

Implementing WHO evidence-based interventions for adolescents and young adults living with and affected by HIV



World Health
Organization

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Page 1, lines 2–4

Delete: [In 2023, there were an estimated 480,000 new HIV infections among adolescents and young adults ages 10–24]

Insert: [None]

This correction has been incorporated into the electronic file.

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Abbreviations and acronyms

3TC	lamivudine
APRI	aspartate aminotransferase (AST) to platelet ratio index
ART	antiretroviral therapy
CAB-LA	cabotegravir-long acting
CHB	chronic Hepatitis B
DSD	differentiated service delivery
DTG	dolutegravir
EFV	efavirenz
ETV	Entecavir
FTC	emtricitabine
HBsAg	hepatitis B surface antigen
HBV	Hepatitis B virus
HIV	human immunodeficiency virus
HIVDR	HIV drug resistance
HPV	human papillomavirus
INSTI	integrase strand transfer inhibitors
MMD	multi-month dispensing
MSM	men who have sex with men
NRTI	nucleoside reverse-transcriptase inhibitor
NNRTI	non-nucleoside reverse-transcriptase inhibitor
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
SRH	sexual and reproductive health
STI	sexually transmitted infections
TDF	tenofovir disoproxil fumarate
VMMC	voluntary medical male circumcision
WHO	World Health Organization

Introduction

Adolescents and young adults aged 10-24 remain underserved in the global response against HIV (1). Ongoing evidence generation has enabled us to continually adapt, update, and refine global guidance on HIV prevention, testing, treatment, and service delivery, including for priority populations. As scientific evidence on key interventions for HIV improves and evolves, bringing dramatic improvements in health outcomes and quality of life, it is critical to focus on remaining gaps. The gap in knowledge of HIV status is even greater among adolescents from key populations, and in high incidence settings such as southern Africa (2).

Because HIV prevention and treatment is closely shaped by social, interpersonal, developmental, and contextual factors, adolescents experience unique barriers to accessing developmentally appropriate HIV-related health care. There is also evidence that health systems struggle to respond to their needs during this pivotal life stage. Adolescents may face barriers including inaccessible health facilities, long clinic waiting times, poor infrastructure, and stigma and discrimination (3). Access to the full cascade of health services to prevent and diagnose new infections, and access HIV treatment, are shaped by contextual and gender-specific norms; adolescent girls and young women ages 15-24 still bear the a significant brunt of new infections globally (4). In addition, adolescents and young adults experience poorer treatment coverage, with higher rates of HIV-related morbidity and mortality than some other age groups (5). These challenges tend to be compounded among adolescents and young adults who also belong to key populations (6,7) —who are particularly vulnerable to new HIV infections and have even poorer access to HIV testing, treatment, and care. Typically, adolescents are not routinely accessing healthcare services unless they are sick or pregnant, making it necessary to consider other entry points for support.

Key implementation considerations that inform a contextual and person-centred approach to HIV care need to be continually emphasised in line with the specific needs of adolescents and young adults. Identifying and thinking through the implementation needs for existing evidence-based interventions present across a range of WHO guidelines is essential. This prioritization, based

on strong and conditional recommendations devised by the WHO, is critical as global resources for the HIV epidemic become more limited.

Building on a large body of evidence that has informed WHO guidelines, this document seeks to accomplish two objectives.

- To highlight and prioritize evidence-based interventions and recommendations across the HIV cascade that focus on adolescents and young adults, as well as those for general populations with specific relevance for this younger age group.
- To identify implementation considerations that are central to the effective translation of these guidelines from evidence into practice, as well as highlight evidence gaps.

There are many WHO recommendations on HIV prevention, testing, treatment, and service delivery, and we have not included them all. We have added key references in each section to avail with documents to find the full list of recommendations. All related WHO guidelines from the last decade were carefully reviewed, and relevant interventions and guidelines were extracted. Aside from those with a small number of good practice statements that are cross-cutting and adolescent-specific, those with indirect evidence or not closely aligned with adolescent HIV needs have been omitted from this document.

The needs of adolescents transcend HIV. While this document focuses largely on the HIV cascade, adolescent relevant recommendations from sexually transmitted infections (STIs) including condoms and human papillomavirus (HPV) vaccination, and Hepatitis B and C, are also featured given the syndemics of HIV, STIs and Hepatitis.

Combination prevention, treatment and care programmes use a mix of evidence-based biomedical, behavioural and structural interventions to meet the current HIV prevention needs of adolescents and young adults. However, there needs to be a focus on priority interventions that are evidence-based, practical, contextual and sustainable. This document highlights interventions and recommendations that have passed through the evidence-based lens of the WHO.

Orientation

In this document, we group recommendations along the HIV care cascade: 1) prevention, 2) testing, including disclosure, 3) treatment, including viral load monitoring, and 4) service delivery. Evidence-based interventions have been principally examined based on the strength of recommendation (strong or conditional), using a rigorous and standardised process of analysis and review of up-to-date supporting evidence. Decisions are based around intervention rationale, feasibility, acceptability, equity, resource requirements and cost-effectiveness, and balance of effects, as well as key implementation considerations. Related recommendations on TB, STIs (condoms and HPV) and Hepatitis B and C are interspersed (Table 1).

While there are specific considerations in addressing interventions across the cascade, there are also

important cross-cutting messages, the list may not be exhaustive. Only official guidelines were used to determine the appropriate interventions to include in this document. Technical briefs were referenced for additional contextual information where applicable. The list of WHO Guidelines and other supporting material informing this document is found in Annex 1.

Who is this document for?

This document is for policy-makers and decision-makers in ministries of health responsible for adolescent HIV and related health policies and programmes, international and national nongovernmental organizations, and international organizations that provide technical or financial support for adolescent HIV and related health work.

Table 1: Priority interventions for adolescent living with and affected by HIV

HIV prevention	
Intervention	Strength of recommendation
Condoms	Strong
Oral PrEP	Strong
Dapivirine vaginal ring	Conditional
Long acting injectable Cabotegravir	Conditional
Voluntary medical male circumcision	Strong
Post-exposure prophylaxis	Strong
HIV testing and disclosure	
Intervention	Strength of recommendation
HIV testing with linkage to prevention, treatment, and care (high-burden settings)	Strong
HIV testing with linkage to prevention, treatment, and care (low-burden settings)	Conditional
Community-based HIV testing with linkage to prevention, treatment, and care	Strong
HIV self-testing	Strong
Provider-assisted referral	Strong
Social network-based approaches	Conditional
Support for disclosure to others, including for those at risk of intimate partner violence (women living with HIV)	Strong
Support for disclosure to others (adolescents)	Conditional
HIV treatment	
Intervention	Strength of recommendation
ART: When to start	Conditional
ART: What to start	Strong

ART: What to switch (Non-DTG-based regimens)	Conditional
ART: What to switch (DTG-based regimens)	Strong
Timing of ART (rapid ART initiation)	Strong
Treatment package for advanced HIV	Strong
Viral load monitoring (preferred approach)	Strong
Viral load monitoring (point-of-care testing, frequency)	Conditional

HIV service delivery

Intervention	Strength of recommendation
Psychosocial interventions	Strong
Adolescent-friendly health services	Strong
Linkage to care	Strong
Adherence support interventions	Strong
Differentiated service delivery (multi-month prescribing)	Strong
Differentiated service delivery (ART initiation outside facility)	Conditional
Diverse models to improve retention in care	Conditional
Supporting re-engagement	Strong

HIV & co-morbidities

Intervention	Strength of recommendation
HPV vaccination	Position statement
TB: screening	Strong
TB: treatment	Strong
TB: preventative treatment	Strong
Hepatitis B (mono infection) treatment: who to treat (adolescents)	Strong
Hepatitis B (mono infection) treatment: what to treat with	Strong
Antiviral prophylaxis among pregnant women and adolescent girls to prevent mother-to-child transmission of hepatitis B	Strong
Hepatitis C treatment	Strong
STI management based on molecular tests in resourced settings	Strong
STI syndromic treatment in less resourced settings with limited laboratory capacity	Strong
STI treatment: What to start (Neisseria gonorrhoeae, Chlamydia trachomatis, Trichomonas vaginalis)	Conditional
STI treatment: What to start (Treponema pallidum (syphilis)	Strong
STI partner services	Strong
STI screening for sexually active adolescents and young people in high prevalence and resourced settings	Conditional

Enabling environment

Intervention	Strength of recommendation
Age-of-consent policies	Good practice statement
Sensitization to intimate partner violence	Strong

Prevention

WHO recommends a combination prevention approach, using a mix of evidence-based biomedical, behavioural and structural interventions that is context specific and tailored to populations at greatest risk of HIV with effective, acceptable evidence-based interventions including condoms, pre-exposure prophylaxis (PrEP) and voluntary medical male circumcision (VMMC). WHO supports the integration of hepatitis and STI prevention, testing and treatment and the inclusion of sexual and reproductive health and mental health issues.

This section includes priority evidence-based interventions for primary and secondary HIV prevention alongside key implementation considerations, and research gaps tailored to specific groups to support uptake and effectiveness. Also included are STI-related recommendations including condoms and HPV vaccination.

Summary of priority HIV prevention interventions and key implementation considerations for adolescents and young adults

Intervention: Condoms

WHO recommendation: The correct and consistent use of insertive and receptive condoms with adequate supply of condom-compatible lubricants is recommended to prevent sexual transmission of HIV, viral hepatitis and STIs through anal or vaginal sex (7).

Condoms, when used correctly and consistently, are among the most effective method of preventing most sexually transmitted infections (STIs), including HIV and unplanned pregnancies, and are the only method of contraception that can do both. Condoms are safe, inexpensive, and generally available, though not always accessible to young people. External and internal condoms, when used correctly and consistently, effectively break the chain of HIV and STI transmission. Although condom programmes are integral to HIV prevention and sexual and reproductive health programmes, they require dedicated attention.

Key references:

[Condoms: Key facts \(online resource\). World Health Organization; 2024.](#)

[Guidelines for HIV post-exposure prophylaxis. Geneva: World Health Organization; 2024.](#)

[WHO implementation tool for pre-exposure prophylaxis of HIV infection: provider module for oral and long-acting PrEP.](#)

[Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022.](#)

[Guidelines on long-acting injectable cabotegravir for HIV prevention. Geneva: World Health Organization; 2022.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

[Preventing HIV through safe voluntary medical male circumcision for adolescent boys and men in generalized HIV epidemics: recommendations and key considerations. Geneva: World Health Organization; 2020.](#)

Implementation considerations:

- Barriers to uptake of condoms among younger populations include the absence of scaled targeted demand generation; insufficient supply; poor access (particularly outside the health facility); affordability; stigma; negative perceptions of condoms; and age of consent and legal barriers.
- Multi-sectoral leadership and coordination for condom programming (across public sector,

NGOs, and commercial sector) can be an effective way to mitigate these barriers.

- Condoms should be provided and integrated in combination with other prevention interventions and health services, including contraceptive methods, PrEP, VMMC, testing and treatment of sexually transmitted infections and providing or referring to services that prevent and protect against gender-based violence.
- A supportive policy and regulatory environment, especially removing policy and legal barriers, is critical.
- Funding for condom procurement and for increasing targeted condom distribution through the public and private sector, including in underserved areas, is much needed.
- Innovative platforms to create and meet demand should be leveraged including digital platforms to increase awareness and education about condoms.
- Developing strategies to engage parents and care givers in discussions about sexual health and condom use.
- Ensuring condoms are easily accessible to young people, outside of traditional health facilities, such as schools, community centres, clubs, and workplaces.

Evidence gaps: There is a need for improved age-disaggregated data collection and analytics to provide data-driven and people-centred condom programmes. Improved targeted service delivery for adolescents that is innovative and comprehensive is needed as part of the delivery of combination HIV/STI prevention and sexual and reproductive health services. In some regions, there are insufficient analyses to understand where and how the market is failing to support access, demand, and use. Finally, it is important to strengthen the demand for and supply of condoms and lubricants and address the barriers that hinder the provision, access, and use of condoms by young people, key populations and other people at higher risk of HIV.

Intervention: oral PrEP

WHO recommendation: Oral pre-exposure prophylaxis (oral PrEP) containing tenofovir disoproxil fumarate (TDF) should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention approaches (9).

Implementation considerations:

- Strategies are needed to overcome age-related legal, policy, regulatory and social barriers to accessing PrEP, and health services more broadly, faced by adolescents, as well as challenges with logistics and expenses for attending services.

- Appropriate counselling by healthcare workers is critical to expand the use of PrEP, reduce stigma and discrimination, increase trust, and challenge misconceptions about PrEP and who can benefit from it. Peer-based counselling is another promising approach.
- PrEP should not displace other well-established HIV prevention interventions, such as condoms. However, integrating PrEP into other services used and valued by adolescents and young adults—such as youth-friendly health services, sexual and reproductive health (SRH) and/or antenatal and postnatal services—may help reach adolescents and young adults who otherwise would not be informed about PrEP.
- Flexible operating hours, convenient locations (for example, close to schools), use of virtual interventions, low costs, and adolescent-friendly spaces may support better care for adolescents and young adults, including those on PrEP. Adolescent-friendly spaces can shape access to PrEP on a routine or even as-needed basis.
- Consider additional barriers for PrEP uptake and adherence including cost, fear of side effects, fear of involuntary disclosure, risk perception, and power imbalances in relationships.
- Tailored interventions to facilitate adherence among adolescents and young people may be needed, including more regular follow-up and support groups for clients using PrEP.
- Adolescents and young people benefit when they have helped to design clinical services, with access to social services that have non-judgemental and approachable staff, and flexible visiting hours.

Evidence gaps: Implementation research is needed to understand how to generate demand for HIV prevention service provision, including oral PrEP, and how to better support effective uptake and continuous use of PrEP among adolescents and young adults living in high-burden areas, those who belong to key populations, and young pregnant and breastfeeding women. While there is mixed evidence on the cost-effectiveness of PrEP, adolescents can benefit from access to a suite of prevention options that allow a degree of individual/personal control over HIV risk. More research is needed on integrating PrEP into other health services, such as SRH care and family planning, and expanding access to PrEP, especially for adolescent girls and young women under 18. Operational research is much needed to understand how to optimise integration, and where service provision could be streamlined. Developing interventions that target partners of adolescent girls and young women could also be critical enablers of PrEP uptake, as partners have an impact on their

enrolment and adherence. Further evidence is needed to understand social factors shaping effective use of PrEP and persistence for adolescents and young adults, which may include gender-based violence, poverty, and gender norms. A more nuanced understanding of social, psychological, interpersonal barriers to PrEP use can support better protocols and programming to allow PrEP to reach more adolescents and young adults at substantial risk of HIV.

Intervention: the dapivirine vaginal ring

WHO recommendation: The dapivirine vaginal ring may be offered as an additional prevention choice for women at substantial risk of HIV infection as part of combination prevention approaches (9).

Implementation considerations:

- The dapivirine vaginal ring should be provided to women alongside other PrEP options and in combination with other prevention interventions and health services. This should include condom provision, a range of contraceptive methods, testing and treatment of sexually transmitted infections and providing or referring to services that prevent and protect against gender-based violence.
- Additional, tailored and flexible support for effective use, including first time use of this option by adolescent and young adult women may be needed.
- Offering new users (especially younger users) opportunities for frequent check-ins with healthcare or lay providers may support effective use and persistence and create platforms for troubleshooting. These check-ins could be in-person and virtual to increase accessibility.
- Peer-based support may be an effective means of reaching younger women. Voluntary partner support could also be considered, especially among serodiscordant couples or other appropriate instances.
- Engaging community leaders and stakeholders in the promotion and education about the ring to enhance its acceptance and uptake.

Evidence gaps: More data are needed to understand dapivirine vaginal ring use among younger women. Research is underway to assess preference as part of PrEP choice as well as effective use, persistence and barriers to use among young women. Research to assess the factors linked to acceptability, uptake, effective use, and persistence is critical to understand the potential reach of this prevention, whether used singly or with other interventions. Costing analyses are also needed.

Intervention: long-acting cabotegravir

WHO recommendation: Long-acting injectable cabotegravir (CAB-LA) may be offered as an additional prevention choice for people at substantial risk of HIV infection, as part of combination prevention approaches (10).

Implementation considerations:

- As an additional HIV prevention intervention with less need for frequent clinic visits, CAB-LA may be an appealing alternative to preventing HIV for people for whom oral PrEP is not appropriate or preferred.
- Acceptability of CAB-LA by adolescents may vary, including depending on willingness to receive an injectable delivery mode or try a new prevention product. Providing education on the benefits and safety of CAB-LA, to address fears and misconceptions, can enhance acceptability.
- Barriers for adolescents and young adults in accessing CAB-LA include stigmatization, discrimination by healthcare workers, and criminalization. For young members of key populations, these risks may be even more pronounced. Age-of-consent laws may also limit access to HIV testing and prevention services, and decisions about the delivery of CAB-LA must account for acceptable, safe approaches adapted to specific contexts.
- Significant costs are associated with CAB-LA. It is important to weigh these considerations alongside cost-effectiveness of other adolescent-accepted, well-established prevention options.
- CAB-LA should be accessible alongside other well-established means of HIV prevention. Integrating CAB-LA into services used and valued by adolescents and young adults—such as youth-friendly health services, sexual and reproductive health (SRH) and/or antenatal and postnatal services—may help reach adolescents and young adults who otherwise would not be informed about CAB-LA.
- Importance of DSD models for CAB-LA, including adolescent-friendly provision of services, easy access to PrEP services, having longer opening hours (outside school hours) etc. Low-cost services as disposable income is likely lower than other groups.
- Meaningfully engaging adolescents and young adults to map priorities and gaps is important for service provision of CAB-LA to meet their specific needs.
- Engage and involve communities for promotion, education and addressing myths and misconceptions.

Evidence gaps: Although no large-scale trials have been conducted to assess the safety, efficacy, or effectiveness of CAB-LA among adolescents under the age of 18 years, the limited data indicates comparable efficacy, safety, acceptability and tolerability.¹¹ There is a need for further acceptability and feasibility studies, operational research, and social and behavioural studies to understand factors that may shape adolescents' interest in, and uptake of, CAB-LA, and there are several implementation studies now underway. Additional research may be needed on use of CAB-LA during pregnancy and breastfeeding. Research on CAB-LA's safety, as well as follow-on operational research concerning how CAB-LA may be integrated into antenatal, postnatal, and family planning care, is needed. Implementation research is needed on avenues to promote CAB-LA among adolescents, including through virtual interventions. Cost-effectiveness analyses to evaluate the economic feasibility of CAB-LA as a widespread prevention option. This includes assessing the costs associated with production, distribution, administration, and potential savings from reduced HIV transmission.

Intervention: voluntary medical male circumcision (VMMC)

WHO recommendation: Voluntary medical male circumcision (VMMC) should continue to be promoted as an additional efficacious HIV prevention option within combination prevention for adolescents 15 years and older and adult men in settings with generalized epidemics to reduce the risk of heterosexually acquired HIV infection (9).

Implementation considerations:

- VMMC is acceptable given large proportions of adolescent boys who have taken up VMMC. Offering VMMC to boys aged 15 years and older is preferable to retain patients, discourage them from seeking circumcision from traditional or unqualified circumcisers, and promote benefits of VMMC to communities.
- A minimum package of services, including safer sex education, condom promotion, the offer of HIV testing services and management of STIs, must be delivered along with the male circumcision procedure. VMMC can be integrated into community-wide, complementary approaches for health promotion and prevention through schools, communities, and health facilities.
- VMMC programmes are cost-effective in many countries of East and Southern Africa.
- Parents should be able to access accurate, balanced information and education on VMMC, and be made aware of both the risks and

benefits. Adolescents themselves, as well as parents/guardians, should be able to access age-appropriate information.

- VMMC should be offered through the formal health sector by technically competent, trained providers who can assess adolescent capacity to consent, and who can conduct this process and adopt age-appropriate approaches to health/development education.
- Several factors should be considered in deciding whether to offer VMMC to younger adolescent boys, including their capacity to give informed consent, thus respecting their human rights, and safety, and reducing risk of adverse events.

Evidence gaps: More age-disaggregated data could support evidence for VMMC among younger adolescents, including safety and acceptability. Collecting surveillance data on moderate, severe, and serious adverse events could inform strategies to reduce risk. There is a need to identify optimal strategies for community engagement around VMMC for adolescents, as well as gather evidence on the feasibility, effectiveness, and cost of providing VMMC in a broader package of adolescent health services. Healthcare providers may require support to determine readiness of the adolescent for VMMC and assess their capacity for informed consent. Further implementation science evidence is needed on sustaining VMMC services.

Intervention: post-exposure prophylaxis

WHO recommendation: An HIV post-exposure prophylaxis (PEP) regimen with two ARV drugs is effective, but three drugs are preferred (9).

Post-exposure prophylaxis should be offered to individuals with suspected or known exposure to HIV as early as possible, ideally within 24 hours, but no later than 72 hours. Other PEP recommendations include:

- TDF + 3TC (or FTC) is the preferred backbone regimen for HIV post-exposure prophylaxis (PEP). DTG is recommended as the preferred third drug for HIV PEP (strong recommendation, low-certainty evidence).
- A 28-day prescription of antiretroviral drugs should be provided for HIV post-exposure prophylaxis following initial risk assessment (strong recommendation, low-quality evidence).
- HIV PEP should be delivered in community settings (strong recommendation, very low-certainty evidence) (9).

Implementation considerations:

- Timely access to PEP is essential. PEP should be made readily available at diverse delivery points including emergency departments and clinics.
- Training of healthcare providers should focus on the importance of PEP, how to administer and support patients throughout the process, and how to handle cases with empathy and confidentiality, especially in the context of sexual assault.
- It is critical to ensure that legal and policy frameworks support access to PEP for all individuals, including minors.
- Access to PEP, which can be offered after recent high-risk HIV exposure (within past 72 hours) is generally a challenge. Access difficulties can be more pronounced for adolescents and young adults due to a myriad of factors including low knowledge, structural, financial barriers including laws and policies. Offering HIV self-testing as part of the package is encouraged with rapid linkage to follow-up care. Efforts should be made to raise awareness and reduce stigma through targeted education campaigns and community engagement.
- Comprehensive PEP services for adolescent girls and young women of childbearing potential who have had sexual exposure should include an offer of a pregnancy test at both baseline assessment and follow-up. Emergency contraception should be offered to adolescent girls and young women as soon as possible, ideally within five days of sexual exposure.
- PEP provision should be sensitive to reasons for HIV exposure. For survivors of sexual assault, PEP should be provided alongside a broader package of care that includes first-line support and prophylaxis for sexually transmitted infections (STIs). Psychosocial support should be made available, which may include referrals to appropriate services or treatment by a multidisciplinary team.
- Offering PEP as part of adolescent friendly services and where adolescents are likely to access services, in addition to traditional healthcare and emergency services is reasonable, including through virtual platforms.
- For pregnant and breastfeeding adolescents and young adults PEP is safe to administer, but healthcare providers should discuss potential risks of breastfeeding with unknown HIV status.
- PEP delivery can also be integrated into PrEP service delivery, to help individuals move from PEP to longer-term PrEP without interruption and help to reduce future risks of HIV acquisition. PrEP should be offered to individuals taking PEP, with Transition to PrEP supported with adequate counselling.

Evidence gaps: More research is needed to explore barriers and facilitators to PEP access for adolescents and young adults. Additional work could examine feasibility of diverse (non-facility) and simplified PEP delivery approaches and sites, as well as strategies that can boost adherence of PEP regimens for adolescents, who are likelier to have lower adherence rates.



High school students actively playing during their Physical Education class, Micronesia (Federated States of), 2023 © WHO / Acer Apis

Testing and disclosure

Testing is a critical entry point of the HIV continuum, allowing individuals living with HIV to be identified, diagnosed, and rapidly connected to healthcare, including prevention services. To reach adolescents and young people, it is important to prioritize efforts to create an enabling environment, such as reviewing and revising age of consent laws and policies and supporting provider training to encourage the offer of non-discriminatory and non-stigmatizing HIV testing.

For adolescents, HIV testing can be daunting; they may be experiencing multiple, significant life changes with additional pressure of HIV testing or sharing their status. Concerns over privacy and involuntary disclosure may deter adolescents from testing. Because adolescence is also a period of experimentation and risk-taking, fear of an HIV-positive status linked to unprotected sex, for instance, may also be associated with guilt, self-blame, and shame. Testing and disclosure also add new stressors for adolescents in sexual and/or romantic relationships or marriages, and responses may be reinforced by gender norms. Adolescents experiencing, or at risk of, gender-based violence may find the process of testing even more complex.

Adolescents' healthcare experiences during this time can also shape their broader emergent sense of identity, and future orientation and aspirations—especially without adequate support and attention. The guidelines on testing and disclosure shape how adolescents and young adults can be supported to keep themselves and others safe.

A strategic mix of differentiated HTS approaches is needed to reach adolescents and young people. Risk-screening tools that help reduce missed opportunities and increase the number of adolescents being offered testing could be considered, particularly in settings where adolescent testing coverage is suboptimal. Risk screening tools, provider- or self-administered, are generally used to prompt testing among those who would otherwise not be offered testing (screening in) or to stop testing people who would otherwise be offered testing (screening out). WHO does not advise the use of screening-out tools.

Key references:

[Consolidated guidelines on differentiated HIV testing services. Geneva: World Health Organization; 2024.](#)

[WHO guideline on self-care interventions for health and well-being, 2022 revision. Geneva: World Health Organization; 2022.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

[What works for generating demand for HIV testing services: policy brief. World Health Organization; 2019.](#)

[WHO encourages countries to adapt HIV testing strategies in response to changing epidemic: policy brief. World Health Organization; 2019.](#)

[Consolidated guideline on sexual and reproductive health and rights of women living with HIV. Geneva: World Health Organization; 2017.](#)

[HIV and adolescents: guidance for HIV testing and counselling and care for adolescents living with HIV: recommendations for a public health approach and considerations for policymakers and managers.](#)

Summary of priority HIV testing and disclosure support interventions and key implementation considerations for adolescents and young adults

Intervention: Facility-based HIV testing with linkage to prevention, treatment, and care

WHO recommendation:

1. HIV testing services, with linkage to prevention, treatment, and care are recommended for all adolescents in settings with a high burden of HIV infection and should be accessible to adolescents in low and high burden settings (9).
2. All pregnant women, including pregnant adolescent girls and young women, should be tested for HIV, syphilis and hepatitis B surface antigen (HBsAg) at least once and as early as possible (syphilis: strong recommendation, moderate-certainty evidence; HBsAg: strong recommendation, low-certainty evidence). Dual HIV and syphilis rapid diagnostic tests can be the first test in HIV testing strategies and algorithms in antenatal care (9).

Implementation considerations:

- Health providers should be sensitized to common testing barriers and adopt adolescent-friendly approaches to reaching those who require routine testing.
- At the time of testing, health providers should ensure counselling for all adolescents, so that they are aware of the reason for the test and what the results mean.
- Adolescents and young adults in highly vulnerable circumstances—such as those in socially marginalised positions, or who are exposed to additional sexual risk—may require additional support to access HIV testing and initiation onto ART.
- Testing and linkage services can utilize responsive strategies for adolescents, including non-stigmatizing care; dedicated adolescent-only spaces at health facilities or within community settings; special adolescent-focused events; and flexible hours to accommodate school-going adolescents or those who are seeking confidential HIV testing.
- Managing patient flow through a health facility, especially immediately after an HIV-positive diagnosis, is especially important to reduce any internalized or enacted stigma and build trust between the adolescent and the health care providers and facility. Peer navigators or supporters may be valuable in this regard.
- Integrating HIV testing with SRH services can help reach sexually active adolescents (especially those exposed to sexual risks), as well as those who may seek preventative HIV and/or SRH services. Integrating HIV testing into maternal and child

health services can similarly reach pregnant and parenting adolescents, ensuring regular testing and re-testing throughout pregnancy and breastfeeding to prevent secondary HIV transmission to infants.

Evidence gaps: More evidence is needed to identify and understand testing approaches that are sensitive to adolescent-specific needs—prioritising confidential, respectful, inclusive, and non-judgmental approaches. There is limited evidence on interventions that aim to improve linkage to care among adolescents: tracking linkages could support more streamlined approaches to linking adolescents and young adults who are newly diagnosed with HIV to ART as well as available support services. For pregnant women, recommendations on additional testing alongside HIV testing—including for hepatitis B and syphilis—indicate important service integration opportunities. Emerging data, assessing gaps in adolescent and youth HIV prevention, has shown that seroconversion during pregnancy and breastfeeding is especially common in younger mothers; more data is needed on PrEP use in young mothers who test HIV-negative at initial antenatal visits to generate knowledge on prevention needs for this group. There is also a need for systematic approaches to identify high-risk adolescents in facility entry points, such as outpatient departments, especially in settings where universal testing of adolescents may not be possible.

Intervention: Community-based HIV testing with linkage to prevention, treatment, and care

WHO recommendation: Community-based HIV testing services are recommended, with linkage to prevention, treatment, and care services, in addition to routine facility-based testing, for all populations, particularly key populations (9).

Implementation considerations:

- Community-based services may be more appealing for individuals who experience marginalization or are exposed to sexual risk; however, testing services should aim to mitigate stigma and reduce exposing adolescents to additional social harm.
- As with facility-based strategies, the presence of flexible, confidential, and safe community-based spaces may support adolescents' needs and increase comfort at community level.
- Lay providers, including peer supporters or community health workers, may be able to support uptake of testing outside the health facility.

Evidence gaps: More evidence on a broad spectrum of testing approaches is needed to address adolescents' needs and preferences. Also, more evidence on cost-effective strategies to identify undiagnosed adolescents living with HIV in low prevalence communities is required. Considerations for young key populations are in Part 5.

Intervention: HIV self-testing

WHO recommendation: HIV self-testing should be offered as an additional approach to HIV testing services (9).

Implementation considerations:

- For adolescents who are interested in HIV testing but concerned about confidentiality, self-testing can provide an ideal alternative to visiting a health facility and increase uptake. Implementation can be assisted or unassisted, with a variety of distribution options including facilities, peer distribution in communities, community health worker distribution, and/or community distribution locations, such as through community-based organisations.
- Community-based testing is more acceptable and can have a higher uptake among adolescents. Self-testing can be expanded to be administered in community settings.
- Self-testing may be empowering for adolescents but can also add new pressures. Without facility- or community-based infrastructure for HIV testing and counselling that includes immediate linkages to counselling, adolescents may feel confused or vulnerable following an HIV-positive self-test diagnosis. Providers should be aware of this when making self-testing kits available to adolescents and young adults.
- New digital social media, video or messaging platforms can also be considered for supporting adolescent self-testers. These may be readily acceptable, especially to young people, less costly than in-person support and easier to provide at scale.
- Although most people can perform HIV self-testing with minimal or no support, adolescents may have questions or doubts about the process of confirmatory testing, understanding instructions, and accuracy. These questions can be answered through responsive service delivery. Messages about HIV self-testing should be adapted and made appropriate for adolescents, promoting autonomy and self-care.
- Adolescents who need additional support should be provided a range of support adapted to address the local context, adolescent needs and preferences; it may also be valuable to have HIV self-testing be linked to further services.
- A minimum support package to accompany HIV self-testing implementation is encouraged. This package can be regularly reviewed and adjusted as programmes expand and scale up.

Evidence gaps: More research is required to understand experiences of self-testing among adolescents and young adults, especially around

issues of social harm, linkage to care following self-testing diagnosis, or other unknown barriers to self-testing. Operational research examining the flow of self-testing and how this innovation supports or disrupts the existing HIV care cascade for adolescents and young adults is critical to bolstering services; it is also important for increasing equity and acceptability of HIV testing approaches and working with adolescents directly to generate understandings of context-specific barriers to accessing these services.

Intervention: Provider-assisted referral (including partner notification or index testing)

WHO recommendation: Provider-assisted referral (including partner notification or index testing) should be offered to all people with HIV as part of a voluntary comprehensive package of testing and care (9).

Index testing in adolescents can include testing of partners and biological children of mothers with HIV, a sibling of a child living with HIV, or a sexual partner. In all settings, HTS should be offered to all biological infants and young children with an HIV-positive parent and whose HIV status is unknown (often termed “family-based index case testing”) as part of a package of provider-assisted referral.

Implementation considerations: Provider-assisted referral (also called partner notification or index testing) uses trained providers to ask people living with HIV about their sexual or drug-injecting partners or networks. After obtaining patient consent, the provider contacts the network to notify them of potential HIV exposure and offer voluntary HIV testing. These services should always be voluntary, with the client informed of the benefits and potential areas for caution. While this practice should be encouraged, clients should have the opportunity to choose from available options for partner services or decline them altogether. Mandatory or coercive testing is never warranted. In consultation with the client, the provider should assess the risk of harm, and the most appropriate approach for couple and partner testing, including more supportive options such as provider assistance, and situations that make couple or partner testing inadvisable.

- Adolescents may have concerns about the confidentiality of this process, especially if they have not disclosed their status to their sexual and/or romantic partners.
- Health providers (and other notification providers) should be sensitized to adolescents’ potentially diverse relationships. Because many adolescent relationships are more fluid, partners may be difficult to locate for notification.

- Mode of communication is a crucial part of implementing voluntary assisted partner notification services. Younger people may be more likely to favour mobile phone text messaging over other communication methods.
- Health providers should also be aware that disclosing potential HIV exposure to adolescents (for instance, through notification services provided by the health provider) may be more complicated and emotionally challenging for younger patients. Risks of violence or other unintended consequences are important to consider.
- Directly engaging adolescents and young adults to improve notification services is critical. Trained peers can also be highly effective at supporting index case testing.

Evidence gaps: There is less evidence on the effectiveness of provider-assisted referral with adolescent and young adult populations, including key populations. Additional research should explore adolescent preferences for partner notification, building on existing limited evidence, and identify strategies supporting wider implementation of services across high-HIV burden areas.

Intervention: Social network-based approaches

WHO recommendation: Social network testing approaches may be offered as an additional approach to HIV testing as part of a comprehensive package of care and prevention (12).

Implementation considerations:

- This approach to voluntary testing engages sexual and/or drug-injecting partners and social contacts of people living with HIV as well as those who are HIV-negative and at ongoing risk. It can be effective for anyone in high-burden settings.
- Social network approaches can be offered through HIV self-testing as well as standard facility-based testing.
- Social network testing approaches are highly acceptable and feasible across settings and populations, including adolescents and young people.
- Context-specific risks associated with newly diagnosed HIV in adolescents to develop messaging to target high-risk adolescents is needed.

Evidence gaps: Because the applicability of this approach for general populations is new, more research is required on how to maximize the implementation effectiveness, as well as observing any unintended stigma or gaps in accessibility.

Intervention: Support for disclosure

WHO recommendations: Adolescents should be counselled about the potential benefits and risks of disclosing their HIV-positive status and empowered and supported to determine whether, when how and to whom to disclose (9).

Implementation considerations:

- Coercing adolescents to disclose their HIV status to others is strongly discouraged. Disclosure support for adolescents needs to focus on individual circumstances, the adolescent's support network, their evolving capacity to make their own health decisions, and potential risks that may follow disclosure. Because adolescent girls and young women living with HIV face high levels of violence (including during pregnancy), the decision to disclose within an intimate partnership may be shaped by fear of violence, unequal power dynamics, or loss of income or financial stability.
- Interventions to support safe disclosure require comprehensive provider training, as well as contextually tailored service delivery approaches.
- Building supportive infrastructure at the care provider level could equip workers to manage multiple interrelated risks that adolescents and young adults may experience. Health care worker biases about the sexual practices or risk behaviours of adolescents and young adults—both those newly diagnosed with HIV as well as those with perinatally-acquired HIV—may hinder effective counselling and disclosure support, or revictimize adolescents and young adults who are experiencing, or at risk of experiencing, violence linked to their HIV status.
- Peer supporters or support groups can support adolescents and young adults, and especially girls and women, to navigate complex situations where violence or fear of violence is present.

Evidence gaps: While programmatic evidence identifies how peers and support groups can enhance disclosure support, more robust evidence supporting adolescent disclosure techniques has been limited. Additional research could study implementation factors that yield better patient satisfaction or safer disclosure experiences among adolescents and young adults. Furthermore, there are persistent gaps in how adolescents themselves are disclosed to—either about their own status (for those with perinatally-acquired HIV), or about why they should get an HIV test (for those eligible for index testing because of a parent living with HIV). Addressing these gaps could help reduce with reducing delayed disclosure to adolescents and improve their health literacy, care, and treatment.

Treatment

The WHO guidelines on HIV treatment focus on antiretroviral therapy (ART) treatment regimens recommended for the general population living with HIV, including adolescents and young adults; they also include guidelines on viral load monitoring and suppression. While adolescents are included in this group, most contributing evidence is derived from studies targeting adults. None of the viral load monitoring guidelines are specific to adolescents, meaning that adolescent-specific implementation considerations may require more careful attention. Adolescents, as a high priority group with diverse barriers to treatment initiation and access to HIV care, require additional support for ART initiation and adherence, with special considerations for adolescents facing specific health risks such as with advanced HIV disease. More broadly, there are gender inequities in treatment access. In response to these barriers, interventions linked to initiation on ART and supporting adherence after initiation need to adopt tailored approaches across diverse contexts.

Key references:

[Providing care to people with advanced HIV disease who are seriously ill: policy brief. Geneva: World Health Organization; 2023.](#)

[The role of viral suppression in improving individual health and reducing transmission: policy brief. World Health Organization; 2023.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

[Package of care for children and adolescents with advanced HIV disease: STOP AIDS: technical brief. World Health Organization; 2020.](#)

Summary of priority HIV treatment interventions and key implementation considerations for adolescents and young adults

Intervention: Antiretroviral therapy

WHO recommendations:

1. When to start: ART should be initiated in all adolescents living with HIV, regardless of WHO clinical stage and at any CD4 cell count (9).
2. What to start (first line): Dolutegravir (DTG) in combination with a nucleoside reverse-transcriptase inhibitor (NRTI) backbone is recommended as the preferred first-line regimen for people living with HIV initiating ART (9).
3. What to switch (second line, previous use of non-DTG-based regimens): DTG in combination with an optimized nucleoside reverse-transcriptase inhibitor backbone may be recommended as a preferred second-line regimen for people living with HIV for whom non-DTG-based regimens are failing (9).
4. What to switch (second line, previous use of DTG-based regimens): Boosted protease inhibitors in combination with an optimized NRTI backbone are recommended as a preferred second-line regimen for people living with HIV for whom DTG-based regimens are failing (9).

Implementation considerations:

- It is important for adolescents to have suitable and acceptable ART regimens given their lower rates of ART adherence and viral suppression. Adolescents may discontinue medication due to side effects, and inconsistent daily routines may make consistent adherence challenging.
- For adolescents on less optimal regimens (e.g., those containing a non-nucleoside reverse-transcriptase inhibitor (NNRTI)), transitioning to a DTG-based regimen is strongly encouraged and an opportunity for routine viral load testing and enhanced treatment adherence counselling and support. DTG-based regimens are more effective at achieving viral load suppression and have lower rates of HIV drug resistance and fewer side effects.

- Where possible, utilize ART regimens with low pill burden (such as TLD) to reduce barriers to adherence seen with increased pill counts.

Evidence gaps: More information on DTG-associated weight gain and cardiometabolic effects is needed to better understand geographical and population differences and the potential clinical consequences of long-term use of DTG-containing regimens. Such research would help build a better understanding of adolescents' experiences and acceptability of DTG-based regimens, as well as generating better data on clinical safety and efficacy.

Intervention: Timing of ART initiation

WHO recommendations:

1. Rapid ART initiation should be offered to all people living with HIV following a confirmed HIV diagnosis and clinical assessment (9).
2. ART initiation should be offered on the same day to people who are ready to start (9).

Implementation considerations:

- Timing of ART initiation may depend on the context and assessment of readiness. Adolescents and young adults may need additional time between diagnosis and ART initiation, and same-day initiation decisions should assess adolescents' readiness to start lifelong treatment and access to clinical and psychosocial support systems to help promote adherence and care retention.
- Even for groups of adolescents among whom rapid ART initiation is a priority, additional support may be needed—including newly diagnosed and ART-initiated pregnant and breastfeeding adolescents and adolescents with advanced HIV disease, who may require additional supportive interventions alongside rapid ART initiation.
- Rapid ART initiation may support equity and accessibility for groups lost following HIV diagnosis, which can include adolescents and young adults. Peer counselling and health care provider education may bolster adolescents' readiness for rapid initiation.

Evidence gaps: Research priorities should include gathering adolescent and young adult perspectives on same-day ART initiation, as well as evaluating rapid treatment initiation approaches. Adolescents and young adults may need additional support for HIV status disclosure, preparing for daily medicine-taking, self-care education (for older adolescents), and caregiver communication (for younger adolescents).

Intervention: Treatment package for adolescents with advanced HIV

WHO recommendation: A package of interventions including screening, treatment and/or prophylaxis for major opportunistic infections, rapid ART initiation and intensified adherence support interventions should be offered to everyone presenting with advanced HIV disease (13).

Implementation considerations:

- HIV programmes should ensure high-quality care for adolescents and young adults living with HIV, with attention paid to those who present late or are seriously ill.
- Adolescents and young adults who have previously initiated ART and have re-engaged in care after a period of treatment interruption should be assessed for advanced HIV disease.
- ART initiation should be prioritised, where clinically appropriate; adapted adherence support should include tailored counselling to ensure optimal adherence to the package of care for advanced HIV disease, which may include home visits and community support.
- Peer led groups may have an important role to play in prompting people who are unwell to seek health care, in supporting people who are recovering following acute illness and to support ongoing adherence and retention in care.
- STOP AIDS (Screen, Treat, Optimize and Prevent AIDS) can be used to guide procedures in treating adolescents with advanced HIV disease.

Evidence gaps: Adolescent-specific barriers to care require further evaluation to prevent disease progression in this age group. Understanding health system-specific barriers to implementing these treatment regimens can also help to optimise outcomes. There is also a need for understanding prevalence of advanced HIV disease, advanced HIV disease service uptake, and prevalence of opportunistic infections among newly diagnosed adolescents living with HIV and those re-engaged in care. Better tools are needed to screen and diagnose TB and chronic comorbidities among adolescents living with HIV, as well as specific services to support nutrition, given the limited data on relatively high rates of malnutrition in this group.

Intervention: Viral load monitoring

WHO recommendations:

1. Viral load is recommended as the preferred monitoring approach to diagnose and confirm treatment failure (9).
2. Routine viral load monitoring can be carried out by six months after ART initiation, at 12 months and then every 12 months thereafter if the person is established on ART to synchronize with routine programmatic monitoring and evaluation reporting (9).

There are three key categories for HIV viral load measurements: unsuppressed (>1000 copies/mL), suppressed (detected but ≤ 1000 copies/mL) and undetectable (viral load not detected by test used). Adolescents and young adults living with HIV who have an undetectable viral load have zero risk of transmitting HIV to their sexual partner(s). Those who have a suppressed but detectable viral load and are taking medication as prescribed have almost zero or negligible risk of transmitting HIV to their sexual partner(s).

Implementation considerations:

- An undetectable viral load is the goal of antiretroviral therapy for all people living with HIV, for their own health and to prevent onward transmission to their sexual partner(s) and children. Adolescents and young adults living with HIV who have an undetectable viral load have zero risk of transmitting HIV through sex as long as they continue to take their antiretroviral therapy as prescribed.
- Taking antiretroviral therapy as prescribed will also improve individual health and enable individuals to live a healthy life.
- HIV viral load test results can be a motivation for adhering to treatment and achieving the goal of being undetectable. Counselling to emphasize adherence during antiretroviral therapy initiation,

and throughout treatment, is essential, including communicating the preventative benefits of viral load suppression.

- Building health literacy in adolescents and empowering them to set and achieve treatment goals, such as achieving viral load suppression, can support adolescent engagement in healthcare decisions and build self-health management skills that can be carried into adulthood.
- Community-led initiatives that communicate benefits to adolescents and young adults living with HIV, such as “Undetectable = Untransmittable” (U=U) campaigns, provide helpful messages and tools to encourage them to achieve and maintain viral suppression and to reduce anxiety about transmitting HIV to sexual partners, support safer conception in serodiscordant couples and reduce community stigma (14).
- Adherence counselling should be at every visit to emphasize viral suppression as key to treatment success. Healthcare provider training and clear protocols can help connect adolescents and young adults experiencing virological failure to additional support, including intensified adherence counselling and regimen switches if needed.

Evidence gaps: More research is needed to understand the impact of point-of-care testing on HIV treatment outcomes (including morbidity and mortality) versus laboratory-based testing in younger populations. Implementation research approaches could investigate how to streamline viral load monitoring processes for groups that face additional barriers to care, such as adolescents and young adults. Current evidence shows relatively low rates of integrase strand transfer inhibitors (INSTI) resistance in children and adults on DTG, however more evidence is needed on prevalence of HIVDR to INSTIs in adolescents and how this affects the management of high viral load in adolescents and ART sequencing.



Teenagers warming up before playing football, 2012 © WHO

Service delivery

Service delivery is critical in ensuring that adolescents and young adults living with HIV can safely and comfortably access care; that they are supported and motivated to adhere to ART; and that they can navigate the challenges of living with and remaining on treatment for a lifelong condition. WHO's service delivery recommendations respond to multiple realities facing both health care providers and adolescents and young adults seeking HIV-related care, including prevention options and SRH services. In addition to logistical challenges at the individual level, health facilities may be overburdened in resource-constrained settings or where health systems are routinely unable to meet patient demand. Service delivery should integrate adequate attention to human rights, individual dignity, and a high standard of care provision, in line with WHO quality standards. The wide range of WHO recommendations on HIV service delivery include broader health systems-focused aspects. In this section, we distil recommendations that are well-supported by the available evidence and are closely matched to serve adolescent- and young adult-specific needs.

Summary of priority HIV service delivery interventions and key implementation considerations for adolescents and young adults

Intervention: Psychosocial interventions

WHO recommendation: Psychosocial interventions (15) should be provided to all adolescents and young adults living with HIV (9).

Implementation considerations:

- Adolescents may experience overlapping forms of stigma as both mental health and HIV are stigmatized in many societies. Interventions should aim to mitigate stigmatization. Interventions promoting self-care and empowerment, and providing confidential spaces for sharing, may be appealing. Healthcare provider training should also be bolstered to address mental health and tackle persistent stigma.

Key references:

[Supporting re-engagement in HIV treatment services: Policy brief. Geneva: World Health Organization; 2024.](#)

[Integrating psychosocial interventions and support into HIV services for adolescents and young adults: technical brief. Geneva: World Health Organization; 2023.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

[Adolescent-friendly health services for adolescents living with HIV: from theory to practice. Technical brief. Geneva, Switzerland: World Health Organization; 2019.](#)

[Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents. Volume 1.](#)

- Tailoring packages of care including psychosocial support to specific contexts is important; adaptations may be needed to cater to specific sub-groups of adolescents, and appropriate linkages to care should accompany these interventions.
- Peer support has been found to be acceptable and feasible and can improve HIV-related clinical outcomes in adolescents living with HIV, as well as mental health outcomes. Peer implementers should receive adequate training, remuneration, and structured supervision, as well as opportunities for peer-peer learning and ongoing professional development.
- Multiple strategies can be used to integrate psychosocial interventions into health services and better reach adolescents and young adults. These include health facility-based interventions,

home visits, community-based / facility-linked support groups such as teen clubs or adherence clubs, social media, and phone-based support. Integrating services can be particularly valuable—for instance, providing options for psychosocial support through routine HIV visits and care.

- A focus on younger adolescents may help promote protective behaviours, equipping younger adolescents living with HIV with strategies to improve their health and treatment outcomes. Earlier intervention may also in certain cases prevent the onset of mental health challenges.

Evidence gaps: More intervention evaluation evidence from sub-groups of adolescents and young adults across high-HIV burden settings is required, including those exposed to multiple adversities. There is limited evidence on content and delivery strategies to engage parents, caregivers, or other trusted adults to build supportive networks for adolescents and young adults living with HIV. Documenting lessons from caregiver engagement strategies embedded within interventions is key, as is identifying ways to obtain adolescent consent to engage these adults. Costing data is also much needed, alongside evidence from virtual interventions, to assess which psychosocial interventions may be feasible for countries or districts to implement in line with available resources and observed need. Research is needed to examine the baseline costs required for effective interventions to scale or translate to new country settings. Implementation science methodologies, beyond costing, could illuminate obstacles and opportunities to implementing the most effective interventions.

Intervention: Adolescent-friendly health services

WHO recommendation: Adolescent-friendly health services should be implemented in HIV services to ensure engagement and improved outcomes (9).

Implementation considerations:

- Adolescent-friendly health services should be considered as a cross-cutting service priority, integrated into interventions aimed at improving quality of care for adolescents and young adults accessing HIV prevention, testing, or treatment services.
- Adolescents and young adults place high priority on these kinds of services. Suggested activities to improve service delivery include flexible clinic visiting to accommodate school hours; adolescent-dedicated spaces and hours; peer-led and community-based interventions and services; provision of HIV- and SRH-related information and support that is empowering and solution-oriented; and comprehensive care that supports adolescents with health issues beyond HIV.
- Adolescent-friendly services should include activities that target young people in their communities and to mobilize them for access of services at facilities.

- Adolescent-friendly services should be careful to ensure equity in service delivery and devote adequate attention to adolescents' specific needs, especially for socially marginalized groups of adolescents (see Box 1). Equitable approaches to service provision could include no out-of-pocket expenses for services, as well as flexible, differentiated services.
- Integrating technology to enhance service delivery should be considered (including telehealth services, mobile health apps, and social media platforms to provide information, reminders, and support).
- Healthcare providers working in HIV care should be adolescent-competent and be trained to incorporate non-judgmental, confidential, supportive care while also offering opportunities for honest and open discussion with adolescent patients. Peer supporters may also be included in health team / case management meetings to ensure youth representation and provide input into continuous quality improvement activities for addressing adolescent gaps.
- The global standards for quality health-care services for adolescents should be considered and implemented to increase adolescents' use of services and contribute to better health outcomes (see Box 2).

Evidence gaps: Meaningful participatory engagement is critical to ensure services meet adolescents' needs. Directly engaging with adolescents and young adults in the prioritisation, design, implementation planning, and evaluation of HIV-linked adolescent-friendly services and interventions is key, and research should incorporate these provisions into the design and implementation of new adolescent-focused services.

Box 1: WHO-defined characteristics of adolescent-friendly health services

- **Equitable:** All adolescents, not just certain groups, are able to obtain the health services they need.
- **Accessible:** Adolescents can obtain the services that are provided.
- **Acceptable:** Health services are provided in ways that meet the expectations of adolescent clients.
- **Appropriate:** The right health services that adolescents need are provided.
- **Effective:** The right health services are provided in the right way and contribute positively to the health of adolescents.

Box 2: Global standards (with examples) for the quality of health-care services for adolescents and HIV-related activities aligned to the standards (from 2021 HIV consolidated guidelines)

Global standard	Description	Example of activities implemented to attain this standard
1. Adolescents' health literacy	The health facility implements systems to ensure that adolescents are knowledgeable about their own health, and they know where and when to obtain health services	Training of peer supporters, also adolescents living with HIV in HIV prevention, sexual and reproductive health, mental health and life skills Developing job aids on HIV testing, care and treatment, viral load monitoring, adherence counselling and contraceptive information and provision specific to adolescents Peer supporters and treatment literacy staff address HIV knowledge and adherence and the concerns of adolescents
2. Community support	The health facility implements systems to ensure that parents, guardians and other community members and community organizations recognize the value of providing health services to adolescents and support such provision and the utilization of services by adolescents	Their caregivers join clubs and are involved in activities both between and within clubs Conducting sensitization sessions within schools to eliminate stigma and promote testing, adherence and retention by school-attending adolescents living with HIV Engaging parents and guardians during caregiver sessions and introducing the services
3. Appropriate package of services	The health facility provides a package of information, counselling, diagnostic, treatment and care services that fulfils the needs of all adolescents. Services are provided in the facility and through referral linkages and outreach	Standard operating procedures developed and implemented to provide standard and simplified information on the available package of services Constitute a ministry-led multidisciplinary mentorship team on capacity-building for the needs of the adolescents
4. Providers' competencies	Health-care providers demonstrate the technical competence required to provide effective health services to adolescents. Both health-care providers and support staff respect, protect and fulfil adolescents' rights to information, privacy, confidentiality, non-discrimination, non-judgemental attitudes and respect	Training health-care workers at service delivery points on providing adolescent-friendly health services within an integrated service package Regular meetings, on-site support and mentorship and refresher workshops Peer educator curriculum package and teen club guide for peers and health-care providers to use
5. Facility characteristics	The health facility has convenient operating hours, a welcoming and clean environment and maintains privacy and confidentiality. It has the equipment, medicines, supplies and technology needed to ensure effective service provision to adolescents	Clinic appointment hours specific to adolescents and flexible opening hours outside regular clinic hours, such as evenings or weekends or school holidays to facilitate convenient hours and a safe space for HIV care and psychosocial support discussions Multidisciplinary teams scheduled to provide different services; to refill ARV medicine, conduct viral load testing and counsel clients Develop and adhere to the infection prevention and control policies

Global standard	Description	Example of activities implemented to attain this standard
6. Equity and non-discrimination	The health facility provides high-quality services to all adolescents regardless of their ability to pay, age, sex, marital status, education level, ethnic origin, sexual orientation or other characteristics	Services provided free of charge with no out-of-pocket expenses Client satisfaction survey performed periodically to get feedback for improvement Involvement of multilayered and multisectoral agencies, including social protection services and the district health team
7. Data and quality improvement	The health facility collects, analyses and uses data on service utilization and quality of care, disaggregated by age and sex, to support quality improvement. Health facility staff members are supported to participate in continuous quality improvement	Develop and implement a monitoring and evaluation framework that clearly defines process and outcome indicators Develop and implement standard data collection tools at the facility level and a reporting template that captures age, sex and outcomes Quality improvement teams to routinely review disaggregated data and brainstorm for solutions with health facility staff and district councils
8. Adolescents' participation	Adolescents are involved in planning, monitoring and evaluating health services and in decisions regarding their own care as well as in certain appropriate aspects of service provision	Implementation of youth advisory groups and processes for design, implementation and feedback on services Peer supporters taking part in relevant health team meetings such as case reviews and advocacy for adolescent-friendly health services Training of peers to be self-health managers, to motivate self and others and to be a source of positive peer pressure to others

Intervention: Linkage to care

WHO recommendation: Following an HIV diagnosis, a package of support interventions should be offered to ensure timely linkage to care for adolescents living with HIV. The following interventions have demonstrated benefit in improving linkage to care following an HIV diagnosis:

- streamlined interventions to reduce time between diagnosis and engagement in care, including:
 - enhanced linkage with case management;
 - support for HIV disclosure;
 - patient tracing;
 - training staff to provide multiple services, and
 - streamlined services.
- peer support and navigation approaches for linkage.
- quality improvement approaches using data to improve linkage (9).

Implementation considerations:

- Linkage mechanisms should be introduced at the point of testing and contain a diverse set of strategies to engage adolescents and young adults. Adolescents' ability to follow through on linkages to care may rely on individual circumstances, trusted relationships, and their sense of satisfaction, confidentiality, and safety with available HIV services.
- Adolescents and young adults with new diagnoses are likely to require time and focused attention to learn more about their health needs, the services and treatment options available, and how to navigate the health system.
- Adolescents may benefit from support from parents, caregivers, or other trusted adults in the aftermath of an HIV diagnosis; they may choose not to seek out these individuals, depending on their family relationships or fears of stigmatization.

- Peer support and outreach can be valuable at the initial linkage stage. Peer support should ideally be co-located and well-integrated with ART initiation procedures to smooth barriers to timely initiation and counselling. Linkages to care outside of health facility, may better serve certain underserved groups, which can include adolescents and young adults, especially young men and key populations. Home visits, enhanced counselling, and navigational support are also critical interventions that may fall under peer support.
- Using data to improve linkages can reduce time between diagnosis and initiation on ART. Linkages may be improved by positive interactions with healthcare workers and receiving disclosure support. Integrating ART into other health services, such as maternal and child health care, as well as TB care, can smooth barriers to uptake.

Evidence gaps: Despite strong recommendations focused on linkage to care, there is limited direct evidence for adolescents and young adults. More robust evidence is required to understand the effectiveness of diverse linkage to care strategies on adolescent uptake and HIV-related outcomes. Few psychosocial interventions for adolescents incorporate linkage to care as a measure or outcome of interest; considering how to integrate strategies linking adolescents and young adults to care within existing intervention programming may be a valuable next step. Additional research should explore the feasibility, acceptability, and cost-effectiveness of linking adolescents and young adults living with HIV and their broader social and sexual networks to HIV prevention, testing, and treatment. Finally, there is limited research exploring opportunities for digital interventions focused on linking to care; more evidence on feasibility and cost-effectiveness could support innovations in this area.

Intervention: Adherence support interventions

WHO recommendation: Adherence support interventions should be provided to adolescents receiving ART. The following interventions have demonstrated effectiveness in improving adherence and virological suppression: peer counsellors, mobile phone text messages, reminder devices, cognitive behavioural skills, behavioural skills training and medication adherence training, and fixed-dose combinations and once-daily regimens (9).

Implementation considerations:

- Daily medicine-taking can be especially challenging for adolescents. Adolescents may experience heightened HIV stigma, peer pressure,

or fears of involuntary disclosure of their HIV status to peers, romantic/sexual partners, or family members. They may also be deterred from treatment retention due to medication side effects as well as treatment fatigue.

- Adherence support interventions and packages of care can be tailored to adolescents' specific needs, challenges, and daily routines. Diverse interventions include interpersonal and digital interventions, as well as innovations such as integrating these services with psychosocial or mental health support services.
- Adolescents can face specific barriers in navigating the health system, due to poor linkages between paediatric and adult care, and health providers with limited time and skills to support them.
- Adherence may be supported through flexible approaches including social media, adolescent-only spaces, and community-based approaches. Knowledge of HIV status is critical to adherence, as is peer support and parental/caregiver support from trusted caregivers—drawing on adolescents' networks while ensuring they feel safe and validated. Peer interventions may also be more cost-effective than training healthcare providers.

Evidence gaps: Additional research is needed to test and evaluate interventions for adolescents specifically. It is important to consider potential synergistic effects of combining two or more interventions on improving HIV adherence outcomes and other health system factors.

Intervention: Differentiated service delivery for HIV treatment

Differentiated service delivery models for HIV treatment can be described within four categories: group models managed by health-care workers; group models managed by clients; individual models based at facilities; and individual models not based at facilities.

WHO recommendations:

1. People established on ART (Box 3) should be offered clinical visits, every 3-6 months, preferably every six months if feasible (9).
2. People established on ART should be offered refills, every 3-6 months, preferably every six months if feasible (9).
3. ART initiation may be offered outside the health facility (9).

Box 3: Criteria for determining whether a person is established on ART (from 2021 HIV consolidated guidelines)

To support the implementation of these recommendations, WHO has developed criteria for determining whether a person has been successfully established on ART:

- Receiving ART for at least six months;
- No current illness, which does not include well-controlled chronic health conditions;
- Good understanding of lifelong adherence: adequate adherence counselling provided; and
- Evidence of treatment success: at least one suppressed viral load result within the past six months (if viral load is not available: CD4 count >200 cells/mm³ (CD4 count >350 cells/mm³ for children 3-5 years old) or weight gain, absence of symptoms and concurrent infections).

Implementation considerations:

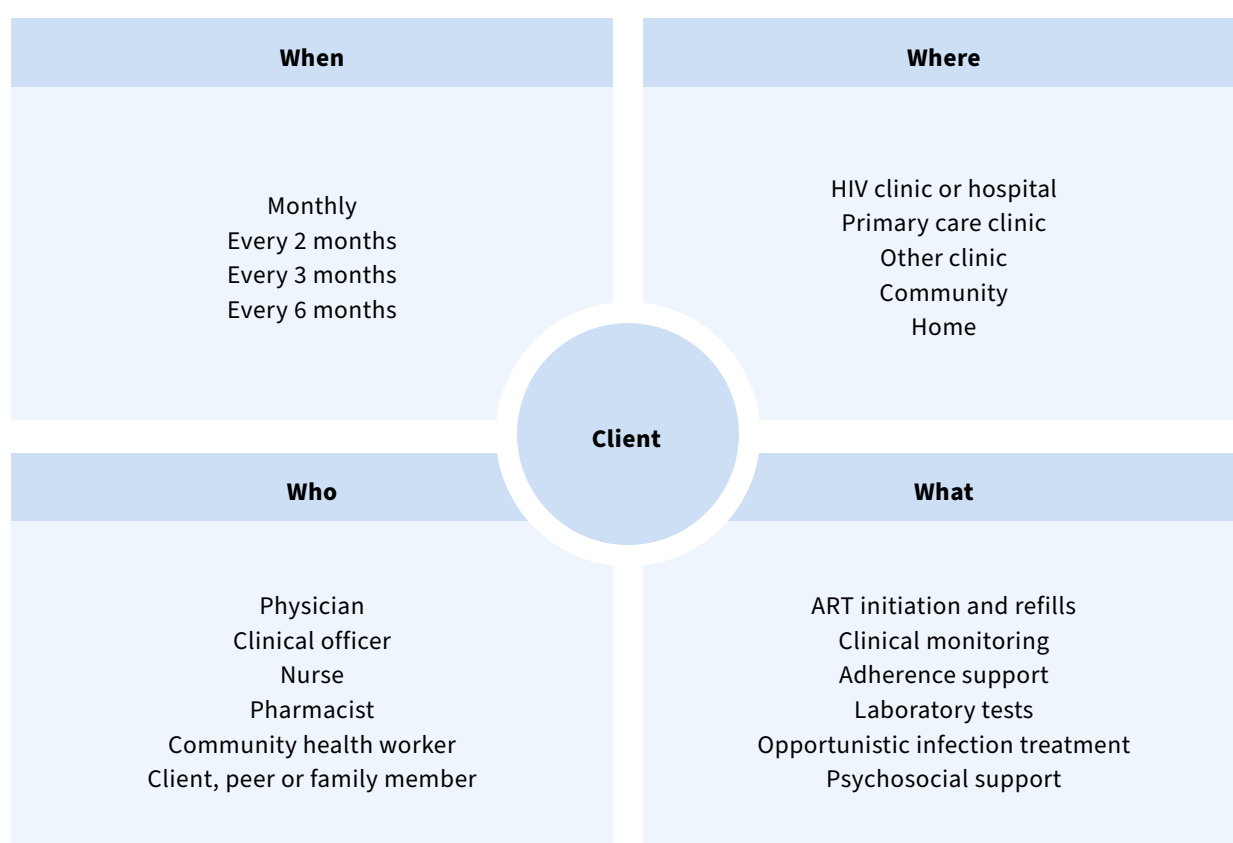
- Adolescents and young adults, who face distinct barriers to accessing ART, are likely to prefer fewer health facility visits. Obtaining refills monthly can be time-consuming and difficult to plan, especially if adolescents are in school or have concerns about stigma.
- Decisions about transitioning to multi-month dispensing of ART (MMD) routines should be made by health providers in consultation with adolescents, and should ensure patients are established on ART, as these approaches can enhance retention in care.
- Some adolescents may need more time to become established on ART, especially given significant life changes, whilst others remain better supported by more consistent monitoring or more frequent contact with the health system.
- Pregnant and postpartum adolescents may also require additional attention to support better treatment outcomes and prevention of mother-to-child transmission. Clinical visits and ART refills can be integrated with other health services such as family planning visits.
- ART initiation outside of health facilities should link with community-based HIV testing, given recommendations to make same-day initiation of ART available.

- Initiation outside of facilities may be beneficial for adolescents and young adults who are socially marginalized, stigmatized, or otherwise unable to access routine care.
- ART refills should be provided as close to adolescent's homes as possible. Out-of-facility individual or group collection ART delivery models can be considered.
- Outside initiation still requires linkage to a health facility. Adolescents and young adults initiated onto ART outside of facilities should be counselled to understand the importance of lifelong adherence and how to navigate routine HIV care processes such as viral load monitoring and medication refills. Adolescents require age-appropriate HIV literacy, additional disclosure support, and access to psychosocial care.
- It can be beneficial to provide virtual or community-based psychosocial support in between medication dispensing appointments.
- Aligning dispensing appointments for adolescents during school vacations may help mitigate the barrier of missed appointments due to school attendance.

Differentiated service delivery for HIV treatment is based on four building blocks (Fig. 1). In any given differentiated service delivery model for HIV treatment, the building blocks need to be defined separately for clinical consultations, ART refills and psychosocial support.

Evidence gaps: Specific evidence is required on the effectiveness of multi-month prescribing among adolescents and young adults, including hybrid approaches to monitoring viral load and suppression. While initiation outside the health facility may help increase access, there is limited evidence on acceptability and feasibility among adolescents and young adults. While the guidelines refer to the potential for less frequent visits, there is limited evidence on this approach, especially for adolescents. More research is needed to understand acceptable approaches for adolescents and young adults who are offered ART initiation outside of health facilities, and how to ensure smooth linkages between community- and facility-based HIV care and support. Transitioning from adolescent (often peer-driven) models to adult models of service delivery continues to be a barrier, and more evidence on successful approaches is needed, including maintaining good health outcomes post-transition. Ensuring smooth support for transitions of service delivery for adolescents who become pregnant while on ART is another priority, as some services, including peer support, can be lost in the transfer to antenatal care.

Figure 1: The building blocks of differentiated service delivery for HIV treatment (reproduced from WHO's 2021 guidelines)



Intervention: Diverse models to improve retention in care

WHO recommendations:

1. Community-based approaches can improve treatment adherence and retention in care of adolescents living with HIV (9).
2. Training of health-care workers can contribute to treatment adherence and improvement in retention in care of adolescents living with HIV (9).
3. Programmes should provide community support for people living with HIV to improve retention in HIV care. The following community-level interventions have demonstrated benefit in improving retention in care: a package of community-based interventions; adherence clubs; extra care for high-risk people (9).

Implementation considerations:

- Community-based approaches (e.g. community-based adherence and psychosocial counselling) should be closely linked to health facilities, to ensure service integration, clear referral pathways, and resource sharing to improve sustainability.
- Adolescent-friendly approaches should be integrated into all interventions to improve

retention. Healthcare worker training should focus on developing core competencies in adolescent-friendly care and integrating updated knowledge on HIV care provision. Retention may be improved by providing adolescent-specific services at specific times, or in separate spaces, with flexible appointments to cater for adolescents who are attending school.

- Comprehensive, integrated health service provision that addresses multiple needs concurrently, such as psychosocial support, sexual and reproductive health, and/or STI testing, should be considered to retain adolescents and young adults in care.
- Peer-led models of care can be considered to better reach adolescents outside facilities. Outside engagement may help address barriers related to cost, stigma, or service quality. Peer-led adherence clubs can create a sense of belonging and mutual care, and de-stigmatise medicine-taking.
- Adolescent retention can be enhanced by close monitoring of adolescent engagement in care, including routine follow-ups and proactive communication. Peer supporters, linked to community and/or health facility structures, can

assist in outreach efforts to optimise engagement and troubleshoot barriers for adolescents who struggle to be retained in care.

Evidence gaps: There is a need for specific costing data for different types of community-based engagement to guide national policies and support programme implementation with adolescents and young adults in particular. There is a gap in understanding how adolescents and young adults navigate transitions across care delivery points, and further operational and implementation research is required to improve strategies to link and retain adolescents across decentralised and diverse points of care.

Intervention: Supporting re-engagement

WHO recommendation: HIV programmes should implement interventions to trace people who have disengaged from care and provide support for re-engagement (9).

Implementation considerations:

- Re-engagement approaches should centre on responsive care, acknowledging that adolescents who struggle with adherence may experience other layered vulnerabilities and differing reasons for disengagement.
- Re-engagement challenges should be addressed through a tailored adherence support plan with linkage to relevant support services (e.g. mental health or social support).
- Peer supporters or other lay counsellors may be able to effectively re-engage adolescent patients. Personnel (including peer supporters) that support community-based tracing of young patients should be trained on approaches to reduce and/or mitigate stigma, understand common reasons for disengagement, and be sensitive to adolescent-specific concerns.
- Tracing approaches depend on the adolescent's consent to be reached. These approaches can encompass a mix of remote communication (such as phone calls, text messages, mail, and email), in-person tracing, or a hybrid approach—defined according to the adolescent's preferences.
- Cost considerations regarding patient tracing are important and decisions often need to be made at the facility or district level.

Evidence gaps: There is limited research with adolescents on strategies for improving re-engagement in care. While qualitative research can assist in understanding various common reasons for disengagement across diverse sub-groups of adolescents and young adults, there is a need to better understand critical life events, or transitions, that may disrupt medicine-taking, especially for younger people. This could also identify strategies for tracing and supporting adolescents and young adults who are struggling with their ART and/or HIV care, as well as find ways to re-engage them in care more formally. This research could examine strategies that may be effective at particular stages of the HIV care continuum—for instance, after testing but before initiation, after initiation, and/or after a regimen change. Digital modalities for re-engagement may be beneficial, as well as tailored peer support. As acceptability and effectiveness of these strategies is determined, it is also important to identify costs and weigh these against benefits.

Considerations for young key populations

Key populations: defined groups who, due to specific higher-risk behaviours, are at increased risk of HIV, viral hepatitis or STIs irrespective of the epidemic type or local context. Also, they often have legal and social issues related to their behaviours that increase their vulnerability to HIV. WHO guidelines focus on five key populations: 1) men who have sex with men; 2) people who inject drugs; 3) people in prisons and other closed settings; 4) sex workers; and 5) trans and gender diverse people. Key populations face social, legal, structural and other contextual factors that obstruct their access to HIV, viral hepatitis and STIs and other essential health services.

Young key populations face additional risks and face peculiar challenges and require tailored interventions and face exclusion including from research. Young members of key populations may experience specific power imbalances linked to social marginalization, limiting their ability to negotiate condom use or safely access services. Stigma and discrimination at the individual, interpersonal, and societal level may act as barriers for adolescents and young adults who seek to test for HIV, especially those from key populations. These barriers may be related to individuals' experiences of mistreatment from healthcare workers, fears of being openly stigmatized by other patients in public health facility settings, and potential legal consequences. In certain settings, specific behaviours and/or sexual

Key references:

[Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022.](#)

orientations may be criminalized, raising the risk of reporting and/or prosecution for young members of key populations who seek much-needed support—and requiring more sensitive, tailored approaches.

WHO recommendations: WHO recommendations focused on HIV-specific interventions and recommended package for all key population groups also apply to young key populations (7). These packages, with key characteristics (Box 4) are spread across interventions essential for impact on an enabling environment on removing punitive laws, policies, reducing stigma and discrimination and addressing violence; essential health interventions across prevention, testing, and treatment; and essential health interventions for broader health including anal health, sexual and reproductive health, mental health, prevention, assessment and treatment of cervical cancer and treatment for harmful alcohol and other substance use.

Box 4: Summary of key characteristics of effective young key population services

Quality services are friendly, affordable, confidential, safe and easy to access, at convenient times

Comprehensive services are integrated and decentralized where relevant

Developmentally appropriate information and education are provided

Health care providers, peers, educators, people working in welfare, social and justice services are trained.

Services are supportive and make use of peer-based and peer-led initiatives

Implementation considerations:

- It is essential that services are designed and delivered in a way that considers the multiple, overlapping vulnerabilities that confront adolescents from key populations, and their different needs based on age, specific behaviours, complexities of their social and legal environment and the epidemic setting.
- Programmes share an ethical duty to ensure equivalency for young people. Addressing underlying structural barriers for young key populations is critical.
- Meaningful, ethical engagement with individuals representing young key populations can enhance relevance of services, while empowering youth to express their views and articulate needs.
- Partnering with existing, trusted service providers, including community-based youth and key population organizations, can enhance organizational capacity while reaching key populations in acceptable ways.
- Developmentally appropriate information and education, delivered across multiple platforms and in diverse formats, is core to quality service provision, as is health provider capacity development and training to support non-judgmental, rights-based service provision and care.
- Peer-driven models may be particularly effective for young key populations, for reasons linked to stigma, discrimination, and criminalization. Peer approaches may support improved access to and retention in care and may also enable broader reach with key populations.
- Consider platforms including Trusted Access Platforms for young key populations that are safe, stigma-free and provide services that are specifically designed to meet their unique needs. These may include drop-in centres, mobile clinics, peer-led outreach programs, and online services that provide confidential and friendly access to essential HIV prevention, testing, treatment, and support. By ensuring privacy, cultural compatibility, and non-judgmental care, these platforms help young people access essential services in a supportive environment.



Education and prevention programmes at school in Malawi © WHO / Stephenie Hollyman

Considerations for HIV and other co-morbidities

This section briefly covers recommendations linked to common co-morbidities for HIV among adolescents, including HPV vaccination, tuberculosis (TB), hepatitis B and hepatitis C.

HPV vaccination

WHO recommendation: The human papillomavirus (HPV) vaccine is recommended for girls aged 9-14 years as the primary target population for vaccination before they become sexually active (8).

Implementation considerations:

- Providing vaccinations for secondary target populations, including females aged ≥ 15 years, boys, older males or men who have sex with men (MSM), is recommended only if feasible, and if it does not divert resources from vaccination of the primary target population or effective cervical cancer screening programmes.
- Individuals who are known to be immunocompromised or living with HIV (regardless of age or ART status) should receive at least two HPV vaccine doses at 6 months interval, and, where possible, three doses. Integrating a third dose into HIV care and treatment programmes or as part of an adolescent package of services, may be one promising approach.
- Adolescents who have faced sexual abuse, as well as those living with HIV, are at heightened risk of HPV-related disease, and should be considered a priority for HPV vaccination.

Evidence gaps: More adolescent-specific research is needed including to better understand acceptability, feasibility, and existing barriers among adolescents and young key populations. Among adolescents living with HIV who have drug-resistant TB as well as those who are pregnant and breastfeeding, more research is needed to address the safety and tolerability of early ART initiation. More evidence is needed to assess the

Key references:

[Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection. Geneva: World Health Organization; 2024.](#)

[WHO consolidated guidelines on Tuberculosis. Module 6: tuberculosis and comorbidities. Geneva: World Health Organization; 2024.](#)

[Human papillomavirus vaccines: WHO position paper \(2022 update\) 16 December 2022. Weekly epidemiological record. No 50 2022, 97, 645-672.](#)

[Updated recommendations on treatment of adolescents and children with chronic HCV infection, and HCV simplified service delivery and diagnostics. Geneva: World Health Organization; 2022.](#)

[Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

longterm safety and tolerability of newer ART drugs in the context of TB and HIV coinfection.

While this recommendation is based on the GRADE approach, no designations have been made regarding strength of recommendation or quality of evidence.

Tuberculosis

WHO recommendations:

1. TB screening: Adolescents living with HIV should be systematically screened for TB disease at each visit to a health facility (9).
2. Treatment for TB disease: In individuals with co-morbid TB and HIV, ART should be started as soon as possible within two weeks of initiating TB treatment, regardless of CD4 cell count, among people living with HIV (9).
3. TB preventive treatment: Adolescents living with HIV who are unlikely to have TB disease should receive TB preventive treatment as part of a comprehensive package of HIV care. Treatment should also be given to those receiving ART, to pregnant women and to those who have previously been treated for TB, irrespective of the degree of immunosuppression and even if latent* TB infection testing is unavailable (9).

Implementation considerations:

- Screening for TB should be aligned with other routine HIV care visits, to reduce the burden on adolescents living with HIV, especially given the additional barriers to facility-based care for this group.
- Follow-up is important to assess adverse events related to co-treatment, immune reconstitution inflammatory syndrome, or other clinical events requiring attention.
- Task sharing with community workers of tasks including symptom screening with referral and linkage to care should be strongly considered.
- Healthcare providers and programme managers should receive adequate training to deliver integrated TB and HIV services, including co-locating services and establishing an integrated supply chain, laboratory, and information services.
- TB preventive treatment (TPT) should be a core component of the HIV package of care and fall under national HIV/AIDS programmes and service provision.
- Adolescents with TB face unique challenges due to peer pressure and stigma, with concurrent issues such as use of alcohol, tobacco and other substances which may have an impact on adherence to TB treatment.

Evidence gaps: More adolescent-specific research is needed including to better understand acceptability, feasibility, and existing barriers among adolescents and young key populations. Among adolescents living with HIV who have drug-resistant TB as well as those who are pregnant and breastfeeding, more research is needed to

address the safety and tolerability of early ART initiation and the impact of also impact on Drug-Drug Interactions on dosing of ART with rifamycin-based TPT and first- and second line TB treatment. More evidence is needed to assess the long-term safety and tolerability of newer ART drugs in the context of TB and HIV coinfection.

Hepatitis B and C

Hepatitis B mono-infection (2024 Hepatitis B virus (HBV) guidelines)

WHO recommendations:

1. **Who to treat:** Treatment is recommended for all eligible adolescents (aged ≥ 12 years) with chronic hepatitis B (CHB)¹, including pregnant adolescents and adolescent girls of reproductive age with:
 - a. Evidence of significant fibrosis ($\geq F2$) based on clinical criteria or an aspartate aminotransferase (AST) to platelet ratio index (APRI) score of >0.5 or transient elastography value of >7 kPa or evidence of cirrhosis (F4) based on clinical criteria (or an APRI score of >1 or transient elastography value of >12.5 kPa), regardless of HBV DNA or ALT levels (strong recommendation, low-certainty evidence).
OR
 - b. HBV DNA >2000 IU/mL and an ALT level above the ULN (30 U/L for boys and men and 19 U/L for girls and women). For adolescents, ALT $>$ ULN at least twice in a 6- to 12-month period (conditional recommendation, low-certainty evidence).
OR
 - c. Presence of coinfections (such as HIV, HDV and HCV), family history of liver cancer or cirrhosis, immune suppression (such as long-term steroids, solid organ or stem cell transplant), comorbidities (such as diabetes, metabolic dysfunction-associated steatotic liver disease and iron overload secondary to treatment for disorders of the blood) or extrahepatic manifestations (such as glomerulonephritis or vasculitis), regardless of APRI score or HBV DNA or ALT level (conditional recommendation, low-certainty evidence).
OR
 - d. Persistently abnormal ALT levels (in the absence of access to an HBV DNA assay), regardless of APRI score (conditional recommendation, very-low-certainty evidence) (16).

1. Defined as the presence of HBsAg on at least one occasion, in adults and for adolescents and children, persistence of HBsAg for six months or more

*The term "latent TB infection" has been replaced by the term "TB infection"

Current evidence is insufficient to support extending the same treatment eligibility criteria used for adults and adolescents to include children with HBV 2-11 years old. However, treatment is generally offered on a case-by-case basis to select children in this age range identified to have the following: cirrhosis or advancing liver fibrosis stage $\geq$ F2, persistent hepatitis flare with HBV DNA >2000 IU/mL, comorbidities that increase the risk of progressive liver disease, or a need for immunosuppressive therapy.

Note: HIV and HBV coinfection

Dolutegravir (DTG) in combination with a nucleos(t)ide reverse-transcriptase inhibitor (NRTI) backbone is the preferred first-line drug regimen for adults, adolescents and children living with HIV initiating ART, including those with HIV and HBV coinfection. Efavirenz (EFV) at low dose (400 mg) is an alternative to DTG for adults and adolescents.

Knowing the HBsAg status of people living with HIV is important before initiating ART or switching regimens and before initiating PrEP. Current ART guidelines recommend using TDF (in combination with 3TC or FTC) as the preferred NRTI backbone option for most situations in HIV management, including HIV and HBV coinfection. TDF, TAF, 3TC and FTC are all active against both HIV and HBV. TAF could be an alternative to TDF in specific clinical situations for people coinfecting with HIV and HBV, especially if renal or bone problems are a concern, and for adolescents. If neither TDF nor TAF can be safely used, the alternative recommended hepatitis B therapy is ETV in addition to a fully suppressive ARV drug regimen. This nucleos(t)

ide analogue combination should be retained if the ARV drug regimen is changed because of failure to suppress HIV viral loads. ARV drug regimens that do not include TDF, ETV or TAF are not appropriate for people coinfecting with HIV and HBV.

2. What to treat with (Figure 2):

For all adolescents for whom antiviral therapy is indicated, tenofovir disoproxil fumarate (TDF) or entecavir (ETV) are recommended as preferred regimens. TDF + lamivudine (3TC) or TDF + emtricitabine (FTC) are recommended as alternative regimens (where TDF monotherapy is not available). (strong recommendation, moderate-certainty evidence) (16).

Entecavir (ETV) or tenofovir alafenamide fumarate (TAF) (if available) are recommended for people with established osteoporosis and/or impaired kidney function and for adolescents (TAF for those aged 12 years or older as alternative regimen), for whom antiviral therapy is indicated (strong recommendation, moderate-certainty evidence) (16).

3. Antiviral prophylaxis among pregnant women and adolescent girls to prevent mother-to-child transmission of hepatitis B.

In settings where HBV DNA or HBeAg testing is available, prophylaxis with tenofovir disoproxil fumarate (TDF) is recommended for all HBV-positive (HBsAg-positive) pregnant women with HBV DNA ≥ 2000 IU/mL or positive HBeAg (preferably from the second trimester of pregnancy until at least delivery

Figure 2: Summary of Preferred and alternative first-line antiviral regimens (reproduced from WHO guidelines for people with chronic hepatitis B infection, 2024).

Population	Preferred first-line regimen	Alternative first-line regimen	Special circumstances
Adults	TDF ETV	TDF + 3TC TDF + FTC (where TDF monotherapy is not available)	ETV TAF (for people with established osteoporosis and/or impaired kidney function)
Adolescents (12-17 years)	TDF ETV	TDF + 3TC TDF + FTC where TDF monotherapy is not available) TAF	
Children (2-11 years)	TDF* ETV		

TDF: tenofovir disoproxil fumarate; ETV: entecavir; 3TC: lamivudine; FTC: emtricitabine; TAF: tenofovir alafenamide fumarate.

*Low dose formulations of TDF may not be widely available

or completion of the infant HBV vaccination series), to prevent the mother-to-child transmission (MTCT) of HBV (strong recommendation, moderate-certainty evidence) (16).

New recommendation

In settings where neither HBV DNA nor HBeAg testing is available, prophylaxis with tenofovir disoproxil fumarate (TDF)c for all HBV-positive (HBsAg-positive) pregnant women may be considered (preferably from the second trimester of pregnancy until at least delivery or completion of the infant HBV vaccination series), to prevent MTCT of HBV (conditional recommendation, low-certainty evidence) (16).

All interventions should be given in addition to at least three doses of hepatitis B vaccination for all infants, including a timely birth dose (16).

Note: All pregnant women and adolescent girls should be assessed first for eligibility for long-term treatment for their own health. For women of childbearing age planning additional pregnancies, TDF prophylaxis can also be maintained after delivery and during subsequent pregnancies, according to choice.

Implementation considerations:

- Expanding treatment eligibility may pose significant challenges, especially in low- and middle-income country settings, and requires more attention to awareness, community education, and expanded access to testing, alongside enhanced training of healthcare personnel.
- In high HIV burden settings, testing for HIV should be undertaken before commencing hepatitis B treatment to ensure optimal treatment regimens for both HIV and HBV.
- Those initiating treatment should be monitored annually, with ongoing adherence support and retention in care.

Evidence gaps: There is a need for long-term studies to demonstrate the impact and effectiveness of expanding treatment eligibility on morbidity and mortality related to CHB, reduction in transmission, quality of life, and potential harm. Studies of the impacts among under-researched populations—such as adolescents in low- and middle-income countries, especially in sub-Saharan Africa—should be prioritized. Comparative trials and long-term follow-up studies are needed to determine how treatment during childhood or early adolescence in different regions affects the development of liver fibrosis, cirrhosis or HCC during adolescence or adulthood but also HBV transmission and health-related quality of life. Long-term prospective studies to understand

the potential adverse effects of long-term nucleos(t)ide analogue treatment on kidney and bone health, including any effect on peak bone mass achieved during teenage years and lifetime fracture risk. Data on the burden and routes of transmission of HBV among children and adolescents in different regions and rates of transmission among higher-risk groups, including adolescents who inject drugs and adolescent boys and men who have sex with boys or men are needed; as well as determining the population-based prevalence of liver fibrosis caused by hepatitis B and the progression of fibrosis during childhood and further validating non-invasive tests of liver fibrosis for children and adolescents.

Hepatitis C mono-infection and HIV-HCV co-infection

WHO recommendation: WHO recommends treatment using pangenotypic DAA regimens (sofosbuvir/daclatasvir, sofosbuvir/velpatasvir, glecaprevir/pibrentasvir) for all in adults (18 years and above), adolescents (12–17 years), older children (6–11 years) (all strong recommendations) and younger children (3–5 years) (conditional recommendation) with chronic hepatitis C infection regardless of stage of disease:

- Adolescents (12–17 years): strong recommendation; moderate/low certainty of evidence.
- Older children (6–11 years): strong recommendation; moderate/very low certainty of evidence.
- SOF/DCV1 for 12 weeks: 2 certainty of evidence: high (adults), high (adolescents and older children); very low (younger children).
- SOF/VEL for 12 weeks: certainty of evidence: high (adults), low (adolescents and older children); very low (younger children).
- G/P for eight weeks: certainty of evidence: high (adults), moderate (adolescents and older children); very low (younger children). (Figure 3) (17).

Implementation considerations:

- Numerous benefits of treating HCV in childhood and adolescents include achieving cure of a chronic disease, avoiding stigmatization and prevention of onwards transmission, especially among adolescents engaging in high-risk behaviours.
- Case-finding, testing, care, and treatment of children and adolescents should be included in national plans and guidelines.
- Testing approaches to improve hepatitis case-finding among infants may include testing children

Figure 3: Dosing by weight bands

Pangenotypic DAA regimens			Non-pangenotypic DAA regimens (in settings with minimal GT3 infection) ^a
Sofosbuvir/daclatasvir ^b	Sofosbuvir/velpatasvir	Glecaprevir/pibrentasvir ^c	Sofosbuvir/ledipasvir
>26 kg 400/60 mg od (film-coated tablets)	>30 kg 400/100 mg od (FDC tablet)	>45 kg 300/120 mg od (FDC tablet or 6 packets of oral pellets)	≥35kg 90/400 mg od (FDC tablet)
14–25 kg 200 mg/30 mg2 (as single tablets, sofosbuvir preferred as smaller 100 mg tablet)	17–29 kg 200/50 mg od (FDC tablet or granules)	30–<45 kg 250/100 mg od (5 packets of oral pellets) 20–<30 kg 200/80 mg od (4 packets of oral pellets)	17– 35kg 45/200 mg (tablet)
	<17 kg 150/37.5 mg od (coated granules)	<20 kg 150/60mg od (3 packets of oral pellets)	<17 kg 33.75/150 mg (FDC granules packets)

- a. For use in those with genotype 1, 4, 5, or 6 infection or where genotype 3 infection is uncommon. In the SHARED trial, (in adults) a sustained virological response (SVR) with sofosbuvir (400 mg) and ledipasvir (90 mg) was observed in 261 (87%) overall, but in only 56% of those infected with HCV genotype 4r, compared with 93% of those infected with genotype subtypes other than 4r. Realistically, these findings do not support the use of sofosbuvir–ledipasvir as the initial therapy for HCV infection without genotype subtyping in some regions and countries in sub-Saharan Africa.
- b. Dosing based on population pharmacokinetic modelling studies
- c. Available as tablets (FDC) 100/40 mg and oral pellets or granules 50/20 mg, depending on locally approved product information

of all HBV- or HCV-positive mothers (especially if the mother is HCV/HIV-coinfected) through home- or facility-based testing, offering viral hepatitis testing to all children and adolescents attending HIV services, STI clinics and TB clinics, focusing HCV testing on children who have had medical interventions or received blood products, offering testing to all children and adolescents presenting with signs and symptoms that suggest acute or chronic viral hepatitis (including anorexia, nausea, jaundice, right upper quadrant discomfort and abnormal liver function tests).

- Approaches for service delivery among adolescents living with HIV should be responsive, holistic, and supportive. Services need to be convenient and flexible, and ideally integrate HIV and viral hepatitis testing and care.
- Adolescents experiencing additional vulnerabilities, such as those living on the streets, experiencing age-disparate sex, and those who are sexually exploited or trafficked, require additional care and support. Targeted campaigns as well as adolescent-developed solutions can be critical to engaging these individuals.

Evidence gaps: Country-level serosurvey data is needed to inform updated estimates of prevalence and burden of viral hepatitis in young populations. More research is needed to establish optimal approaches for testing, case-finding, and linkage to care for children and adolescents in diverse settings; evidence is also needed on the impact on DAA treatment on growth, cognitive function, educational attainment and quality of life among younger populations. Direct evaluation of sofosbuvir/daclatasvir in children 6–11 years and <25 kg for sustained virologic response, adverse events, tolerability and pharmacokinetics. There is also a need to establish the efficacy of sofosbuvir/daclatasvir in regions where genotypes, including genotypes 1, 3 and 4-non-a/d subtypes, with inherent resistance-associated substitutions that increase treatment failure rates with this regimen are prevalent. Sofosbuvir/daclatasvir pharmacokinetic data are modelled only against wild type, and dose-related efficacy against genotypes 1, 3 and 4-non-a/d subtypes variants in children is uncertain. Implementation research studies on optimal approaches for testing, case-finding and linkage to care for children and adolescents in different settings is also required.

STIs in adolescents

WHO recommendations:

1. [WHO recommends](#) management of STI symptoms based on the results of quality-assured molecular tests if resources are available.
 - a. *Urethral discharge from the penis*: treat according to molecular test result for *Chlamydia trachomatis* and/or *Neisseria gonorrhoeae* on the same visit. If test is negative, then treat for non-gonococcal and non-chlamydial urethritis.
 - b. *Vaginal discharge*: treat according to molecular test or point-of-care test results for *Chlamydia trachomatis* and/or *Neisseria gonorrhoeae* and/or *Trichomonas vaginalis* on the same visit. Treatment for bacterial vaginosis and/or *Candida* is suggested based on type of discharge or smear microscopy result.
 - c. *Genital ulcer*: treat for syphilis and/or herpes simplex virus based on molecular test results available on the same day.
2. [WHO recommends](#) syndromic treatment in settings with limited or no molecular tests or laboratory capacity.
 - a. *Urethral discharge from the penis*: treat for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* to ensure same-day treatment.
 - b. *Vaginal discharge*: treat for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* to ensure same-day treatment. WHO suggests including treatment for bacterial vaginosis and *Trichomonas vaginalis* if discharge is present or based on smear microscopy results, and to treat for *Candida* base on type of discharge or by microscopy results.
 - c. *Genital ulcer*: treat syndromically for syphilis and herpes simplex virus to ensure same-day treatment.
3. [WHO provides](#) the following recommendation for treatment of STIs:
 - a. *Neisseria gonorrhoeae*: WHO suggests ceftriaxone 1g intramuscularly as single dose. If refused or not available, cefixime 800mg orally single dose plus test-of-cure or cefixime 800mg orally plus azithromycin 2g orally is suggested.
 - b. *Chlamydia trachomatis*: WHO suggests doxycycline 100mg orally twice a day for 7 days. If pregnant or breastfeeding woman, drugs not available or serious concerns about adherence to multiple doses, azithromycin 1g orally as single dose is suggested.
4. [WHO recommends](#) that STI partner services should be offered to people with STIs as part of a range of options based on their needs and preferences and within a comprehensive package of voluntary STI testing, care and prevention.
5. [WHO suggests](#) that sexually active adolescents and young people (10–24 years) who have no symptoms of a sexually transmitted infection and are accessing health care services be screened for *N. gonorrhoeae* and/or *C. trachomatis* in settings where prevalence is high and resources and capacity are available.
 - a. Screening can be done by either a quality-assured molecular assay or rapid diagnostic test and where treatment is available.
 - b. Treat for *N. gonorrhoeae* and/or *C. trachomatis* based on the results of the quality-assured test

Key references:

[Guidelines for the management of asymptomatic sexually transmitted infections.](#)

[Updated recommendations for the treatment of *Neisseria gonorrhoeae*, *Chlamydia trachomatis* and *Treponema pallidum* \(syphilis\) and new recommendations on syphilis testing and partner services.](#)

[Recommendations for the treatment of *Trichomonas vaginalis*, *Mycoplasma genitalium*, *Candida albicans*, bacterial vaginosis and human papillomavirus \(anogenital warts\).](#)

[Guidelines for the management of symptomatic STIs.](#)

Implementation considerations:

- General good practice is to take a comprehensive medical and sexual history, perform physical examination and offer HIV and/or syphilis testing.
- Vaginal swab specimens may be self-collected or clinician-collected.
- In settings where diagnostic tests results are not feasible on the same day, syndromic treatment for urethral discharge, vaginal discharge and genital ulcer should be provided. Test results should be used to adjust the treatment regimen and to inform STI partner services.
- Syphilis serology should be performed in addition to molecular test of genital ulcer to support further treatment decisions.
- WHO recommends that national or local antimicrobial resistance data should inform the choice of therapy for gonorrhoea if available.
- First-line diagnostic and treatment regimens are provided. Approaches to the clinical management of recurrent or complicated infections are provided in the full guidelines.
- Detailed recommendations for treatment options of syphilis in non-pregnant and pregnant people in case benzathine benzylpenicillin is unavailable are provided in the full guidelines.
- Human rights (voluntary; never mandatory), offering options linkage to care and service integration are important aspects of successful STI partner services.
- For STI recommendation 5. above on STI screening for sexually active adolescents and young people in high prevalence settings, concrete considerations should be given to the factors of resources and supply chain constraints and epidemic setting

(for settings where prevalence is high). When balancing resources and benefits of screening, female adolescents may be prioritized. This recommendation is applied at a population level prevalence, not by individual risk assessment noting that settings are considered high prevalence if 15-20% combined *Neisseria gonorrhoeae* and *Chlamydia trachomatis* prevalence.

Evidence gaps

- More geographically representative studies and more studies across different populations, including adolescents using pre-exposure prophylaxis (PrEP) for HIV, young key populations, and people with symptomatic STIs are needed.
- Expand youth specific research on use of comparative study designs that assess the best combination of STI partner service options (including social network approaches, provider-led approaches), and which include innovations such as self-tests and virtual tools.
- Explore user values and preferences for alternative options through discrete choice experiments and qualitative research.
- Low-cost point-of-care tests to diagnose gonorrhoea and to determine antibiotic susceptibility are needed to ensure good antibiotic stewardship that conserves treatment options for those with confirmed gonorrhoea and delays the emergence of resistance.
- There is very little research on the values people including young people place on outcomes such as cure, burden of disease, reducing future antibiotic resistance or risk of transmission.



Young people enjoying basketball in Guiuan Eastern Samar © WHO / Francisco Guerrero

Considerations on enabling environments for adolescents and young adults

Across the HIV care continuum, there are important socio-ecological factors that shape adolescents' ability to access and stay retained in services for HIV prevention, testing, and treatment. Importantly, creating enabling environments for adolescents can support their ability to thrive and experience healthy transitions to adulthood. Enabling environments can focus on supporting the individual, as well as focusing on relationships (partners, families, peers, and health workers), communities (building positive and equitable social norms and support), and societies (those promoting the protection of human rights and the dignity and participation of all people, including disadvantaged and vulnerable groups and persons).

While legal provisions, and social and gender norms, govern interactions with the health system for adolescents everywhere, in specific countries and regions, and at specific life stages, adolescents can encounter norms, laws, and policies that inhibit their autonomy and challenge their ability to access valuable health services. Throughout this document, implementation considerations and evidence gaps have explored how such factors may shape how HIV-related interventions can be implemented among adolescents and young adults. In this section, we focus on both guidelines and good practice statements focused on adolescents' socioecological environments, highlighting age-of-consent policies and sensitization to intimate partner violence. The WHO recommendations on adolescent sexual and reproductive health and rights, referenced below, include a compilation of other of sexual and reproductive health and rights issues that may be important for the human rights, health and well-being of adolescents (aged 10-19 years) and the relevant World Health Organization (WHO) guidelines on how to address them.

Key references:

[Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2022.](#)

[Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. Geneva: World Health Organization; 2021.](#)

[Consolidated guideline on sexual and reproductive health and rights of women living with HIV. Geneva: World Health Organization; 2017.](#)

[WHO recommendations on adolescent sexual and reproductive health and rights; 2018.](#)

Young KP face many additional structural barriers and designing effective services need to include additional enabling interventions, including revising laws and policies, addressing stigma and discrimination, empowering communities and addressing violence (refer to chapter 7 of [WHO Consolidated guidelines for key populations 2022](#)

Age-of-consent policies

It is critical to consider age-of-consent policies in supporting adolescents' access to testing and right to care. In settings with a high burden of HIV, there is a need to harmonize age of consent policies to existing needs, to enable more young adults to access these essential services.

Good practice statement: Governments should revisit age-of-consent policies, considering the need to uphold adolescents' rights to make choices about their own health and well-being (with consideration for different levels of maturity and understanding) (9).

Implementation considerations:

- Adolescents under the age of legal majority, and especially those at greater risk of HIV, should neither require the consent nor presence of a parent or guardian (in some cases, a spouse) to access HIV testing services. However, with adolescents' permission and assessment of circumstances, it may be beneficial to engage parents or family members to provide support for disclosure or treatment.
- Social, political, and cultural norms, as well as legal policies, may interfere with the ability of health care providers to implementing health services without the consent or notification of parents or guardians. For instance, among adolescent girls who are under the legal age of majority but who are married, some country policies may require spousal consent to seek services for contraception or HIV testing.
- For adolescents exposed to HIV, requiring parental consent for testing may be a barrier, especially in cases of sexual assault, or where parents/guardians are unavailable. While PEP and HIV testing should proceed in line with national consent policies, adherence support should be prioritized for this group.
- There may be legal barriers to optimal PrEP initiation, implementation, and access linked to age-of-consent laws. These barriers may emerge in settings where human rights are denied for certain groups at substantial risk of HIV, such as sex workers or transgender individuals, as well as where adolescents are unable to access healthcare on their own.
- Importantly, adolescents from key populations, as discussed in Part 5, may face significant marginalization, and even criminalization in certain settings, exacerbated by an inability to access services before the legal age of consent.
- Health providers should be aware of laws in their country setting.

Sensitization to intimate partner violence

Many young women at risk of acquiring HIV, as well as those living with HIV, are at elevated risk of experiencing violence from their partners. Key populations and youth who are gender-diverse are also at greater risk of experiencing gender-based violence. These recommendations draw on indirect evidence to encourage holistic recognition of these risks by service providers and policymakers alike.

WHO recommendation: Policymakers and service providers who support women living with HIV who are considering voluntary HIV disclosure should recognize that many fear, or are experiencing, or are at risk of intimate partner violence (18).

Health-care providers should ask about exposure to intimate partner violence when assessing

conditions that may be caused or complicated by intimate partner violence, to improve diagnosis/identification and subsequent care (18).

Implementation considerations:

- Providers should be trained in first-line support for individuals experiencing violence, especially young people. It is important to recognise that barriers to disclosure for young people are often more complex due to their developmental stage, and peer-based support may be one way to enhance sensitive, responsive approaches.
- Providers should be specially attuned to providing non-stigmatising, confidential care for young people living with HIV experiencing violence.
- Monitoring and documenting incidents of violence can support both evidence for awareness and advocacy as well as inform programme design.

Annex 1: Guidelines and supporting documents informing this document

Guidelines	Year
Consolidated guidelines on differentiated HIV testing services	2024
Guidelines for HIV post-exposure prophylaxis	2024
Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection	2024
Guidelines for the management of asymptomatic sexually transmitted infections	2024
Recommendations for the treatment of <i>Trichomonas vaginalis</i> , <i>Mycoplasma genitalium</i> , <i>Candida albicans</i> , bacterial vaginosis and human papillomavirus (anogenital warts)	2024
WHO consolidated guidelines on tuberculosis: module 6: tuberculosis and comorbidities	2024
WHO implementation tool for pre-exposure prophylaxis of HIV infection: provider module for oral and long-acting PrEP	2024
WHO operational handbook on tuberculosis. Module 6: tuberculosis and comorbidities, second edition. Geneva: World Health Organization; 2024	2024
Updated recommendations for the treatment of <i>Neisseria gonorrhoeae</i> , <i>Chlamydia trachomatis</i> , and <i>Treponema pallidum</i> (syphilis) and new recommendations on syphilis testing and partner services	2024
Updated recommendations on treatment of adolescents and children with chronic HCV infection, and HCV simplified service delivery and diagnostics	2022
WHO guideline on self-care interventions for health and wellbeing	2022
Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations	2022
Guidelines on long-acting injectable cabotegravir for HIV prevention	2022
WHO consolidated guidelines on tuberculosis. Module 5: management of tuberculosis in children and adolescents. Geneva: World Health Organization; 2022	2022
WHO operational handbook on tuberculosis. Module 5: management of tuberculosis in children and adolescents. Geneva: World Health Organization; 2022	2022
Updated recommendations on service delivery for the treatment and care of people living with HIV	2021
Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach	2021
Guidelines for the management of symptomatic sexually transmitted infections	2021
Preventing HIV through safe voluntary medical male circumcision for adolescent boys and men in generalized HIV epidemics: recommendations and key considerations	2020
Consolidated guidelines on HIV testing services	2019
Consolidated guideline on the sexual and reproductive health and rights of women living with HIV	2017

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations: 2016 update. Chapter 7.	2016
Guidelines on post-exposure prophylaxis for HIV and the use of cotrimoxazole prophylaxis for HIV-related infections among adults, adolescents and children: recommendations for a public health approach	2014
HIV and adolescents: guidance for HIV testing and counselling and care for adolescents living with HIV: recommendations for a public health approach and considerations for policymakers and managers	2013
Additional supporting documents	Year
Condoms: Key facts (online resource)	2024
Supporting re-engagement in HIV treatment services	2024
Integrating psychosocial interventions and support into HIV services for adolescents and young adults: technical brief	2023
Providing care to people with advanced HIV disease who are seriously ill	2023
The role of viral suppression in improving individual health and reducing transmission: policy brief	2023
Differentiated and simplified pre-exposure prophylaxis for HIV prevention: update to WHO implementation guidance (technical document)	2022
Human papillomavirus vaccines: WHO position paper (2022 update)	2022
Putting young key populations first — HIV and young people from key populations in the Asia and Pacific region 2022	2022
Package of care for children and adolescents with advanced HIV disease	2020
WHO recommends HIV self-testing – evidence update and considerations for success: policy brief	2019
WHO encourages countries to adapt HIV testing strategies in response to changing epidemic: policy brief	2019
What works for generating demand for HIV testing services: policy brief	2019
Adolescent-friendly health services for adolescents living with HIV: from theory to practice. Technical brief.	2019
Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health-care services for adolescents. Volume 1: Standards and criteria.	2015
WHO recommendations on adolescent sexual and reproductive health and rights	2018

*Technical briefs were referenced for additional contextual information where applicable. Only official guidelines were used to determine the appropriate interventions to include in this document.

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