With 33 million people living with HIV and 2.7 million new infections in 2007, the HIV epidemic continues to be a major challenge for global health. Although political and financial commitments and country efforts have resulted in increasing access to HIV services in recent years, the annual number of new infections remains high and continues to outpace the annual increase in the number of people receiving treatment. This report provides a global update on progress in scaling up priority health sector interventions for HIV prevention, treatment and care in 2008 towards the internationally endorsed goal of universal access.

Key indicators of progress in low- and middle-income countries in 2008

<table>
<thead>
<tr>
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<th>December 2007</th>
<th>December 2008</th>
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</thead>
<tbody>
<tr>
<td>Number of adults and children</td>
<td>2,970,000</td>
<td>4,030,000</td>
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<tr>
<td>receiving antiretroviral therapy</td>
<td>[2,480,000-3,460,000]</td>
<td>[3,700,000-4,360,000]</td>
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<tr>
<td>Antiretroviral therapy coverage among adults and children</td>
<td>33% [30-36%]</td>
<td>42% [40-47%]</td>
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<tr>
<td>Number of children younger than 15 years in need receiving antiretroviral therapy</td>
<td>198,000</td>
<td>275,700</td>
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<tr>
<td>Percentage of pregnant women living with HIV receiving antiretroviral drugs to prevent mother-to-child transmission</td>
<td>35% [29-44%]</td>
<td>45% [37-57%]</td>
</tr>
</tbody>
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Overall, the availability and coverage of priority health sector interventions for HIV prevention, treatment and care continued to expand in low- and middle-income countries in 2008. Nevertheless, progress has been uneven across and within countries, and many gaps and challenges remain.

The volume and scope of data to measure progress in scaling up priority HIV interventions improved substantially in 2008. Of 192 United Nations Member States, 158 reported data to WHO, UNICEF and UNAIDS, including 139 low- and middle-income and 19 high-income countries, with higher reporting rates for many indicators compared with 2007, although there remain uncertainties related to the quality of data reported. This has allowed for more comprehensive global analysis of the health sector’s achievements towards universal access to HIV prevention, treatment and care.

HIV testing and counselling

The availability and uptake of HIV testing and counselling services continued to increase in 2008. In 66 low- and middle-income countries with comparable data, the total number of health facilities providing HIV testing and counselling increased by about 35%: from 25,000 in 2007 to 33,600 in 2008.

In population-based surveys conducted between 2005 and 2008, the median percentage of respondents aged 15–49 years living with HIV who reported having ever received a test and test results prior to the survey increased from about 15% (2005–2006, 12 countries) to 39% (2007–2008, 7 countries). These results can be attributed to the expansion of provider-initiated HIV testing and counselling in health care settings along with diverse client-initiated and community-based approaches. Yet despite the expansion of services, knowledge of HIV status remains low.

Health sector interventions for HIV prevention

More data became available in 2008 on the epidemiology of HIV infection among population groups at high risk of HIV such as injecting drug users, sex workers and men who have sex with men, including in countries with generalized epidemics.

Of 92 low- and middle-income countries that reported information on programmes and policies targeting injecting drug users, 30 countries were providing needle and syringe programmes in 2008, and 26 countries reported providing opioid substitution therapy. The median number of syringes distributed by needle and syringe programmes per injecting drug user per year was about 24.4 in Europe and Central Asia and 26.5 in East, South and South-East Asia, far below the internationally recommended target of 200 syringes per injecting drug user per year. The criminalization of injecting drug use and the failure to recognize comorbid conditions in many people who inject drugs pose barriers to scaling up necessary services in many countries.

Recent data have shed important light on the dynamics of the HIV epidemic among men who have sex with men, including in countries in sub-Saharan Africa, where same-sex relations have often been considered too taboo to be acknowledged. The median percentage of surveyed men who have sex with men in low- and middle-income countries who reported the use of a condom the last time they had anal sex with a male partner was about 60%. Rates of condom use vary widely across regions and countries, with the highest rates in Latin America. A series of global and regional consultations in 2008 re-emphasized the role of the health sector and defined priority interventions to address the health needs of men who have sex with men.

Surveys conducted among sex workers in 56 countries found a median percentage of 86% reporting the use of a condom with their most recent client, with wide variation across...
countries. Further expansion of programmes promoting condom use among sex workers must consider the local context and the heterogeneity of formal or brothel-based and informal sex work.

Although some evidence indicates that access to HIV interventions is expanding in many settings, population groups at high risk of HIV infection continue to face technical, legal and sociocultural barriers in accessing health care services.

The year 2008 saw further progress in developing and implementing new prevention technologies. All 13 priority countries in sub-Saharan Africa with high rates of heterosexual HIV transmission and low rates of male circumcision had established policies and programmes to scale up male circumcision to reduce the risk of heterosexually acquired HIV infection in men. More countries also reported the establishment of policies to provide post-exposure prophylaxis for occupational and non-occupational exposure to HIV. Ongoing research is required on the use of antiretroviral drugs for HIV prevention, including for pre-exposure prophylaxis and microbicides.

Among countries that provided data on screening for transfusion-transmissible infections (including HIV, hepatitis B, hepatitis C and syphilis), about 25% reported being unable to screen all donated blood for one or more of these infections. Continued efforts are needed to ensure the safety of blood and blood products, especially in low-income countries.

Treatment and care for people living with HIV

Access to antiretroviral therapy continued to expand rapidly. At the end of 2008, more than 4 million [3 700 000–4 360 000] people were receiving antiretroviral therapy in low- and middle-income countries, an increase of more than 1 million (36%) compared with the end of 2007 and a 10-fold expansion in 5 years. The greatest expansion in the number of people receiving treatment in 2008 was in sub-Saharan Africa, where about 2 925 000 [2 690 000–3 160 000] people were receiving antiretroviral therapy at the end of 2008 versus 2 100 000 [1 905 000–2 295 000] people at the end of 2007.

The estimated coverage of antiretroviral therapy in low- and middle-income countries reached 42% [40–47%] in 2008, and coverage in sub-Saharan Africa was 44% [41–48%]. Despite progress, more than 5 million of the estimated 9.5 million [8 600 000–10 000 000] people needing antiretroviral therapy were still without access to treatment, making it absolutely critical to accelerate programme delivery to reach universal access goals.

Data disaggregated by sex show that adult women are slightly advantaged compared with adult men in access to antiretroviral therapy in low- and middle-income countries. About 60% of adults receiving antiretroviral therapy in reporting countries were women, who represent 55% of the people in need.

More countries provided national programme data on patient retention on antiretroviral therapy. Data showed that most patient attrition occurred during the first year of treatment. Patient retention tended to stabilize thereafter. In sub-Saharan Africa, the retention of people receiving antiretroviral therapy was estimated at 75% at 12 months following initiation and at 67% at 24 months. However, many people living with HIV continue to be diagnosed late, preventing the timely initiation of antiretroviral therapy when its impact on survival would be greatest.

Tuberculosis (TB) continues to be the leading cause of death among people living with HIV. In 2007, 16% of people with notified TB knew their HIV status, resulting in low rates of access to co-trimoxazole prophylaxis and antiretroviral therapy for people living with HIV and TB. There has been an increase in reported intensified TB case-finding and provision of isoniazid preventive therapy among people living with HIV, but coverage of these interventions also remains low overall. The data draw attention to the urgent need to strengthen integrated monitoring and evaluation systems to assess the progress and outcomes of collaborative HIV/TB interventions.

HIV services for women and children, including preventing mother-to-child transmission

Access to services for preventing mother-to-child transmission in low- and middle-income countries continued to expand in 2008. Twenty-one per cent of pregnant women received an HIV test in 2008, up from 15% in 2007, and 45% [37–57%] of pregnant women living with HIV received antiretroviral drugs to prevent mother-to-child transmission.

More countries moved towards using efficacious combination drug regimens for antiretroviral prophylaxis, although about 31% of pregnant women living with HIV in 97 reporting low- and middle-income countries continued to receive single-dose regimens.

An estimated 34% of pregnant women who tested positive for HIV were assessed for eligibility to receive antiretroviral therapy for their own health in 2008. Timely initiation of antiretroviral therapy among eligible mothers is not only critical to reduce maternal mortality, but also to reduce perinatal HIV transmission to the child or transmission during breastfeeding.
In 2008, 38% [31-47%] of the 730 000 [580 000–880 000] children estimated to need antiretroviral therapy in low- and middle-income countries had access. The number of health facilities providing antiretroviral therapy to children increased by about 80% between 2007 and 2008 and 39% more children were receiving antiretroviral therapy. About 8% of infants born to pregnant women with HIV initiated co-trimoxazole by two months of age, more than twice the percentage reported in 2007.

In 41 reporting low- and middle-income countries, only 15% of children born to mothers living with HIV were tested for HIV within the first two months of life. Efforts to improve early infant diagnosis and postnatal follow-up with integration of HIV services with services for maternal, newborn and child health are needed to provide a continuum of HIV prevention and care for women and children.

Health systems and HIV

Strong health systems and continuing synergy with investment in HIV programmes are essential to achieve universal access to HIV prevention, treatment and care services. Countries are adopting strategies such as task-shifting to address human resource shortages, with increasing evidence of improvements in access, coverage and quality of health services at comparable or lower costs than traditional delivery models. Attention to the quality of the services provided; continued opportunities for health worker training and measures to prevent stigma and discrimination against people living with HIV in health care settings are equally essential.

Procurement and supply management of HIV drugs and other commodities have also been strengthened in many countries, with some evidence of beneficial effects on the overall systems. Nevertheless, in 2008, 34% of reporting low- and middle-income countries had experienced at least one stock-out of a required antiretroviral drug.

Investment in health information systems remains vital to ensure that countries are able to generate and use strategic information to monitor progress in scaling up HIV services in the health sector and assess the effects of programmes. Although more data are becoming available from national programmes and surveys, their quality and completeness are uneven. Data are also necessary to ensure accountability in relation to international and national goals and to guarantee sustained funding for the HIV response, especially given economic recession.