar, Jan.–Oct. 07: 1,067; Niger, Jan.–June 2007: 503; Panama: Jan.–Sept. 2007: 53; Paraguay, Jan.–Nov. 2007: 129; Rwanda, Jan.–Nov. 2007: 5,945; South Africa, Jan.–Sept. 2007: 95,373.

c From 271 programme counties, Jan.–Sept. 2007.

d Northern Sudan reported 3 for the period Aug.–Dec. 2007 and Southern Sudan reported 6 for the period Jan.–Dec. 2007, giving a total of 9.

† Regional averages are calculated for only the population representing 50 per cent or more of the region's total population of interest.

GOAL 2. Providing paediatric treatment in low- and middle-income countries*

	Estimated number of children (0–14 years old) living with HIV, 2007			Estimated number of HIV-infected pregnant women, 2007			Number of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	% of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	Number of children (0–14 years old) receiving ART, 2007**
	Estimate	Low estimate	High estimate	Estimate	Low estimate	High estimate			
Afghanistan	–	–	–	–	–	–	0 a	–	0
Albania	–	–	–	–	–	–	–	–	12
Algeria	–	–	–	<500	<200	660	–	–	45
Angola	17,000	12,000	35,000	18,000	13,000	22,000	–	–	363
Antigua and Barbuda	–	–	–	–	–	–	–	–	–
Argentina	–	–	–	1,700	1,200	2,400	–	–	3,654
Armenia	–	–	–	<100	<100	<100	0	0	4
Azerbaijan	–	–	–	<100	<100	<200	2	3	0
Bahamas	–	–	<200	–	–	–	–	–	–
Bahrain	–	–	–	–	–	–	–	–	–
Bangladesh	–	–	–	<500	<200	<500	5 a	2	1 a
Barbados	–	<100	–	–	–	–	–	–	–
Belarus	–	–	–	<100	<100	<200	136	>95	69
Belize	<200	–	<500	<200	<100	<500	9	6	65
Benin	5,400	4,700	6,300	4,500	3,900	5,300	984	22	542
Bhutan	–	–	–	–	–	–	0 a	–	0
Bolivia	–	–	–	<200	<200	<500	–	–	22
Bosnia and Herzegovina	–	–	–	–	–	–	0	–	1
Botswana	15,000	13,000	16,000	11,000	10,000	12,000	9,489	83	9,496
Brazil	–	–	–	8,600	5,600	13,000	–	–	6,815
Brunei Darussalam	–	–	–	–	–	–	–	–	–
Bulgaria	–	–	–	–	–	–	–	–	3
Burkina Faso	10,000	8,400	12,000	8,300	6,800	10,000	–	–	658
Burundi	15,000	12,000	19,000	7,800	5,100	10,000	814 a	10	1,198
Cambodia	4,400	4,000	5,000	1,600	1,200	2,000	203	13	2,541
Cameroon	45,000	38,000	51,000	34,000	22,000	42,000	1,030	3	1,694
Cape Verde	–	–	–	–	–	–	31 a	–	23
Central African Republic	14,000	12,000	16,000	11,000	9,800	12,000	443 a	4	417
Chad	19,000	14,000	27,000	18,000	10,000	22,000	63 a	0	148
Chile	–	–	–	<500	<500	500	–	–	–
China	–	–	–	6,800	4,300	11,000	650 a	10	766
Colombia	–	–	–	2,500	1,600	3,700	–	–	3
Comoros	–	<100	–	<100	<100	<100	0 a	0	1
Congo	6,600	5,600	7,700	4,400	3,400	5,400	462	10	462
Cook Islands	–	–	–	–	–	–	–	–	–
Costa Rica	–	–	–	<200	<100	<500	40 a	28	52 a
Côte d'Ivoire	52,000	44,000	58,000	28,000	21,000	34,000	–	–	1,785
Croatia	–	–	–	–	–	–	–	–	5 a
Cuba	–	–	–	<100	<100	<200	1	2	17
Democratic People's Republic of Korea	–	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	–	37,000	52,000	38,000	33,000	46,000	170 a	0	1,632
Djibouti	1,100	<1,000	1,400	820	610	1,000	52 a	6	25
Dominica	–	–	–	–	–	–	2 a	–	2
Dominican Republic	2,700	2,200	3,300	1,600	1,200	2,200	–	–	589
Ecuador	–	–	–	<500	<500	800	–	–	252
Egypt	–	–	–	<200	<200	<500	2	1	18
El Salvador	–	–	–	650	<500	1,100	111	17	693
Equatorial Guinea	<1,000	–	1,100	710	530	950	–	–	–
Eritrea	3,100	2,300	4,400	2,500	1,600	4,000	150 k	6	65
Ethiopia	92,000	80,000	100,000	66,000	58,000	74,000	388 a	1	4,534
Fiji	–	–	–	<100	<100	<100	2 a	25	1
Gabon	2,300	1,600	3,200	2,300	1,600	3,500	58 c	2	73
Gambia	–	–	<1,000	510	<500	800	–	–	83 a
Georgia	–	–	–	<100	<100	<100	21	91	15
Ghana	17,000	15,000	19,000	14,000	12,000	16,000	–	–	576
Grenada	–	–	–	–	–	–	–	–	2
Guatemala	–	–	–	5,300	3,200	8,100	171 e	3	597
Guinea	6,300	5,000	7,900	6,200	5,000	8,600	334 e	5	307
Guinea-Bissau	1,500	1,100	2,200	1,500	1,000	2,100	0	0	41
Guyana	–	–	<1,000	<500	<200	<500	90 a	27	162
Haiti	6,800	5,800	8,100	5,100	4,200	6,100	–	–	867 a
Honduras	1,600	1,000	3,000	650	<500	1,200	–	–	751
India	–	–	–	64,000	37,000	92,000	1,200 a	2	8,887
Indonesia	–	–	–	3,300	2,100	5,300	25	1	19
Iran (Islamic Republic of)	–	–	–	1,300	940	1,800	13 f	1	21
Iraq	–	–	–	–	–	–	–	–	0

GOAL 2. Providing paediatric treatment in low- and middle-income countries*

	Estimated number of children (0–14 years old) living with HIV, 2007			Estimated number of HIV-infected pregnant women, 2007			Number of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	% of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	Number of children (0–14 years old) receiving ART, 2007**
	Estimate	Low estimate	High estimate	Estimate	Low estimate	High estimate			
Jamaica	–	–	<1,000	<500	<500	640	–	–	336
Jordan	–	–	–	–	–	–	0 a	–	4
Kazakhstan	–	–	–	<200	<100	<500	130	74	71
Kenya	–	130,000	180,000	76,000	66,000	86,000	4,534 h	6	15,090
Kiribati	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–
Kyrgyzstan	–	–	–	<100	<100	<200	–	–	26
Lao People's Democratic Republic	–	–	–	<200	<100	<500	16	14	36
Lebanon	–	–	–	<100	<100	<100	–	–	9
Lesotho	12,000	11,000	13,000	12,000	11,000	14,000	–	–	1,553
Liberia	3,100	2,300	6,300	3,100	2,400	3,900	112	4	92
Libyan Arab Jamahiriya	–	–	–	–	–	–	–	–	–
Madagascar	<500	–	<1,000	<500	<500	760	2 a	0	0 a
Malawi	91,000	80,000	100,000	73,000	64,000	82,000	8,803	12	10,439
Malaysia	–	–	–	1,300	770	2,000	–	–	500
Maldives	–	–	–	<100	<100	<100	–	–	0
Mali	9,400	7,800	11,000	8,600	6,800	11,000	195 i	2	579
Marshall Islands	–	–	–	–	–	–	–	–	–
Mauritania	<500	–	<1,000	<500	<500	770	18	4	23
Mauritius	<100	–	<200	<200	<100	<500	–	–	–
Mexico	–	–	–	3,100	2,000	4,900	–	–	176 a
Micronesia (Federated States of)	–	–	–	–	–	–	–	–	–
Moldova, Republic of	–	–	<100	<100	<100	<200	0	0	19
Mongolia	–	–	–	<100	<100	<100	0	0	0
Montenegro	–	–	–	–	–	–	–	–	1
Morocco	–	–	–	<500	<500	550	–	–	58
Mozambique	100,000	87,000	120,000	97,000	81,000	120,000	–	–	6,320
Myanmar	–	–	–	4,500	2,900	7,100	–	–	287 a
Namibia	14,000	12,000	16,000	9,400	7,600	11,000	–	–	5,283
Nauru	–	–	–	–	–	–	–	–	–
Nepal	–	–	–	1,500	990	2,300	31	2	51
Nicaragua	–	–	–	<200	<100	<500	43 e	26	45
Niger	3,200	2,500	4,200	3,300	2,100	5,000	–	–	104
Nigeria	220,000	170,000	370,000	190,000	130,000	240,000	–	–	15,345
Niue	–	–	–	–	–	–	–	–	–
Occupied Palestinian Territory	–	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	–	25 a
Pakistan	–	–	–	2,300	1,500	3,700	0	0	21
Palau	–	–	–	–	–	–	–	–	0
Panama	–	–	–	<500	<500	510	–	–	214 a
Papua New Guinea	1,100	<1,000	1,200	1,900	1,800	2,100	60	3	185
Paraguay	–	–	–	<500	<500	830	42 a	9	104
Peru	–	–	–	1,300	890	1,800	–	–	322
Philippines	–	–	–	<200	<200	<500	0	0	4
Qatar	–	–	–	–	–	–	–	–	–
Republic of Korea	–	–	–	–	–	–	–	–	–
Romania	–	–	–	<500	<200	<500	78	29	196
Russian Federation	–	–	–	7,300	4,500	11,000	–	–	330 a
Rwanda	19,000	17,000	21,000	11,000	9,100	13,000	–	–	4,350
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–	2
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	–	–	–	–	–	3 a	–	2
Saudi Arabia	–	–	–	–	–	–	–	–	–
Senegal	3,100	2,500	3,700	4,400	3,000	6,300	–	–	384
Serbia	–	–	–	<100	<100	<200	0 a	0	14 a
Seychelles	–	–	–	–	–	–	–	–	–
Sierra Leone	4,000	3,000	5,300	4,400	3,100	6,200	66	2	12 a
Singapore	–	–	–	–	–	–	–	–	–
Solomon Islands	–	–	–	–	–	–	–	–	–
Somalia	<1,000	–	1,600	940	510	1,700	–	–	5
South Africa	280,000	230,000	320,000	220,000	180,000	260,000	–	–	32,060
Sri Lanka	–	–	–	<100	<100	<100	1 a	2	0 a
Sudan	25,000	18,000	33,000	18,000	12,000	26,000	14	0	–
Suriname	<200	–	<500	<200	<100	<200	–	–	58

GOAL 2. Providing paediatric treatment in low- and middle-income countries*

	Estimated number of children (0–14 years old) living with HIV, 2007			Estimated number of HIV-infected pregnant women, 2007			Number of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	% of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis, 2007	Number of children (0–14 years old) receiving ART, 2007**
	Estimate	Low estimate	High estimate	Estimate	Low estimate	High estimate			
Swaziland	15,000	14,000	17,000	13,000	12,000	15,000	725 a	6	2,123
Syrian Arab Republic	–	–	–	–	–	–	0	–	4
Tajikistan	–	–	–	<200	<100	<500	1	1	4
Thailand	14,000	12,000	17,000	10,000	6,400	15,000	–	–	6,687
The former Yugoslav Republic of Macedonia	–	–	–	–	–	–	–	–	1
Timor-Leste	–	–	–	–	–	–	–	–	–
Togo	10,000	8,400	12,000	8,000	6,300	10,000	488	6	559
Tonga	–	–	–	–	–	–	–	–	–
Trinidad and Tobago	–	–	<500	–	–	–	–	–	–
Tunisia	–	–	–	<100	<100	<100	0	0	3 a
Turkey	–	–	–	–	–	–	0 a	–	9
Turkmenistan	–	–	–	–	–	–	0 a	–	0
Tuvalu	–	–	–	–	–	–	–	–	–
Uganda	130,000	120,000	150,000	78,000	68,000	92,000	–	–	8,532
Ukraine	–	–	–	5,200	3,800	6,700	3,325 l	63	908
United Arab Emirates	–	–	–	–	–	–	–	–	–
United Republic of Tanzania	140,000	130,000	150,000	100,000	91,000	110,000	–	–	11,176
Uruguay	–	–	–	<200	<100	<500	70 a	52	160 a
Uzbekistan	–	–	–	<500	<200	840	–	–	225
Vanuatu	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	–	–	–	2,300	1,300	4,600	–	–	611 a
Viet Nam	–	–	–	3,900	2,400	6,400	–	–	789
Yemen	–	–	–	–	–	–	0	–	1
Zambia	95,000	86,000	110,000	76,000	68,000	86,000	11,884	16	11,602
Zimbabwe	120,000	110,000	140,000	52,000	48,000	57,000	9,975	19	8,237
SUMMARY INDICATORS									
Sub-Saharan Africa	1,800,000 †	1,700,000 †	2,000,000 †	1,300,000	1,200,000	1,400,000	51,200	–	157,968
Eastern and Southern Africa	1,300,000 †	1,200,000 †	1,400,000 †	930,000	860,000	1,000,000	46,800	–	132,427
West and Central Africa	480,000 †	420,000 †	640,000 †	390,000	320,000	450,000	4,460	–	25,541
Middle East and North Africa	28,000 †	20,000 †	36,000 †	21,000	15,000	29,000	81	–	213
South Asia	110,000 †	75,000 †	140,000 †	69,000	40,000	97,000	1,240	–	8,960
East Asia and Pacific	41,000 †	36,000 †	49,000 †	34,000	27,000	44,000	956	–	11,815
Latin America and Caribbean	55,000 †	47,000 †	70,000 †	36,000	30,000	45,000	579	–	16,571
CEE/CIS	11,000 †	9,000 †	14,000 †	14,000	10,000	18,000	3,690	–	1,913
Low- and middle-income countries	–	–	–	1,500,000	1,400,000	1,600,000	57,800	–	197,440
Developing countries	2,000,000 †	1,900,000 †	2,300,000 †	–	–	–	–	–	–
World	2,000,000 †	1,900,000 †	2,300,000 †	–	–	–	–	–	–

DEFINITIONS OF THE INDICATORS

Estimated number of children living with HIV: Estimated number of children (0–14 years old) living with HIV as of 2007.

Estimated number of HIV-infected pregnant women: Estimated number of pregnant women (15–49 years old) living with HIV as of 2007.

Number of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis: Reported number of infants born to HIV-infected mothers started on cotrimoxazole prophylaxis within two months of birth.

Percentage of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis: Calculated by dividing the number of HIV-exposed infants started on cotrimoxazole prophylaxis by the estimated number of children born to HIV-infected pregnant women, assuming a ratio of one child to one HIV-infected mother. The denominator is the estimated number of HIV-infected pregnant women.

Number of children receiving ART: Reported number of children (0–14 years old) living with HIV receiving ART as of 2007.

MAIN DATA SOURCES

Estimated number of children living with HIV: UNAIDS, *2008 Report on the Global AIDS Epidemic.*

Estimated number of HIV-infected pregnant women: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

Number of infants born to HIV-infected pregnant women started on cotrimoxazole prophylaxis: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

Percentage of infants born to HIV-infected women started on cotrimoxazole prophylaxis: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

Number of children receiving ART: WHO, UNAIDS and UNICEF, *Towards Universal Access: Scaling up priority HIV/AIDS interventions in the health sector – Progress Report 2008.*

NOTES

* Typically this table would include the following estimates: Number of children living with HIV in need of ART; and Percentage of children in need receiving ART. These estimates are still under review and were not available at the time of publication of this report.

– Data not available.

** United Nations General Assembly Special Session on HIV/AIDS (2001) indicator, as part of men and women with advanced HIV infection receiving antiretroviral combination therapy.

a The latest reported data are to December 2006.

c Data reported for the period September–December 2007.

e Data reported for the period January–November 2007.

f Data reported for the period March 2006–February 2007.

h Data reported for the period April–September 2007.

i Data reported for the period January–August 2007.

k Data reported for the period January–October 2007.

l Ukrainian legislation states that virological tests for HIV diagnosis are provided to newborns at two and six months after birth. These data include the number of tests, not infants, because a system of monitoring is not in place to collect the number of infants tested.

† Regional averages are calculated for only the population representing 50 per cent or more of the region's total population of interest.

GOAL 3. Preventing infection among adolescents and young people

	HIV prevalence among young people (15–24 years old), 2007 **		Knowledge and behaviours							
			% of young people (15–24 years old) who have comprehensive knowledge of HIV (2002–2007*)**		% of young people (15–24 years old) who had sex with more than one partner in the last 12 months (2002–2007*)**		% of young people (15–24 years old) with multiple partners and who used a condom at last sex (2002–2007*)**		% of young people (15–19 years old) who had sex before age 15 (2002–2007*)**	
	Male (%)	Female (%)	Male	Female	Male	Female	Male	Female	Male	Female
Afghanistan	–	–	–	–	–	–	–	–	–	–
Albania	–	–	–	6	–	–	–	–	–	–
Algeria	0.1	0.1	–	13	–	–	–	–	–	–
Angola	0.2	0.3	–	–	–	–	–	–	–	–
Antigua and Barbuda	–	–	–	–	–	–	–	–	–	–
Argentina	0.6	0.3	–	–	–	–	–	–	–	–
Armenia	0.2	0.1	15	23	13	0	79	–	3	<1
Azerbaijan	0.3	0.1	5	5	9	0	29	–	1	<1
Bahamas	3.2	1.5	–	–	–	–	–	–	–	–
Bahrain	–	–	–	–	–	–	–	–	–	–
Bangladesh	–	–	–	16	–	–	–	–	–	–
Barbados	1.3	0.6	–	–	–	–	–	–	–	–
Belarus	0.3	0.1	–	34	–	–	–	–	–	–
Belize	0.5	1.5	–	40	–	–	–	–	–	–
Benin	0.3	0.9	35	16	10	1	45	27	13	13
Bhutan	0.1	<0.1	–	–	–	–	–	–	–	–
Bolivia	0.2	0.1	18	15	19	1	–	–	15	6
Bosnia and Herzegovina	–	–	–	48	–	–	–	–	–	1
Botswana	5.1	15.3	–	–	–	–	–	–	–	–
Brazil	1.0	0.6	–	–	–	–	–	–	–	–
Brunei Darussalam	–	–	–	–	–	–	–	–	–	–
Bulgaria	–	–	15	17	–	–	–	–	–	–
Burkina Faso	0.5	0.9	–	19	–	1	–	71 x	–	6
Burundi	0.4	1.3	–	30	–	1	–	–	–	3
Cambodia	0.8	0.3	45	50	5	0	75	–	<1	1
Cameroon	1.2	4.3	–	32	–	5	–	68	–	13
Cape Verde	–	–	36	36	33	4	80	64	46	21
Central African Republic	1.1	5.5	27	17	–	–	–	–	–	29
Chad	2.0	2.8	20	8	12	1	26	9	11	19
Chile	0.3	0.2	–	–	–	–	–	–	–	–
China	0.1	0.1	–	–	–	–	–	–	–	–
Colombia	0.7	0.3	–	–	–	5	–	36	–	14
Comoros	0.1	<0.1	–	–	–	–	–	–	–	–
Congo	0.8	2.3	35	26	20	10	37	22	25	24
Cook Islands	–	–	–	–	–	–	–	–	–	–
Costa Rica	0.4	0.2	–	–	–	–	–	–	–	–
Côte d'Ivoire	0.8	2.4	28	18	20	5	62	45	17	20
Croatia	–	–	–	–	–	–	–	–	–	–
Cuba	0.1	0.1	–	52	–	–	–	–	–	–
Democratic People's Republic of Korea	–	–	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	–	–	21	15	14	3	22	9	18	18
Djibouti	0.7	2.1	–	18	–	–	–	–	–	–
Dominica	–	–	–	–	–	–	–	–	–	–
Dominican Republic	0.3	0.6	34	41	23	5	62	34	21	14
Ecuador	0.4	0.2	–	–	–	–	–	–	–	–
Egypt	–	–	–	4 y	–	–	–	–	–	–
El Salvador	0.9	0.5	–	–	–	–	–	–	–	–
Equatorial Guinea	0.8	2.5	–	–	–	–	–	–	–	–
Eritrea	0.3	0.9	–	37	–	–	–	–	–	9
Ethiopia	0.5	1.5	33	20	1	<1	–	–	2	11
Fiji	0.1	–	–	–	–	–	–	–	–	–
Gabon	1.3	3.9	–	–	–	–	–	–	–	–
Gambia	0.2	0.6	–	39	–	1	–	64 x	–	4
Georgia	0.1	0.1	–	15	–	–	–	–	–	–
Ghana	0.4	1.3	33	25	6	2	61 x	43 x	5	7
Grenada	–	–	–	–	–	–	–	–	–	–
Guatemala	–	1.5	–	–	–	–	–	–	15	7
Guinea	0.4	1.2	23	17	19	2	39	28	18	20
Guinea-Bissau	0.4	1.2	–	18	–	6	–	58	–	22
Guyana	0.5	1.7	–	50	9	2	62	–	11	8
Haiti	0.6	1.4	40	34	20	2	51	23	42	15
Honduras	0.7	0.4	–	30	–	1	–	27	–	10

GOAL 3. Preventing infection among adolescents and young people

	HIV prevalence among young people (15–24 years old), 2007 **		Knowledge and behaviours							
			% of young people (15–24 years old) who have comprehensive knowledge of HIV (2002–2007*)**		% of young people (15–24 years old) who had sex with more than one partner in the last 12 months (2002–2007*)**		% of young people (15–24 years old) with multiple partners and who used a condom at last sex (2002–2007*)**		% of young people (15–19 years old) who had sex before age 15 (2002–2007*)**	
	Male (%)	Female (%)	Male	Female	Male	Female	Male	Female	Male	Female
India	0.3	0.3	36	20	2	<1	32	17 x	3	8
Indonesia	0.3	0.1	0 y	1	–	–	–	–	–	–
Iran (Islamic Republic of)	0.2	0.1	–	–	–	–	–	–	–	–
Iraq	–	–	–	3	–	–	–	–	–	–
Jamaica	1.7	0.9	–	60	–	–	–	–	–	–
Jordan	–	–	–	3 y	–	–	–	–	–	–
Kazakhstan	0.2	0.1	–	22	–	–	–	–	–	–
Kenya	–	–	47	34	11	2	52	9	31	15
Kiribati	–	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–
Kyrgyzstan	0.2	0.1	–	20	–	1	–	–	–	<1
Lao People's Democratic Republic	0.2	0.1	–	–	–	–	–	–	–	–
Lebanon	0.1	0.1	–	–	–	–	–	–	–	–
Lesotho	5.9	14.9	18	26	18	5	51	31	30	16
Liberia	0.4	1.3	27	21	–	–	28	16	9	19
Libyan Arab Jamahiriya	–	–	–	–	–	–	–	–	–	–
Madagascar	0.2	0.1	16	19	19	3	13	2	20	32
Malawi	2.4	8.4	42	42	6	1	46	48	16	14
Malaysia	0.6	0.3	–	–	–	–	–	–	–	–
Maldives	–	–	–	–	–	–	–	–	–	–
Mali	0.4	1.1	22	18	6	2	28	8	6	24
Marshall Islands	–	–	39	27	10	5	23 x	9 x	25	15
Mauritania	0.9	0.5	–	–	–	–	–	–	–	–
Mauritius	1.8	1.0	–	–	–	–	–	–	–	–
Mexico	0.3	0.2	–	–	–	–	–	–	–	–
Micronesia (Federated States of)	–	–	–	–	–	–	–	–	–	–
Moldova, Republic of	0.4	0.2	54 y	42 y	17	2	60	30	10	2
Mongolia	0.1	–	–	35	–	–	–	–	–	–
Montenegro	–	–	–	30	–	<1	–	–	–	<1
Morocco	0.1	0.1	–	12	–	–	–	–	–	–
Mozambique	2.9	8.5	33	20	29	6	30	20	31	28
Myanmar	0.7	0.6	–	–	–	–	–	–	–	–
Namibia	3.4	10.3	62	65	11	2	82	74	19	7
Nauru	–	–	–	–	–	–	–	–	–	–
Nepal	0.5	0.3	44	28	2	<1	59 x	–	3	6
Nicaragua	0.3	0.1	–	–	–	–	–	–	–	–
Niger	0.9	0.5	16	13	2	<1	42 x	–	5	26
Nigeria	0.8	2.3	21	18	8	2	38	17	8	20
Niue	–	–	–	–	–	–	–	–	–	–
Occupied Palestinian Territory	–	–	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–
Pakistan	0.1	0.1	–	3	–	–	–	–	–	–
Palau	–	–	–	–	–	–	–	–	–	–
Panama	1.1	0.6	–	–	–	–	–	–	–	–
Papua New Guinea	0.6	0.7	–	–	–	–	–	–	–	–
Paraguay	0.7	0.3	–	–	–	–	–	–	–	–
Peru	0.5	0.3	–	19	–	1	–	38 x	–	5
Philippines	–	–	18	12	6	–	30	–	3	1
Qatar	–	–	–	–	–	–	–	–	–	–
Republic of Korea	<0.1	<0.1	–	–	–	–	–	–	–	–
Romania	0.2	0.2	1 y	3 y	–	–	–	–	–	–
Russian Federation	1.3	0.6	–	–	–	–	–	–	–	–
Rwanda	0.5	1.4	54	51	1	<1	–	–	15	5
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	–	–	44	–	2	–	57 x	–	9
Saudi Arabia	–	–	–	–	–	–	–	–	–	–
Senegal	0.3	0.8	24	19	6	1	64	33	13	9
Serbia	0.1	0.1	–	42	–	2	–	80 x	–	1
Seychelles	–	–	–	–	–	–	–	–	–	–

GOAL 3. Preventing infection among adolescents and young people

	HIV prevalence among young people (15–24 years old), 2007 **		Knowledge and behaviours							
			% of young people (15–24 years old) who have comprehensive knowledge of HIV (2002–2007*)**		% of young people (15–24 years old) who had sex with more than one partner in the last 12 months (2002–2007*)**		% of young people (15–24 years old) with multiple partners and who used a condom at last sex (2002–2007*)**		% of young people (15–19 years old) who had sex before age 15 (2002–2007*)**	
	Male (%)	Female (%)	Male	Female	Male	Female	Male	Female	Male	Female
Sierra Leone	0.4	1.3	–	17	–	4	–	27	–	25
Singapore	0.2	0.1	–	–	–	–	–	–	–	–
Solomon Islands	–	–	–	–	–	–	–	–	–	–
Somalia	0.6	0.3	–	4	–	–	–	–	–	–
South Africa	4.0	12.7	–	–	–	–	–	–	–	–
Sri Lanka	<0.1	–	–	–	–	–	–	–	–	–
Sudan	0.3	1.0	–	–	–	–	–	–	–	–
Suriname	2.7	1.4	–	41	–	3	–	80	–	–
Swaziland	5.8	22.6	52	52	10	2	67	51 x	5	7
Syrian Arab Republic	–	–	–	7	–	–	–	–	–	–
Tajikistan	0.4	0.1	–	2	–	–	–	–	–	–
Thailand	1.2	1.2	–	46	–	–	–	–	–	–
The former Yugoslav Republic of Macedonia	–	–	–	27	–	1	–	36 x	–	1
Timor-Leste	–	–	–	–	–	–	–	–	–	–
Togo	0.8	2.4	–	28	–	3	–	50	–	12
Tonga	–	–	–	–	–	–	–	–	–	–
Trinidad and Tobago	0.3	1.0	–	54	–	3	–	67	–	5
Tunisia	0.1	<0.1	–	–	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–	–	–
Turkmenistan	–	–	–	5	–	–	–	–	–	–
Tuvalu	–	–	–	–	–	–	–	–	–	–
Uganda	1.3	3.9	38	32	9	2	45	39	14	12
Ukraine	1.5	1.5	43	42	16	3	64	63	3	1
United Arab Emirates	–	–	–	–	–	–	–	–	–	–
United Republic of Tanzania	0.5	0.9	40	45	17	3	39	26	13	11
Uruguay	0.6	0.3	–	–	–	–	–	–	–	–
Uzbekistan	0.1	0.1	–	31	–	<1	–	–	–	–
Vanuatu	–	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	–	–	–	–	–	–	–	–	–	–
Viet Nam	0.6	0.3	–	44	<1	0	–	–	0.3	1
Yemen	–	–	–	–	–	–	–	–	–	–
Zambia	3.6	11.3	37	34	9	2	43	42 x	16	12
Zimbabwe	2.9	7.7	46	44	7	1	59	38 x	5	5
SUMMARY INDICATORS†										
Sub-Saharan Africa	1.1	3.2	30	24	10	2	40	26	12	16
Eastern and Southern Africa	1.5	4.5	38	31	10	2	42	26	14	13
West and Central Africa	0.7	1.9	23	19	10	2	39	26	11	18
Middle East and North Africa	0.1	0.2	–	–	–	–	–	–	–	–
South Asia	0.3	0.2	36	18	2	0	33	17	3	8
East Asia and Pacific	0.2	0.1	7 z	18 z	–	–	–	–	–	–
Latin America and Caribbean	0.5	0.4	–	–	–	–	–	–	–	–
CEE/CIS	0.8	0.5	–	–	–	–	–	–	–	–
Low- and middle-income countries	–	–	–	–	–	–	–	–	–	–
Developing countries	0.4	0.7	30 z	19 z	–	–	–	–	–	–
World	0.4	0.6	–	–	–	–	–	–	–	–

DEFINITIONS OF THE INDICATORS

HIV prevalence among young people: Percentage of young men and women (15–24 years old) living with HIV as of end-2007.

Comprehensive knowledge of HIV: Percentage of young men and women (15–24 years old) who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission, and who know that a healthy-looking person can transmit HIV.

Sex with more than one partner in the last 12 months: Percentage of young men and women (15–24 years old) who have had sexual intercourse with more than one partner in the last 12 months.

Condom use with multiple partners: Percentage of young men and women (15–24 years old) who had more than one partner in the past 12 months and reported using a condom during their last sexual intercourse.

Sex before age 15: Percentage of young people (15–19 years old) who say they had sex before age 15.

MAIN DATA SOURCES

HIV prevalence among young people: UNAIDS, *2008 Report on the Global AIDS Epidemic.*

Comprehensive knowledge of HIV: UNICEF global databases, 2008.

Sex with more than one partner in the last 12 months: UNICEF global databases, 2008.

Condom use with multiple partners: UNICEF global databases, 2008.

Sex before age 15: UNICEF global databases, 2008.

NOTES

– Data not available.

* Data refer to the most recent year available during the period specified in the column heading.

** United Nations General Assembly Special Session on HIV/AIDS (2001) indicator.

† Regional averages are calculated only for the population representing 50 per cent or more of the region's total population of interest.

x Based on small denominators (typically 25–49 unweighted cases).

y Data refer to years or periods other than those specified in the column heading, differ from the standard definition or refer to only part of a country. Such data are included in the calculation of regional and global averages.

z Excludes China.

GOAL 4. Protecting and supporting children affected by HIV and AIDS

	Orphaned and vulnerable children								
	Children who have lost one or both parents due to all causes, 2007	Children who have lost one or both parents due to AIDS, 2007			Children whose mother has died due to any cause, 2007	Children whose father has died due to any cause, 2007	Children both of whose parents have died due to any cause, 2007	Orphan school attendance ratio (2002–2007*)**	% of children whose households received external support (2004–2007*)**
		Estimate	Low Estimate	High Estimate					
Afghanistan	2,100,000	–	–	–	1,100,000	1,400,000	370,000	–	–
Albania	–	–	–	–	–	–	–	–	–
Algeria	570,000	–	–	–	220,000	370,000	26,000	–	–
Angola	1,200,000	50,000	20,000	260,000	600,000	840,000	210,000	–	–
Antigua and Barbuda	–	–	–	–	–	–	–	–	–
Argentina	610,000	–	–	–	93,000	530,000	15,000	–	–
Armenia	50,000	–	–	–	8,400	43,000	1,900	–	–
Azerbaijan	190,000	–	–	–	42,000	160,000	9,100	–	–
Bahamas	6,600	–	–	–	1,200	5,700	<500	–	–
Bahrain	–	–	–	–	–	–	–	–	–
Bangladesh	5,000,000	–	–	–	2,000,000	3,400,000	380,000	0.84	–
Barbados	2,700	–	–	–	<500	2,300	<100	–	–
Belarus	190,000	–	–	–	21,000	170,000	6,800	–	–
Belize	5,500	–	–	–	2,200	3,600	<500	–	–
Benin	340,000	29,000	22,000	40,000	140,000	220,000	26,000	0.90	–
Bhutan	22,000	–	–	–	8,200	15,000	1,800	–	–
Bolivia	300,000	–	–	–	110,000	220,000	20,000	0.74 p	–
Bosnia and Herzegovina	–	–	–	–	–	–	–	–	–
Botswana	130,000	95,000	81,000	110,000	85,000	81,000	37,000	–	–
Brazil	3,200,000	–	–	–	720,000	2,600,000	110,000	–	–
Brunei Darussalam	–	–	–	–	–	–	–	–	–
Bulgaria	95,000	–	–	–	11,000	87,000	2,700	–	–
Burkina Faso	690,000	100,000	62,000	130,000	300,000	480,000	83,000	0.61 p	–
Burundi	600,000	120,000	100,000	150,000	320,000	390,000	120,000	0.85	–
Cambodia	600,000	–	–	–	240,000	420,000	55,000	0.83	–
Cameroon	1,100,000	300,000	230,000	390,000	580,000	710,000	190,000	0.91	9
Cape Verde	–	–	–	–	–	–	–	–	–
Central African Republic	280,000	72,000	58,000	86,000	140,000	190,000	51,000	0.96	7
Chad	540,000	85,000	42,000	270,000	250,000	350,000	61,000	1.05	–
Chile	160,000	–	–	–	25,000	140,000	2,700	–	–
China	17,000,000	–	–	–	4,000,000	14,000,000	560,000	–	–
Colombia	790,000	–	–	–	180,000	640,000	25,000	0.85	–
Comoros	27,000	<100	–	<200	11,000	18,000	1,900	–	–
Congo	210,000	69,000	57,000	84,000	100,000	140,000	31,000	0.88	–
Cook Islands	–	–	–	–	–	–	–	–	–
Costa Rica	36,000	–	–	–	6,400	31,000	<500	–	–
Côte d'Ivoire	1,200,000	420,000	320,000	530,000	590,000	800,000	180,000	0.83	9
Croatia	–	–	–	–	–	–	–	–	–
Cuba	99,000	–	–	–	19,000	82,000	2,100	–	–
Democratic People's Republic of Korea	530,000	–	–	–	150,000	410,000	29,000	–	–
Democratic Republic of the Congo	4,500,000	–	270,000	380,000	2,200,000	3,000,000	740,000	0.77	9
Djibouti	42,000	5,200	1,900	9,600	21,000	27,000	5,800	–	–
Dominica	–	–	–	–	–	–	–	–	–
Dominican Republic	170,000	–	–	–	50,000	120,000	6,600	0.96	–
Ecuador	200,000	–	–	–	46,000	160,000	5,400	–	–
Egypt	1,400,000	–	–	–	390,000	1,100,000	56,000	–	–
El Salvador	130,000	–	–	–	33,000	110,000	4,600	–	–
Equatorial Guinea	32,000	4,800	3,800	6,100	15,000	22,000	5,200	–	–
Eritrea	280,000	18,000	12,000	32,000	120,000	190,000	34,000	0.83	–
Ethiopia	5,000,000	650,000	540,000	780,000	2,400,000	3,200,000	630,000	0.90	–
Fiji	22,000	–	–	–	6,600	17,000	1,400	–	–
Gabon	67,000	18,000	11,000	28,000	31,000	44,000	8,400	–	–
Gambia	48,000	2,700	1,300	4,700	18,000	33,000	2,800	0.87	–
Georgia	72,000	–	–	–	11,000	65,000	2,700	–	–
Ghana	1,100,000	160,000	130,000	200,000	510,000	700,000	130,000	1.04 p	–
Grenada	–	–	–	–	–	–	–	–	–
Guatemala	360,000	–	–	–	96,000	280,000	16,000	–	–
Guinea	380,000	25,000	15,000	39,000	150,000	260,000	32,000	0.73	–
Guinea-Bissau	110,000	5,900	4,200	8,300	50,000	74,000	16,000	0.97	8
Guyana	23,000	–	–	–	8,100	17,000	2,200	–	13
Haiti	380,000	–	–	–	160,000	270,000	50,000	0.86	5
Honduras	170,000	–	–	–	47,000	130,000	6,700	1.08	–
India	25,000,000	–	–	–	7,400,000	19,000,000	1,200,000	0.72	–
Indonesia	4,400,000	–	–	–	1,400,000	3,200,000	230,000	0.82 y	–

GOAL 4. Protecting and supporting children affected by HIV and AIDS

	Orphaned and vulnerable children								
	Children who have lost one or both parents due to all causes, 2007	Children who have lost one or both parents due to AIDS, 2007			Children whose mother has died due to any cause, 2007	Children whose father has died due to any cause, 2007	Children both of whose parents have died due to any cause, 2007	Orphan school attendance ratio (2002–2007*)**	% of children whose households received external support (2004–2007*)**
		Estimate	Low Estimate	High Estimate					
Iran (Islamic Republic of)	1,300,000	–	–	–	420,000	910,000	58,000	–	–
Iraq	–	–	–	–	–	–	–	0.84	–
Jamaica	53,000	–	–	–	16,000	40,000	2,100	–	15
Jordan	–	–	–	–	–	–	–	–	–
Kazakhstan	470,000	–	–	–	90,000	410,000	31,000	–	–
Kenya	2,500,000	–	990,000	1,400,000	1,500,000	1,500,000	470,000	0.95	–
Kiribati	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–
Kyrgyzstan	140,000	–	–	–	34,000	120,000	7,500	–	–
Lao People's Democratic Republic	210,000	–	–	–	90,000	140,000	17,000	–	–
Lebanon	71,000	–	–	–	22,000	52,000	2,900	–	–
Lesotho	160,000	110,000	93,000	120,000	100,000	110,000	49,000	0.95	–
Liberia	270,000	15,000	10,000	87,000	130,000	180,000	45,000	–	–
Libyan Arab Jamahiriya	–	–	–	–	–	–	–	–	–
Madagascar	840,000	3,400	2,100	6,000	360,000	560,000	75,000	0.75	–
Malawi	1,100,000	550,000	470,000	640,000	540,000	740,000	230,000	0.97	19
Malaysia	410,000	–	–	–	110,000	310,000	13,000	–	–
Maldives	8,800	–	–	–	3,900	5,500	<1,000	–	–
Mali	550,000	44,000	27,000	56,000	220,000	380,000	48,000	0.87	–
Marshall Islands	–	–	–	–	–	–	–	–	–
Mauritania	83,000	3,000	1,500	5,900	30,000	58,000	4,500	–	–
Mauritius	21,000	<500	–	<1,000	4,000	17,000	<1,000	–	–
Mexico	1,400,000	–	–	–	320,000	1,100,000	34,000	–	–
Micronesia (Federated States of)	–	–	–	–	–	–	–	–	–
Moldova, Republic of	74,000	–	–	–	13,000	64,000	3,600	–	–
Mongolia	64,000	–	–	–	19,000	49,000	4,000	0.96 p	–
Montenegro	–	–	–	–	–	–	–	–	–
Morocco	630,000	–	–	–	230,000	440,000	32,000	–	–
Mozambique	1,400,000	400,000	280,000	590,000	780,000	920,000	300,000	0.80	–
Myanmar	1,600,000	–	–	–	570,000	1,100,000	120,000	–	–
Namibia	110,000	66,000	50,000	85,000	63,000	65,000	17,000	1.00	17
Nauru	–	–	–	–	–	–	–	–	–
Nepal	990,000	–	–	–	440,000	640,000	95,000	–	–
Nicaragua	110,000	–	–	–	29,000	84,000	3,900	–	–
Niger	570,000	25,000	18,000	39,000	260,000	350,000	43,000	0.67	–
Nigeria	9,700,000	1,200,000	640,000	4,100,000	4,900,000	6,400,000	1,700,000	0.64 p	–
Niue	–	–	–	–	–	–	–	–	–
Occupied Palestinian Territory	–	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	–	–
Pakistan	3,900,000	–	–	–	1,400,000	2,700,000	200,000	–	–
Palau	–	–	–	–	–	–	–	–	–
Panama	48,000	–	–	–	10,000	39,000	1,200	–	–
Papua New Guinea	330,000	–	–	–	130,000	240,000	38,000	–	–
Paraguay	130,000	–	–	–	38,000	93,000	5,100	–	–
Peru	570,000	–	–	–	160,000	430,000	25,000	–	–
Philippines	1,800,000	–	–	–	600,000	1,300,000	81,000	–	–
Qatar	–	–	–	–	–	–	–	–	–
Republic of Korea	360,000	–	–	–	32,000	330,000	3,900	–	–
Romania	300,000	–	–	–	44,000	270,000	11,000	–	–
Russian Federation	4,000,000	–	–	–	460,000	3,700,000	220,000	–	–
Rwanda	860,000	220,000	190,000	250,000	540,000	600,000	290,000	0.82	13
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	–	–	–	–	–	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–
Senegal	350,000	8,400	4,600	14,000	120,000	240,000	19,000	0.83	–
Serbia	130,000	–	–	–	21,000	110,000	4,100	–	–
Seychelles	–	–	–	–	–	–	–	–	–
Sierra Leone	350,000	16,000	6,400	26,000	160,000	250,000	53,000	0.83	1
Singapore	24,000	–	–	–	3,400	21,000	<500	–	–
Solomon Islands	–	–	–	–	–	–	–	–	–
Somalia	590,000	8,800	4,900	16,000	300,000	390,000	100,000	0.78	–

GOAL 4. Protecting and supporting children affected by HIV and AIDS

	Orphaned and vulnerable children								
	Children who have lost one or both parents due to all causes, 2007	Children who have lost one or both parents due to AIDS, 2007			Children whose mother has died due to any cause, 2007	Children whose father has died due to any cause, 2007	Children both of whose parents have died due to any cause, 2007	Orphan school attendance ratio (2002–2007*)**	% of children whose households received external support (2004–2007*)**
		Estimate	Low Estimate	High Estimate					
South Africa	2,500,000	1,400,000	1,100,000	1,800,000	1,400,000	1,600,000	510,000	–	–
Sri Lanka	330,000	–	–	–	70,000	270,000	12,000	–	–
Sudan	1,800,000	–	–	–	840,000	1,200,000	210,000	–	–
Suriname	8,900	–	–	–	2,400	6,800	<500	–	–
Swaziland	96,000	56,000	48,000	65,000	74,000	58,000	37,000	0.97	41
Syrian Arab Republic	–	–	–	–	–	–	–	–	–
Tajikistan	210,000	–	–	–	64,000	150,000	12,000	–	–
Thailand	1,300,000	–	–	–	300,000	1,000,000	58,000	0.93	21
The former Yugoslav Republic of Macedonia	–	–	–	–	–	–	–	–	–
Timor-Leste	48,000	–	–	–	19,000	32,000	3,800	–	–
Togo	260,000	68,000	50,000	91,000	110,000	170,000	23,000	0.94	6
Tonga	–	–	–	–	–	–	–	–	–
Trinidad and Tobago	20,000	–	–	–	5,800	16,000	<1,000	–	–
Tunisia	130,000	–	–	–	36,000	96,000	3,900	–	–
Turkey	–	–	–	–	–	–	–	–	–
Turkmenistan	–	–	–	–	–	–	–	–	–
Tuvalu	–	–	–	–	–	–	–	–	–
Uganda	2,500,000	1,200,000	1,100,000	1,400,000	1,500,000	1,700,000	620,000	0.96	11
Ukraine	1,000,000	–	–	–	110,000	930,000	41,000	0.98	–
United Arab Emirates	–	–	–	–	–	–	–	–	–
United Republic of Tanzania	2,600,000	970,000	850,000	1,100,000	1,400,000	1,700,000	490,000	1.02	–
Uruguay	46,000	–	–	–	6,200	41,000	1,000	–	–
Uzbekistan	690,000	–	–	–	170,000	550,000	32,000	–	–
Vanuatu	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	430,000	–	–	–	96,000	350,000	12,000	–	–
Viet Nam	1,500,000	–	–	–	460,000	1,000,000	57,000	–	–
Yemen	–	–	–	–	–	–	–	–	–
Zambia	1,100,000	600,000	530,000	660,000	740,000	780,000	390,000	1.03 y	16
Zimbabwe	1,300,000	1,000,000	920,000	1,100,000	960,000	900,000	600,000	0.95	31
SUMMARY INDICATORS†									
Sub-Saharan Africa	47,500,000	11,600,000	10,600,000	15,300,000	24,800,000	31,400,000	8,700,000	83	–
Eastern and Southern Africa	24,900,000	8,700,000	8,000,000	9,500,000	13,800,000	16,300,000	5,200,000	92	–
West and Central Africa	22,700,000	3,000,000	2,300,000	6,100,000	11,000,000	15,100,000	3,500,000	76	–
Middle East and North Africa	5,900,000	–	–	–	2,200,000	4,100,000	390,000	–	–
South Asia	37,400,000	–	–	–	12,400,000	27,300,000	2,200,000	73	–
East Asia and Pacific	30,100,000	–	–	–	8,200,000	23,200,000	1,300,000	–	–
Latin America and Caribbean	9,400,000	–	–	–	2,300,000	7,500,000	360,000	–	–
CEE/CIS	7,600,000	–	–	–	1,100,000	6,800,000	380,000	–	–
Low- and middle-income countries	–	–	–	–	–	–	–	–	–
Developing countries	130,000,000	–	–	–	50,000,000	95,000,000	13,000,000	77	–
World	145,000,000	15,000,000	13,000,000	19,000,000	51,400,000	107,000,000	13,400,000	–	–

DEFINITIONS OF THE INDICATORS

Children who have lost one or both parents due to all causes: Estimated number of children (0–17 years old) as of 2007 who have lost one or both parents to any cause.

Children who have lost one or both parents due to AIDS: Estimated number of children (0–17 years old) as of 2007 who have lost one or both parents to AIDS.

Children whose mother/father has died due to any cause: Estimated number of children (0–17 years old) as of 2007 who have lost their biological mother/father to any cause.

Children both of whose parents have died due to any cause: Estimated number of children (0–17 years old) as of 2007 who have lost both parents to any cause.

Orphan school attendance ratio: Percentage of children (10–14 years old) who have lost both biological parents and who are currently attending school as a percentage of non-orphaned children of the same age who live with at least one parent and who are attending school.

Percentage of children whose households received external support: Percentage of orphaned and vulnerable children whose households received free basic external support in caring for the child.

MAIN DATA SOURCES

Children who have lost one or both parents due to all causes: UNAIDS unpublished estimates, 2008.

Children who have lost one or both parents due to AIDS: UNAIDS, *2008 Report on the Global AIDS Epidemic.*

Children whose mother/father has died due to any cause: UNAIDS unpublished estimates, 2008.

Children both of whose parents have died due to any cause: UNAIDS unpublished estimates, 2008.

Orphan school attendance ratio: UNICEF global databases, 2008.

Percentage of children whose households received external support: UNICEF global databases, 2008.

NOTES

– Data not available.

* Data refer to the most recent year available during the period specified in the column heading.

** United Nations General Assembly Special Session on HIV/AIDS (2001) indicator.

p Proportion of orphans (aged 10–14) attending school is based on small denominators (typically 25–49 unweighted cases).

y Data refer to years or periods other than those specified in the column heading, differ from the standard definition or refer to only a part of the country. Such data are included in the calculation of regional and global averages.

† Regional averages are calculated only for the population representing 50 per cent or more of the region's total population of interest.


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ISBN: 978-92-806-4369-5

December 2008