

POLICY BRIEF

# HIV AND ADOLESCENTS: HIV TESTING AND COUNSELLING, TREATMENT AND CARE FOR ADOLESCENTS LIVING WITH HIV

SUMMARY OF KEY FEATURES AND RECOMMENDATIONS

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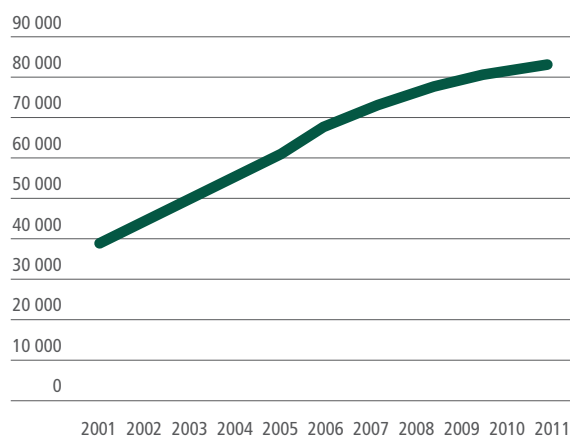
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# WHY ARE ADOLESCENTS IMPORTANT?

Adolescents (10–19 years) continue to be vulnerable to HIV infection (1)<sup>1</sup>. All adolescents are vulnerable to HIV due to the physical and emotional transitions, and potentially heightened risk-taking behaviour, inherent to this period of life. This is particularly true for adolescents who live in settings with a generalized HIV epidemic—especially girls in sub-Saharan Africa who often face a higher risk of infection than boys—and/or adolescents who are members of key populations at higher risk for HIV acquisition or transmission through sexual transmission and injecting drug use.<sup>2</sup>

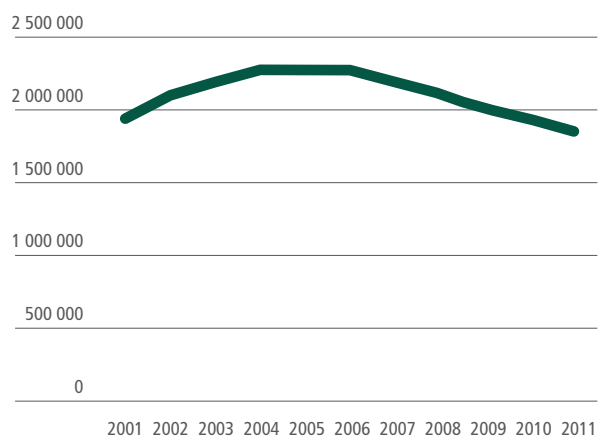
In 2012, an estimated 2.1 million adolescents were living with HIV. Between 2005 and 2012, HIV-related deaths among adolescents increased by 50%, while the global number of HIV-related deaths fell by 30% (2). This increase in adolescent HIV-related deaths is due primarily to poor prioritization of adolescents in national HIV plans, inadequate provision of accessible and acceptable HIV testing and counselling (HTC) and treatment services, and lack of support for adolescents to remain in care and adhere to antiretroviral therapy (ART).

**Total adolescent AIDS-related deaths**



Source: Kasedde S et al (3).

**Total AIDS-related deaths**



Source: UNAIDS (2).

Over the next decade, infants and young children who are living with HIV will become adolescents. While some of them have been diagnosed and are currently on treatment, others have not been diagnosed and/or are not on treatment. All of them will face the physical, emotional and social tasks of adolescence, complicated by the challenges of living with a chronic infection and preventing transmission.

Adolescents enrolled in paediatric treatment and care programmes should begin to transition to services that are more appropriate for their age-related needs and circumstances, if available, with the aim of developing autonomy for their own health care. Undiagnosed adolescents need to be tested for HIV – if negative, linked to prevention services, and, if positive, enrolled and retained in treatment and care that is supportive and effective. Unfortunately in many countries, access to testing and treatment for this age group is complicated by legal barriers where a parent or caregiver's consent is required, often discouraging adolescents from seeking the services they need.

<sup>1</sup> This document focuses on adolescents, ages 10–19 years. However, many programmes focus and report on youth, ages 15–24 years. Inconsistency in data collection often leads to overlapping age categories. This problem is compounded by different definitions of “child”, “adolescent”, “young person” and “young adult”. As a result data specific to adolescents often get lost, as the adolescent age group is subsumed in various different age ranges.

<sup>2</sup> For these guidelines, key populations are defined as those populations at higher risk of HIV acquisition and transmission—sex workers, men who have sex with men, transgender people and people who inject drugs. Adolescent key populations also include those who are sexually abused and/or exploited, and those in prisons and other closed settings.

In 2013, the World Health Organization (WHO) issued two new guidance documents that address, wholly or in part, the prevention, care, and treatment of HIV for adolescents: the *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* (henceforth, the *Consolidated ARV guidelines*); and *HIV and adolescents: guidance for testing and counselling and care for adolescents living with HIV* (henceforth, the *Adolescent HIV guidelines*) (4, 5).

This brief summarizes key issues and recommendations of both documents that pertain specifically to adolescents. The full guideline documents are available at:

[www.who.int/hiv/pub/guidelines/arv2013](http://www.who.int/hiv/pub/guidelines/arv2013) and  
[www.who.int/hiv/pub/guidelines/adolescents/en/](http://www.who.int/hiv/pub/guidelines/adolescents/en/)

## Key messages from the new guidelines

- 1 The HIV epidemic among adolescents needs more attention and a tailored approach.
- 2 Issues and services for adolescents should be included explicitly in national HIV responses, policies and plans.
- 3 Different subpopulations of adolescents may need different approaches to service delivery.
- 4 National laws and policies on consent to services should be reviewed to reduce barriers to access and increase uptake of services by adolescents.
- 5 Adolescents need increased access to testing through provider-initiated testing and counselling in health services in all high HIV-prevalence countries, and through community-based services for adolescents from key populations in all settings.
- 6 There must be effective linkage following HIV testing to prevention, treatment and care services.
- 7 Adolescents need increased access to ART and improved support to remain in care and adhere to treatment—from national to local or community-based services.
- 8 Adolescents should be involved in the development of appropriate and effective HIV services.

## Key features of the new guidance

The *Consolidated ARV guidelines* address various aspects of ARV treatment. The document includes guidance on when to start ART; what combination of drugs to use for first-, second- and third-line therapy; how to monitor people on ART; and when to switch ART regimens for adults, adolescents, children, and pregnant and breastfeeding women. It also includes new guidance on community-based HIV testing and counselling and ART service delivery, and guidance for HIV programme managers on how to best implement ART programmes for the greatest impact and equity. The clinical ART recommendations in these guidelines are appropriate for adolescents, with drug doses adjusted for weight. However, there are many adolescent ART issues that are not well understood—including the long-term implications of starting treatment at a time of considerable physical change, the provision of support for transition from paediatric to adult services, and ways to support ART-experienced perinatally infected adolescents who are having difficulties adhering to their ART or are failing treatment. The update to the *Consolidated ARV guidelines* will address these transition and treatment issues for adolescents in greater detail and will be available in 2014.

The *Adolescent HIV guidelines* address the need to support the ongoing care of vertically infected children, as they become adolescents, and the vulnerability of adolescents to horizontal HIV infection. The Adolescent HIV guidelines emphasize the necessity to consider the range of adolescent needs and circumstances when planning HIV testing and counselling services and developing strategies for providing services that can help increase adherence to treatment and retention in care. Operational lessons learned are provided, as are service delivery recommendations from the *Consolidated ARV guidelines*—modified for adolescents. The *Adolescent HIV guidelines* were developed by WHO with the Global Network of People Living with HIV (GNP+), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Populations Fund (UNFPA) and the United Nations Children’s Fund (UNICEF).

## Recommendations

### 1. HIV testing and counselling

Increasing uptake of HIV testing and counselling (HTC) can lead to earlier diagnosis, more effective care, and reduced mortality. Given the increasing availability of ART and prevention interventions, early diagnosis can improve health outcomes by reducing HIV transmission and incidence as well as HIV-related morbidity and mortality. However, while it is important to increase uptake of HIV testing and counselling by adolescents, it is essential to give significant attention to:

- post-test counselling; appropriate and successful linkage to prevention, treatment and care services; and consent and confidentiality, which are major concerns for adolescents;
- understanding that adolescents testing positive for HIV, who do not yet require treatment, do need care and retention by the health system;
- special issues for adolescents from key populations seeking testing, counselling and other follow-up services.

Adolescents who learn that they are infected with HIV are more likely to obtain emotional support and practice preventive behaviours to reduce the risk of transmitting HIV to others, and are more likely to seek HIV treatment and care earlier, when it can make more of a positive health impact. Access to HTC is also important for adolescents who do not have HIV to reinforce prevention messages and to facilitate access to prevention services and commodities.

#### Community-based HIV testing and counselling

Affordable, feasible and acceptable approaches for increasing access to and the likelihood of adolescents being tested should be explored. Community-based services are particularly useful in reaching horizontally infected older adolescents—as this group is inadequately tested in generalized and concentrated epidemics—and adolescents from key populations in all settings.

The issue of *informed consent* is fundamental to adolescents’ access to effective HIV testing, care and treatment. The age at which individuals can independently consent to interventions, such as HTC, varies across countries and is related to considerations of an individual’s competence to understand the intervention and its implications. The concept of ‘evolving capacities’<sup>1</sup> recognizes the developmental changes that adolescents experience as they mature, including progress in cognitive abilities and capacity for self-determination. While stipulation of different ages of consent and qualifying criteria are intended to protect adolescents, policy makers must carefully consider whether and how such criteria could affect adolescents’ access to health services, especially for HIV testing, care and treatment.

While WHO has not issued recommendations related to consent to HIV testing, treatment and care, policy makers should review their existing regulatory frameworks governing adolescent health care with a view to ensuring harmonization with other age-related laws and policies and facilitating linkages to HIV testing, treatment and care for adolescents. Authorities should also consider especially how to facilitate access to HIV testing and counselling and linkage to care for orphans and vulnerable adolescents, including those living on the streets, adolescents in child-headed households, and adolescents from key populations, girls engaged in sex with older men and in multiple or concurrent sexual partnerships, and all adolescents affected by sexual exploitation.

<sup>1</sup> See Convention on the Rights of the Child. <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>



**TABLE 1. HIV TESTING AND COUNSELLING RECOMMENDATIONS**

Topic and population	Recommendations
<b>Existing but relevant recommendations</b>	
<b>Provider-initiated testing and counselling</b>	<ol style="list-style-type: none"> <li>1. In generalized epidemics, provider-initiated testing and counselling should be recommended to everyone (adults, adolescents and children) attending all health facilities, including medical and surgical services; STI, hepatitis and TB clinics; public and private facilities; inpatient and outpatient settings; mobile or outreach medical services; services for pregnant women (antenatal care, family planning and maternal and child health settings); services for key populations; services for infants and children; and reproductive health services.</li> <li>2. In concentrated and low-level epidemics, provider-initiated testing and counselling should be recommended in all health facilities for: <ul style="list-style-type: none"> <li>• adults, adolescents or children who present with signs and symptoms or medical conditions that could indicate HIV infection, including TB; and</li> <li>• adolescent members of key populations.</li> </ul> </li> </ol>
<b>Disclosure to adolescents</b>	<ol style="list-style-type: none"> <li>3. All adolescents should be disclosed to about their HIV status.</li> <li>4. All adolescents should be disclosed to about the HIV status of their parents/guardians.</li> </ol>
<b>New recommendations</b>	
<b>HIV testing and counselling of adolescents (including disclosure by adolescents)</b>	<ol style="list-style-type: none"> <li>1. HIV testing and counselling, with linkages to prevention, treatment and care, is recommended for adolescents from key populations in <u>all</u> settings (generalized, low and concentrated epidemics).</li> <li>2. In <u>generalized epidemics</u>, HIV testing and counselling with linkage to prevention, treatment and care is recommended for all adolescents.</li> <li>3. In <u>low and concentrated epidemics</u>, HIV testing and counselling with linkage to prevention, treatment and care is recommended to be made <u>accessible</u> to all adolescents.</li> <li>4. Adolescents should be counselled about the potential benefits and risks of disclosure of their HIV status and empowered and supported to determine if, when, how and to whom to disclose.</li> </ol>
<b>Community-based HIV testing and counselling</b>	<ol style="list-style-type: none"> <li>5. In generalized HIV epidemics, community-based HIV testing and counselling with linkage to prevention, care and treatment services is recommended, in addition to provider-initiated testing and counselling.</li> <li>6. In all HIV epidemic settings, community-based HIV testing and counselling for key populations, with linkage to prevention, care and treatment services is recommended, in addition to provider-initiated testing and counselling.</li> </ol>

## 2. ART service delivery

Equity of access is an overarching priority for delivery of services for adolescents. Many national action plans address paediatric and adult services, but do not specify activities for delivery of adolescent services. National authorities should develop actions specific to adolescents so that services for this group can be improved and coverage expanded.

### Retention in care and adherence to ART

#### *Community-based care and support*

Community-based services can mitigate some of the burden faced by adolescents who need accessible and free/low-cost services to support adherence. Greater accessibility, acceptability and affordability can also help increase retention in care and reduce loss to follow-up.

#### *Training of health workers*

All health providers must be mobilized and trained to understand their adolescent population and to encourage them to use HIV services.

No single adherence intervention or package of interventions is effective for everyone and in every setting. Similarly, people's needs and circumstances may also change over time and, as such, programmes and care providers need to tailor combinations of feasible interventions—based on individual barriers and opportunities—to maximize adherence to ART.

*Programme-level interventions* for improving adherence to ART include: (1) avoiding imposing out-of-pocket payments at the point of care, (2) using fixed-dose combination regimens for ART and (3) strengthening drug supply management systems to reliably forecast, procure, and deliver ARV drugs and prevent stock-outs.

*Individual-level adherence interventions* recommendation in the ARV guidelines relates to the use of mobile phone text/SMS messages. Many individual-level interventions are indicated for other reasons. For example, nutritional support, peer support, co-management of depression and substance use disorders and patient education are vital components of routine health and HIV care.

## Integration of HIV treatment with services for tuberculosis, antenatal/mother and newborn care and injecting drug use

Integration of HIV services into other clinical settings may be considered for adolescents, but these services will need to:

- encourage early enrolment for prevention of mother-to-child prevention/antenatal care and support adolescents through the pregnancy and post-partum period;
- understand that, for all aspects of programmes and policy, adolescents in key populations need specific attention. For example, most young people who inject drugs (PWID) are less likely to use routine health services, so HIV treatment needs to be integrated into services that are provided for specifically for PWID;
- ensure that national plans/strategies explicitly include adolescents.

## Decentralization of HIV treatment and care

Providing services near home and using adolescent-friendly approaches—found to produce more effective treatment outcomes—are important as they are likely to make access to services easier and more acceptable for adolescents.

## Task-shifting for HIV care and treatment

This could be considered for adolescents, but:

- The people to whom the tasks are shifted need to be trained to respond to the needs of adolescents.
- There must be strong linkages to nongovernmental organizations and community groups working with adolescents that can support disclosure, adherence, retention in care and other psycho-social, educational and financial needs of adolescents.

**TABLE 2. MAJOR OPERATIONAL AND SERVICE DELIVERY RECOMMENDATIONS**

Topic and population	Recommendations
<b>Interventions to optimize retention in care and adherence to ART</b>	<ol style="list-style-type: none"> <li>1. Mobile phone text messages could be considered as a reminder tool for promoting adherence to ART as part of a package of adherence interventions.</li> <li>2. Community-based approaches can improve treatment adherence and retention in care of adolescents living with HIV.</li> <li>3. Training of health-care workers can contribute to treatment adherence and improvement in retention in care of adolescents living with HIV.</li> </ol>
<b>Service integration and linkage</b>	<ol style="list-style-type: none"> <li>4. In generalized epidemic settings, ART should be initiated and maintained in eligible pregnant and postpartum women and in infants at maternal and child health care settings, with linkage and referral to ongoing HIV care and ART, where appropriate.</li> <li>5. In settings with a high burden of HIV and TB, ART should be initiated for an individual living with HIV in TB treatment settings, with linkage to ongoing HIV care and ART.</li> <li>6. In settings with a high burden of HIV and TB, TB treatment may be provided for an individual living with HIV in HIV care settings where TB diagnosis has also been made.</li> <li>7. ART should be initiated and maintained in eligible people living with HIV at care settings where opioid substitution therapy (OST) is provided.</li> </ol>
<b>Decentralization of treatment and care</b>	<p>The following options should be considered for decentralization of ART initiation and maintenance.</p> <ol style="list-style-type: none"> <li>8. Initiation of ART in hospitals with maintenance of ART in peripheral health facilities.</li> <li>9. Initiation and maintenance of ART in peripheral health facilities.</li> <li>10. Initiation of ART at peripheral health facilities with maintenance at the community level (that is, outside health facilities in settings such as outreach sites, health posts, home-based services or community-based organizations) between regular clinical visits.</li> </ol>
<b>Task-shifting</b>	<ol style="list-style-type: none"> <li>11. Trained non-physician clinicians, midwives and nurses can <b>initiate</b> first-line ART.</li> <li>12. Trained non-physician clinicians, midwives and nurses can <b>maintain</b> ART.</li> <li>13. Trained and supervised community health workers can <b>dispense</b> ART between regular clinical visits.</li> </ol>

### 3. Key clinical recommendations from *Consolidated ARV guidelines*

The table below provides an overview of the key recommendations from the *Consolidated ARV guidelines* that specifically address adolescents. It is important to note that the treatment recommendation for adolescents with the weight of  $\geq 35$  kg is the same as for adults and the treatment recommendation for adolescents weighing  $< 35$  kg is the same as for children aged 3–9 years. Alternatives to these standard recommendations and special circumstances are discussed in the full version of the guidelines.<sup>1</sup>

**TABLE 3. OVERVIEW OF CLINICAL RECOMMENDATIONS FOR ADOLESCENTS**

When to start ART in adolescents living with HIV		
Topic and population	Recommendations	
HIV infection (WHO clinical stage 1 or 2)	1. Initiate ART if CD4 $\leq 500$ cells/mm <sup>3</sup> (CD4 $\leq 350$ cells/mm <sup>3</sup> as a priority).	
Severe/advanced HIV infection (WHO clinical stage 3 or 4)	2. Initiate ART in all individuals regardless of CD4 cell count.	
TB disease	3. Initiate ART in all individuals with active TB disease regardless of CD4 cell count.	
HIV-serodiscordant couples	4. Provide ART to all partners infected with HIV regardless of CD4 cell count (to reduce the risk of HIV transmission to the negative partner).	
Pregnant and breastfeeding adolescents	5. All pregnant and breastfeeding adolescents with HIV should initiate triple ARVs (ART), which should be maintained at least for the duration of mother-to-child transmission risk. Adolescents meeting treatment eligibility criteria should continue lifelong ART. 6. For programmatic and operational reasons, particularly in generalized epidemics, all pregnant and breastfeeding adolescents with HIV should initiate ART as lifelong treatment. 7. In some countries, for adolescents who are not eligible for ART for their own health, consideration can be given to stopping the ARV regimen after the period of mother-to-child transmission risk has ceased.	
What ART regimens to start in adolescents		
	Weight $\geq 35$ kg	Weight $< 35$ kg
Preferred <sup>a</sup>	TDF + 3TC (or FTC) + EFV	ABC + 3TC + EFV
Alternatives	AZT + 3TC + EFV AZT + 3TC + NVP TDF + 3TC (or FTC) + NVP ABC + 3TC + EFV ABC + 3TC + NVP	ABC + 3TC + NVP AZT + 3TC + EFV AZT + 3TC + NVP TDF + 3TC (or FTC) + EFV TDF + 3TC (or FTC) + NVP
Monitoring ART response and diagnosis of treatment failure in adolescents		
1. Viral load is recommended as the preferred monitoring approach to diagnose and confirm ARV treatment failure.		
2. If viral load is not routinely available, CD4 count and clinical monitoring should be used to diagnose treatment failure.		

a. This combination is also preferred for pregnant and breastfeeding adolescents.

<sup>1</sup> For detailed recommendations, see *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach*. Geneva: World Health Organization, 2013. (<http://www.who.int/hiv/pub/guidelines/arv2013/en/index.html>)



## Research gaps

Adolescents have not received sufficient attention in the HIV research agenda. Currently, evidence of effective approaches to improve the quality, uptake and impact of HIV services for adolescents is inadequate for designing and planning adolescent-specific programmes and services, and for conducting routine monitoring and evaluation of programmes. At most levels, there is a lack of age- and sex-disaggregated data, as well as wide gaps in the experience and understanding of how to best serve the needs of a population who are experiencing major physical, emotional and social changes.

Most HIV research and routine evaluations of HIV services continue to exclude adolescents, often because of perceived difficulties with obtaining consent, or because of the challenge of gathering age-specific data from paper-based systems. All recommendations in the current WHO guidelines relating to adolescents are based on weak evidence reflecting the lack of data, because of this programmes providing services for adolescents should be encouraged to document their efforts. There are major operational and clinical gaps including:

- **Disclosure.** How to support adolescents to disclose safely to family members, peers and sexual partners.
- **Adherence.** Alternative regimens for adolescents who have difficulty with adherence to treatment.
- **Regimens for treatment-experienced adolescents** who are failing on their current regimen in settings with limited ARV regime choices and monitoring capacity.
- **Community support.** Although there is some indication of the benefit of community support, there is insufficient reported evidence and examples to give robust guidance on how this can be delivered safely and effectively.



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## PHOTO CREDITS

Cover © UNICEF/Patricia Esteve. A girl laughs during a skit on the prevention of HIV, at a youth centre in Moundou, Chad. The centre teaches adolescents how to prevent the transmission of HIV and offers free HIV testing. The centre also has a small library and game centre and hosts a drama club and other extracurricular activities.

Page 7 © Giacomo Pirozzi. Artem, 14, sits on a wall outside 'Way Home', the shelter where he lives in the city of Odessa, Ukraine. The UNICEF-assisted shelter provides food, accommodation, literacy training and HIV/AIDS-awareness and prevention outreach programmes for children who live or work on the streets. Because of unsafe sex and injecting drug use, street adolescents are one of the groups most at risk of contracting HIV in Ukraine.

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