

Children, HIV and AIDS: The world in 2030

1.9 million

**CHILDREN AND
ADOLESCENTS**

living with HIV in 2030*

270,000

**ANNUAL NEW HIV
INFECTIONS**

among children and
adolescents in 2030*



56,000

**ANNUAL
AIDS-RELATED
DEATHS**

among children and
adolescents in 2030*

* According to UNICEF global projections based on current trends in the HIV response and population estimates.

Introduction

As populations change, recent progress in the HIV response for children and adolescents might not be sufficient to end HIV as a threat to individuals or the public health. Yet, UNICEF believes it is possible to reverse HIV epidemics among all people – including children and adolescents – regardless of their specific risk factors or challenges.

Globally, the population of children and adolescents aged 0–19 is expected to increase by 5 per cent between 2018 and 2030. The increase will be greatest in sub-Saharan Africa, the region in which the HIV burden is highest: The child and adolescent population is projected to grow by 23 per cent in Eastern and Southern Africa and 30 per cent in West and Central Africa. The bulk of the population growth will be in the adolescent age group (10–19 years old). The adolescent population is also projected to grow in the Middle East and North Africa (by 24 per cent), in Eastern Europe and Central Asia (by 17 per cent) and in East Asia Pacific (by 4 per cent) between 2018 and 2030.

Based on these population projections and assuming current HIV response efforts continue at the same pace, the number of children and adolescents aged 0–19 years living with HIV will be 34 per cent lower in 2030 than it is now. Although this is good news, far too many children and adolescents will still be affected: An estimated 1.9 million children and adolescents will be living with HIV in 2030, with 270,000 newly infected in 2030 alone. The bulk of these new HIV infections will occur in Africa.

This downward trajectory in new HIV infections is too slow. Children, adolescents and all others living with HIV who have access to consistent, high-quality antiretroviral therapy (ART) lead their lives and never risk transmitting the virus to others. Slightly more than half of all children (0–14) living with HIV are now on treatment; 48 per cent are not. Scaling up programmes to achieve universal coverage of treatment is a huge logistical, financial and structural challenge for any country. Anything less than continued attention and increasing commitment of resources could lead to the failure of existing prevention and treatment programmes.

A turning point can be dramatic improvements in preventing new HIV infections. Children and adolescents should be at the centre of such efforts. Extraordinary global progress in combating vertical transmission of HIV suggests that renewed attention and the adoption of

innovative programmatic solutions, including the use of new technologies, could lead to elimination of new infections in children aged 0–14 in the coming years. Slower progress in reducing HIV infection rates and AIDS-related deaths, and in increasing access to ART among children and adolescents in comparison to adults, means a focus on reaching this age group is critical.

No one solution can overcome obstacles to better results among children and adolescents. But significant improvements can be achieved through the coordinated delivery of multiple interventions to prevent new HIV infections and to increase access to ART. Recommendations on how to use these projections as a tool to accelerate progress are discussed in this report.

Methods

Spectrum's 2018 AIDS Impact Model (AIM) was used to estimate the number of new HIV infections, AIDS-related deaths and children and adolescents aged 0–19 living with HIV, by age and sex. Model inputs include population statistics, survey data and HIV programme data, reviewed for completeness and quality by UNAIDS, UNICEF, WHO and other collaborating partners.

Output indicators were projected from 2018 to 2030 in two epidemic scenarios:

1. Status quo scenario based on trends in new HIV infections, ART coverage and prevention of mother-to-child transmission (PMTCT) coverage over the past five years.
2. Global target scenario based on 2030 Fast-Track and 2020 Super-Fast-Track targets for ART coverage, PMTCT coverage and reduction in new HIV infections among children, adolescents and adults.

For each scenario, output was extracted at the country level by sex and five-year age group. Data were aggregated to nine geographic regions. These regional aggregates may mask important variations among countries.

A total of 169 countries were included in this analysis, representing 99 per cent of children and adolescents aged 0–19 living with HIV in 2017 and 98 per cent of the same in 2018. Because the analysis represented less than 90 per cent of children and adolescents estimated to be living with HIV in Eastern Europe and Central Asia, North America and Western Europe, exact figures for these regions are not presented.

Global projections

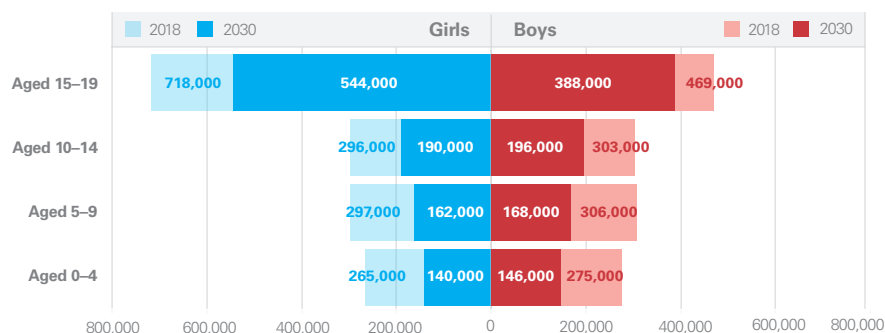
Global projections based on current trends indicate that overall HIV risks and vulnerability among children and adolescents will decline steadily through 2030. However, gaps seem likely to persist in HIV response effectiveness by age. Broadly speaking, decreases in the annual number of new HIV infections, the number of those living with HIV and the annual number of AIDS-related deaths are all projected to be much lower among those aged 10–19 years than among those aged 0–9 years.

The widening age-specific gaps in those measures of HIV risk and impact underscore two recent trends: the relative success of global efforts to end vertical transmission of HIV and the comparative failure of prevention among adolescents. It is possible to achieve greater, more sustained success in both of these critical areas; the data indicate that more must be done to eliminate vertical transmission of HIV, and to address the specific HIV risks and prevention needs of adolescents.

Gender must be considered as well. Globally, far more adolescent girls than boys are living with HIV and are newly infected every year. Although targeted prevention activities for girls has been and should remain a high priority, vulnerable adolescent boys, including those living with HIV, need similar levels of attention, because improvements for adolescent boys lag behind improvements for adolescent girls.

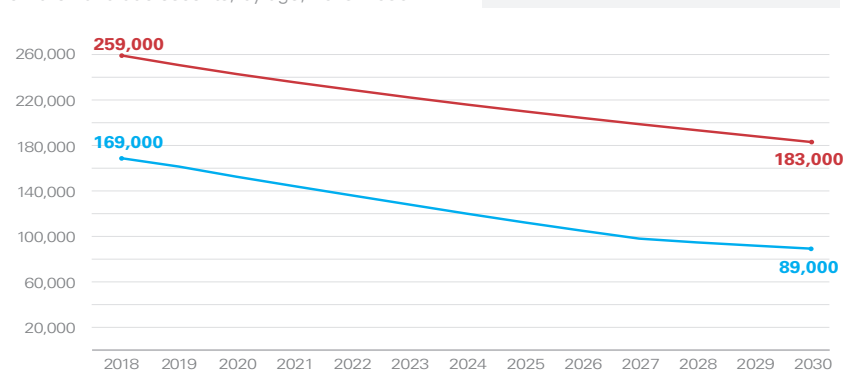
Children aged 0–9 years are projected to experience the biggest decline in number living with HIV

FIGURE 1: Number of children and adolescents living with HIV, by age and sex, 2018 and 2030



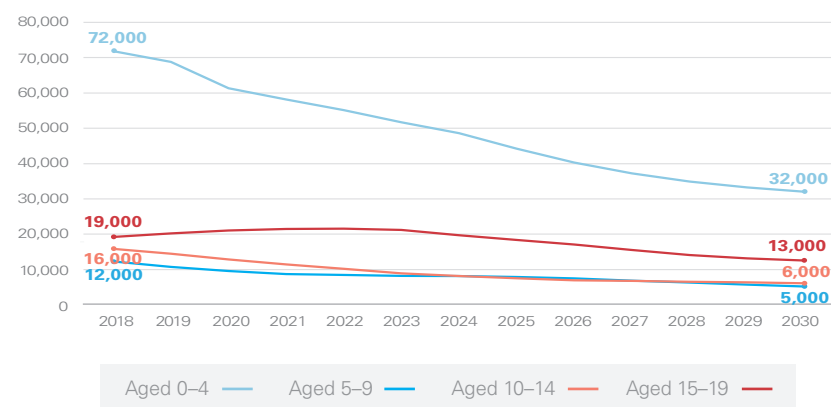
If trends continue, there could be one-third fewer annual new HIV infections among children and adolescents by 2030, with the greatest decrease among children aged 0–9 years

Annual number of new HIV infections among children and adolescents, by age, 2018–2030



The number of AIDS-related deaths are projected to decrease the most for the youngest children, those aged 0–4 years

FIGURE 3: Annual number of AIDS-related deaths among children and adolescents, by age, 2018–2030



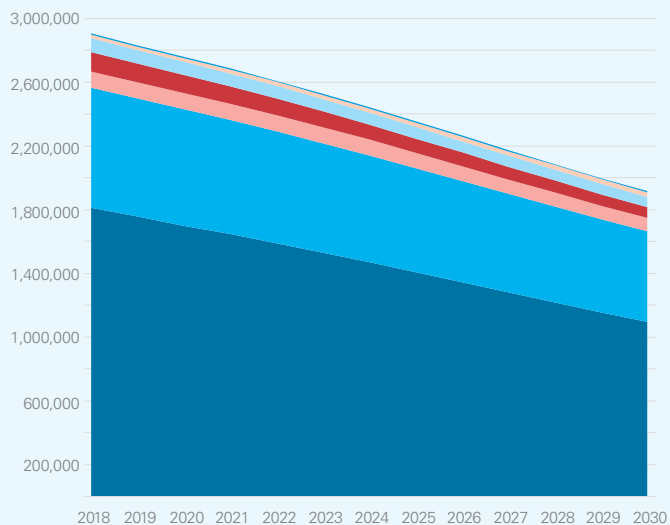
Regional projections

Although patterns of inequities across regions will become less stark over time, regional differences in HIV impact and response for the 0–19 age group are projected to still be evident in the year 2030. The differences will shift and become a bit less stark in general, however. Eastern and Southern Africa will still be home to the majority of those aged 0–19 years living with HIV. But this region’s absolute numbers of children and adolescents living with HIV will decrease over time, and its relative burden will be smaller. Less progress in West and Central Africa is the main reason for this shift. A slower decline in the annual number of new HIV infections in this region, combined with the world’s fastest growing populations of children and adolescents, suggests the global HIV burden among children and adolescents will become increasingly concentrated in West and Central Africa.

Latin America and the Caribbean and Eastern Europe and Central Asia are also projected to contribute more to the global burden of HIV among children and adolescents. The epidemics here are relatively small, but in recent years these regions have made little progress in reducing the number of new infections.

Regional differences in the number of children and adolescents living with HIV will likely persist until 2030

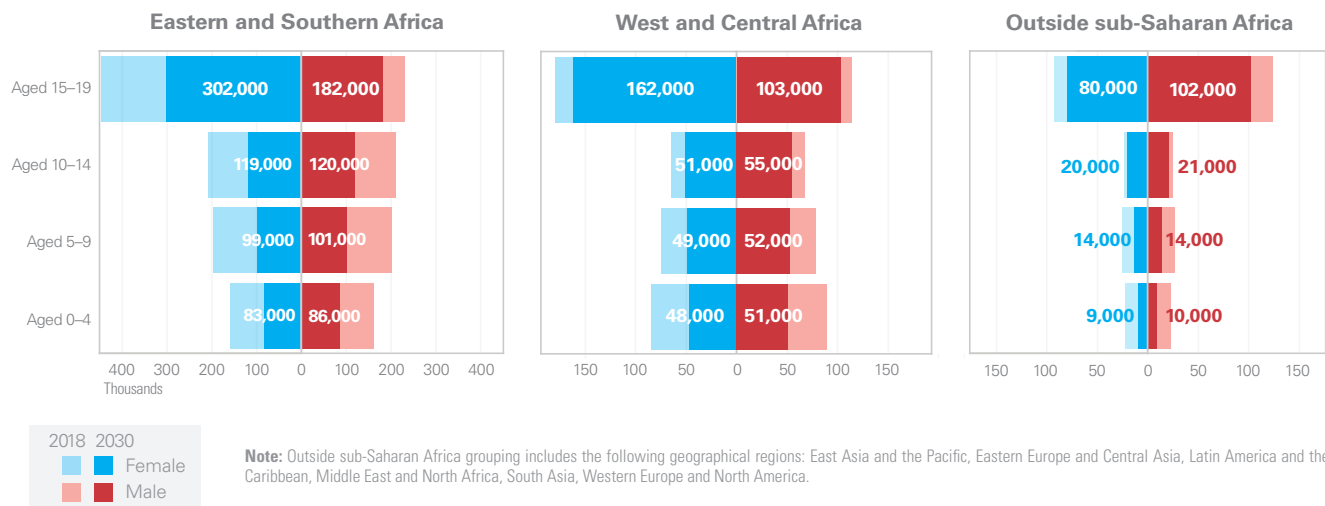
FIGURE 4: Number of children and adolescents aged 0–19 living with HIV, by region, 2018–2030



Note: Western Europe and North America are excluded from the regional comparison.

The outlook for boys and girls living with HIV differs greatly by region, especially for adolescents

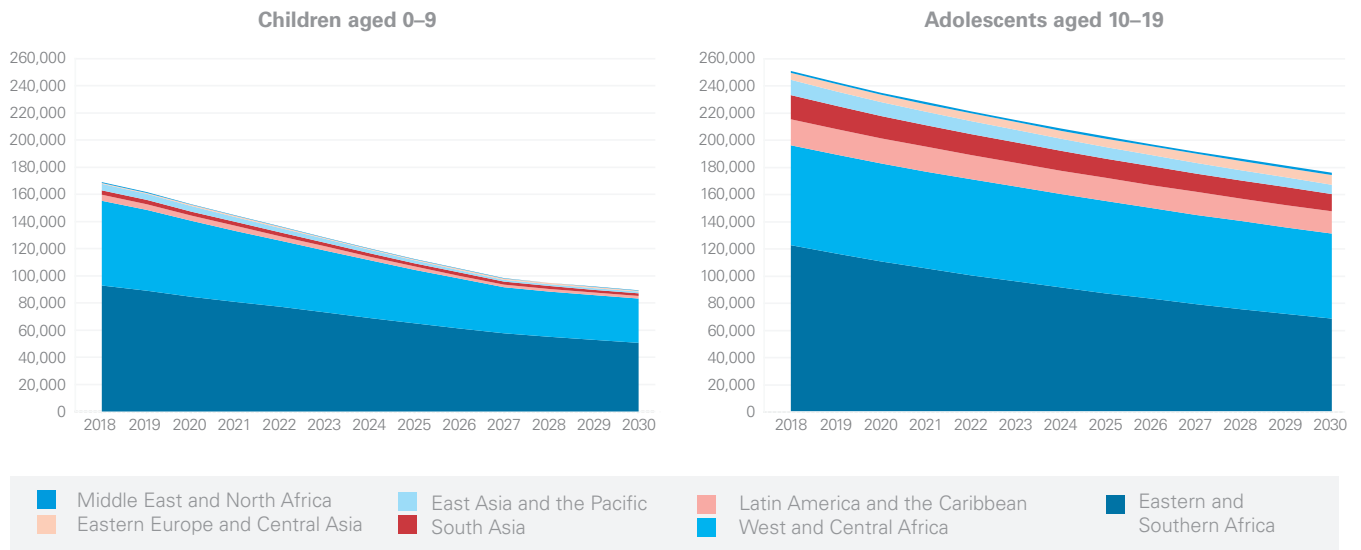
FIGURE 5: Number of children and adolescents living with HIV, by age, sex and region, 2018 and 2030



Note: Outside sub-Saharan Africa grouping includes the following geographical regions: East Asia and the Pacific, Eastern Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, South Asia, Western Europe and North America.

The majority of new HIV infections among adolescents aged 10–19 years could tilt from Eastern and Southern Africa to West and Central Africa

FIGURE 6: Annual number of new HIV infections among children and adolescents, by region, 2018–2030



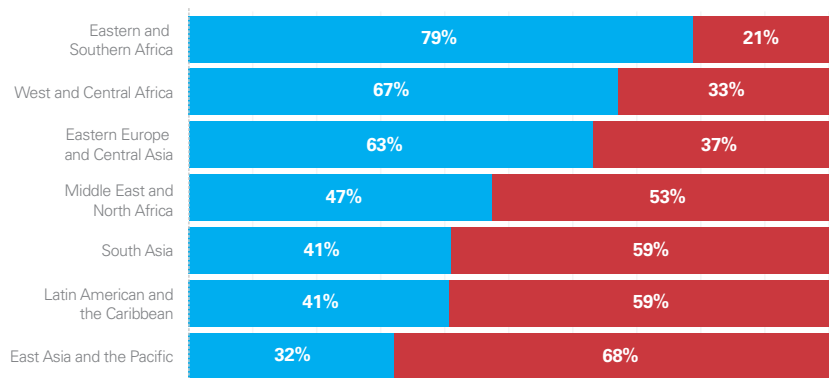
Note: Western Europe and North America are excluded from the regional comparison.

In four regions, more new HIV infections are projected for adolescent boys than for adolescent girls from 2018 to 2030

FIGURE 7: Percent distribution of total number of new HIV infections among adolescents aged 10–19, by sex, 2018–2030



Note: Western Europe and North America are excluded from the regional comparison. Regions are listed by number (largest to smallest) of new HIV infections among adolescents.

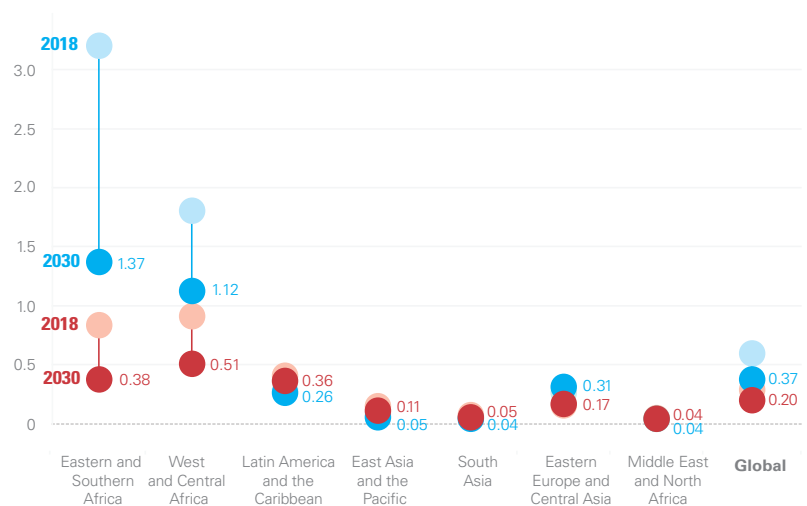


In 2030, Latin America and the Caribbean could have the same HIV infection rate for adolescent boys as Eastern and Southern Africa

FIGURE 8: Annual number of new HIV infections per 1,000 adolescents aged 10–19, by sex and region, 2018 and 2030



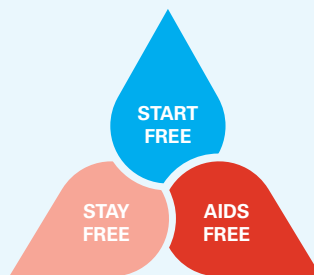
Note: The rate of new HIV infections is expressed as the number of new HIV infections per 1,000 adolescents. This indicator helps to compare the annual numbers of new HIV infections in regions of different epidemic and population sizes. Adolescents already living with HIV are excluded from this calculation. Western Europe and North America are excluded from the regional analysis.



Scenario analysis

Countries around the world have committed to global HIV targets, including the UNAIDS Fast-Track agenda and the Super-Fast-Track framework for ending AIDS in children, adolescents and young women by 2020. Meeting those targets would significantly improve all major indicators of HIV among children and adolescents by 2030, yet progress towards them is lagging substantially, and the time for effective action is quickly running out. Meeting global targets could result in long-lasting positive impacts for children and adolescents.

Global targets from the Super-Fast-Track framework for ending AIDS in children, adolescents and young women by 2020



START FREE

Eliminate new HIV infections among children (aged 0–14) by reducing the number of children newly infected annually to less than 20,000 by 2020.

STAY FREE

Reduce the number of new HIV infections among adolescents and young women (aged 10–24) to less than 100,000 by 2020.

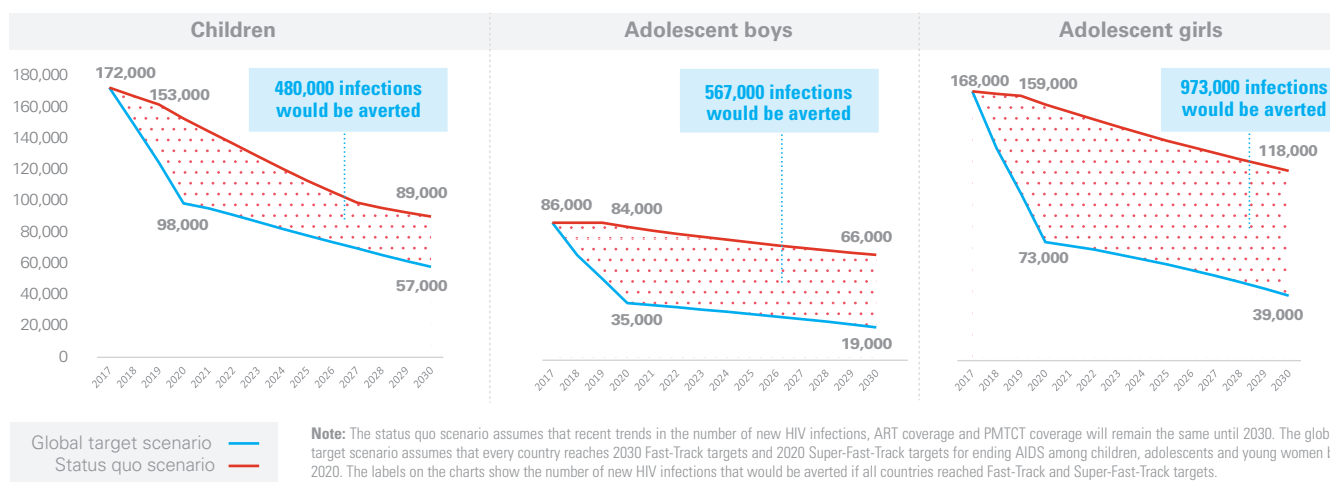
AIDS FREE

Provide 1.4 million children (aged 0–14) and 1 million adolescents (aged 15–19) with HIV treatment by 2020.

Source: Start Free, Stay Free, AIDS Free – A super-fast-track framework for ending AIDS among children, adolescents and young women by 2020, UNAIDS 2017

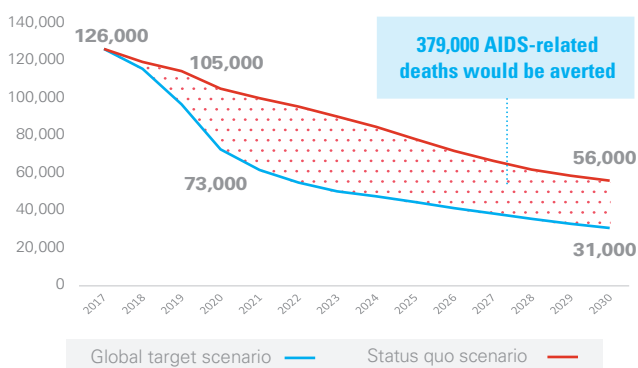
The world is off track to end AIDS for children and adolescents by 2020 and 2030, but reaching global targets would avert 2.0 million new HIV infections

FIGURE 9: Annual number of new HIV infections among children and adolescents, status quo and global target scenarios, 2017–2030



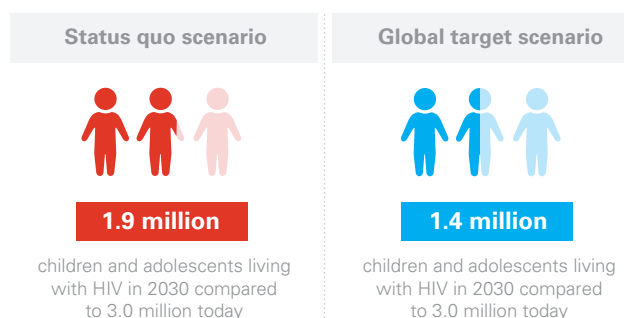
For children and adolescents, reaching global targets in 2020 and 2030 would avert 379,000 AIDS-related deaths

FIGURE 10: Annual number of AIDS-related deaths among children and adolescents, status quo and global target scenarios, 2017–2030



Even with success, a large population of children and adolescents living with HIV will need access to services well beyond 2030

FIGURE 11: Number of children and adolescents aged 0–19 living with HIV in 2017 and 2030, status quo and global target scenarios



Innovative solutions

to change the course of the HIV epidemic

The projections described in this report point to shortfalls in the HIV response for children and adolescents. Progress in preventing HIV in young children, through PMTCT, has slowed; and combination prevention approaches that address the behavioural and structural drivers of the epidemic have not succeeded in reducing the vulnerabilities of adolescents. Many children and adolescents living with HIV don't know their status, and among those who are tested and initiated on treatment, the levels of treatment adherence are low; their viral loads are too high to break the cycle of HIV transmission and AIDS-related mortality. Only when all those living with HIV are identified, treated and retained in care will the benefits of 'treatment as prevention' be fully realized.

Evidence from around the world suggests nine approaches supported by UNICEF to addressing these persistent gaps from both prevention and treatment angles. They are interconnected components of strengthened efforts, centred on the individual and in the family and community, to reduce new HIV infections and improve uptake of and adherence to treatment. Some of these approaches are new and innovative, while others have been used in local settings but have not been brought to greater scale. If adopted, these approaches could have transformative effects in the HIV response among children and adolescents into 2030.

PREVENTING NEW INFECTIONS

1. Digital platforms to improve HIV knowledge

Digital platforms and new media can be used to increase adolescents' awareness of HIV and their inclination and ability to get tested and take other measures to protect themselves and their sexual partners. These digital options must be well-designed and reassuringly confidential to be effective, however.

2. Biomedical interventions for HIV prevention for adolescents

Evidence showing the preventive benefits of antiretroviral drugs calls for innovative models to expand access to biomedical options, such as pre-exposure prophylaxis (PrEP) for adolescents at high risk and others in the pipeline. Such biomedical interventions must be paired with essential support services (e.g., repeat HIV testing, psychosocial support, etc.) in adolescent-friendly settings.

3. Other emerging biomedical innovations

Innovative biomedical solutions including long-acting, injectable ARVs and HIV vaccines offer potential paradigm shifts in ending AIDS. Simplified treatment options and new avenues for prevention could overcome the access and adherence barriers faced by children and adolescents who face a more rapid progression of HIV and a lifetime of treatment.

TREATMENT AND RETENTION IN CARE

4. Family-centred testing

The targeted, family-centred testing approach aims to identify and treat children living with HIV but not yet diagnosed and link them to antiretroviral treatment. It applies an indicator of high risk within the family unit, such as a sibling or parent who is known or has been found to be living with HIV, as an entry point to promote the testing of all children in the family.

5. Point-of-care testing

The scale-up of point-of-care (POC) diagnostic technologies for early infant diagnosis and viral load monitoring through provider-initiated testing at multiple entry points can contribute significantly to efforts to increase access to antiretroviral treatment, end AIDS-related deaths and improve children's well-being. With POC testing for HIV, it is possible to receive results and begin treatment all on the same day.

6. Peer support for improving access to HIV services and retention in care

Evidence from the HIV response has demonstrated that people with shared experiences are those most likely to influence each other's behaviour. Community-based peer support initiatives include women living with HIV serving as mentors to other women accessing HIV services, male role models for partner engagement, and adolescent leaders who reach out to peers and support them in accessing HIV testing, treatment and adherence.

CROSS-CUTTING APPROACHES

7. Adolescent-friendly services

Adolescent-friendly services are essential to the effectiveness of programmes in areas such as sharing knowledge about HIV, getting tested for HIV and other sexually transmitted infections, and accessing and adhering to PrEP and ART. These services are most successful when shaped by adolescents and communicated in ways they understand, and might include peer educators and outreach to places where adolescents feel comfortable.

8. 'Cash + care'

Cash grants provided as part of broader social protection interventions can greatly reduce HIV risk among adolescents and improve retention in care. They work by offering cash as an incentive to clinic or school attendance, or to treatment uptake and adherence. 'Cash + care' seems especially useful for adolescents living in poverty, as well as for adolescent girls.

9. Targeted community outreach for adolescents

Targeted community outreach efforts show promise for increasing entry points to HIV services, either as standalone activities (such as drop-in centres for adolescents) or when integrated into a range of community activities (such as child health days). Such approaches can help reach highly vulnerable and stigmatized populations who normally cannot access health facilities.

Looking ahead

The evolving HIV epidemic and population changes make clear that a combination of solutions adapted to local contexts are needed to achieve an end to AIDS for every child and adolescent. The projections stated in this report are not etched in stone, but represent an opportunity to change the trajectory of the HIV epidemic for future generations. However, one thing remains clear: HIV is a chronic disease, currently without a cure. Thus, along the road to elimination of HIV, sustainable programmes that provide access to testing, treatment and prevention services well past 2030 are more critical now than ever before. The lives and health of future generations depend on it.

For more data about children worldwide, visit data.unicef.org



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