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# **AIDS Free Framework to accelerate paediatric and adolescent HIV treatment**



WHO/CDS/HIV/18.20

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**Suggested citation.** AIDS Free Framework to accelerate paediatric and adolescent HIV treatment. Geneva, Switzerland: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

**Cataloguing-in-Publication (CIP) data.** CIP data are available at <http://apps.who.int/iris>.

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Printed in Switzerland

# Abbreviations

3TC	Lamivudine
ABC	Abacavir
AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
ART	Antiretroviral treatment
AZT	Azidothymidine (zidovudine)
CBO	Community-based organization
CrAG	Cryptococcal antigen
DTG	Dolutegravir
FBO	Faith-based organization
FDC	Fixed-dose combination
HCW	Health care workers
HIV	Human immunodeficiency virus
LPVr	Lopinavir/ritonavir
MTCT	Mother-to-child transmission
OVC	Orphans and vulnerable children
NRTI	Nucleoside reverse-transcriptase inhibitor
NVP	Neviparine
PLHIV	People living with HIV
POC	Point-of-care
SRH	Sex and reproductive health
TB	Tuberculosis
TLD	Tenofovir-lamivudine-dolutegravir
TWG	Technical working group
VMMC	Voluntary medical male circumcision

## Background

*Start Free, Stay Free, AIDS Free* is a collaborative framework to accelerate the end of the AIDS epidemic among children, adolescents and young women by 2020. It builds on the success of the *Global Plan towards ending new HIV infections among children by 2015 and keeping their mothers alive* and embraces the goals set by United Nations Member States in the 2016 Political Declaration on HIV and AIDS. Every child and adolescent living with HIV should have access to antiretroviral therapy (ART). The AIDS Free component of the framework has the specific goal of ensuring 95% of all children and adolescents living with HIV have access to lifelong ART by the end of 2018 [1.6 million children (aged 0-14) and 1.2 million adolescents (aged 15-19)]. These efforts will need to be sustained until 2020, when it is estimated that treating 95% of all children and adolescents living with HIV will require providing ART to 1.4 million children (aged 0-14) and 1 million adolescents (aged 15-19). These goals go hand in hand with the specific goals set by the Start Free, Stay Free components which focus on preventing new infections in infants, children and adolescents.

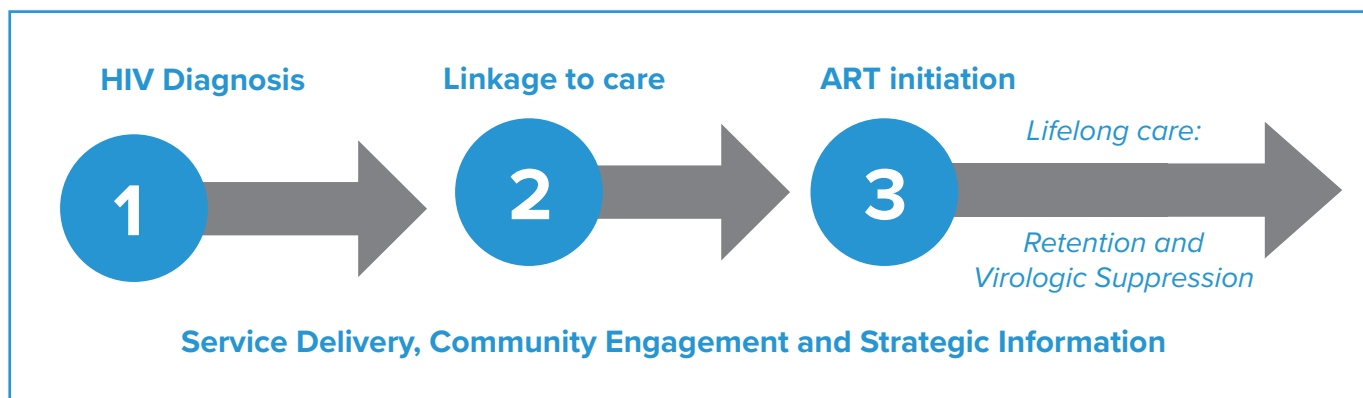
These ambitious targets will require urgent global and country action to identify more children and adolescents living with HIV, saving their lives by starting ART and retaining them in care. Progress continues to be observed in many high burden countries but achieving these targets within this timeframe will require significant acceleration.

### What does acceleration mean?

- Keeping children and adolescents on the political agenda and correcting the misperception that paediatric and adolescent HIV is no longer an issue.
- Mobilizing the resources needed to scale up, adapt and sustain programmes for children and adolescents to better serve needs that change over time and by setting.
- Promoting retargeting exercises at national and subnational levels to establish clear and ambitious goals.
- Strengthening and improving traditional programme elements crucial for identifying, treating and retaining children and adolescents.
- Introducing innovations in a strategic and context-specific manner so that outcomes can be optimized without disrupting existing systems.
- Targeting interventions for maximum impact at national and subnational level in order to adapt programme actions and optimize resource use.
- Continuing critical reviews by maximizing data use to track progress and inform corrective actions.
- Collaborating at the global, regional and national levels to create synergy, since no one will succeed alone and all stakeholders are committed to saving the lives of children and adolescents living with HIV.

Tackling HIV in children and adolescents is not just about identification, treatment and retention in care. It is also about providing a package of care that has to change over time since it supports their physical and neuropsychological development as they survive and thrive into adolescence and adulthood. Acceleration to achieve the fast-track targets will require not just reaching these children and adolescents but also ensuring high-quality comprehensive services are delivered and adapted over time.





While tangible progress is being made in all AIDS Free priority countries, a great deal still needs to be done to achieve the super fast-track targets.

The AIDS Free agenda promotes active and continuous critical review of the implementation of the key programmatic elements that are part of the five focus themes of the AIDS Free component: identification, drug optimization, service delivery, community engagement and strategic information. Critical review should be conducted routinely with the goal of continuously improving each programme element (see box below).

### Critical Review of Programme Implementation

- Policy:** Is there a policy to endorse the implementation of the intervention under review?
- Guidance:** Is there a standardized approach for implementing the intervention? Are there standard operating procedures at every level which set out clear roles and responsibilities for service providers as well as strategic integration between services? Do training packages exist for capacity building of providers?
- Resources:** Are there appropriate human resources, infrastructures and commodities to implement the intervention? If not, is there a plan to mobilize them?
- Scale up:** Is the intervention reaching the target population? Is there a plan to scale up the intervention nationally?
- Quality:** Is the quality of the intervention and its implementation routinely assessed? Is mentorship and supported supervision offered?
- Strategic information:** Are existing monitoring tools able to capture successful implementation of the intervention? Are the tools needed subjects to revision (i.e. age disaggregation)? Does a system exist for periodic analysis of data generated and its adaptation to improve the programme?



***A similar analysis should be carried out and routinely repeated for each intervention***

# Programmatic Areas to be Accelerated

## Identification

### Strengthening existing interventions

#### 1. Scale up and strengthen early infant diagnosis (EID) at 4-6 weeks:

- maximize opportunity for testing (first immunization visit);
- strengthen the capacity of laboratories and referral systems (i.e. human resources<sup>1</sup>, quality management systems, logistics and procurement, sample transport/referral, lab information systems, lab-clinic interface);
- ensure rapid turn-around-time of the results by adoption of technologies (e.g. SMS printers) or by strengthening lab information systems;
- step up ability of health care providers to communicate test results to caregivers;
- ensure confirmatory testing for infants with positive results.



Photo: Eric Bond/EGPAF, 2017

#### 2. Track HIV-exposed infants by retaining mother-infant pairs (MIPs) to ensure appropriate care, provide co-trimoxazole prophylaxis and further testing if they fall sick.

#### 3. Ensure final diagnosis with appropriate testing at the end of the exposure period by retaining mother-infant pairs:

- strengthen community and peer support;
- encourage campaigns to improve maternal and infant survival;
- boost integration of services for MIPs;
- providing differentiated service delivery for pregnant and breastfeeding women and their children.

#### 4. Case finding among children and adolescents: test smart for greater impact:

- prioritize index case testing regardless of national HIV prevalence (i.e. testing should be offered to all children and adolescents living with HIV-infected parents and/or siblings, and to adolescents whose sexual partner is known to have HIV);
- test sick children and adolescents presenting at health facilities, including inpatient wards, TB and malnutrition clinics. Testing of children presenting for general outpatient care should be adapted to the country context;
- optimize strategies to test well children at immunization services and in the community (i.e. orphans and vulnerable children), ensuring age-appropriate testing strategies (i.e. prioritize testing the mothers infants under 18 months, if available) and basing these strategies on context-based information about testing value;
- test adolescents attending antenatal care (ANC), sexual and reproductive health (SRH), harm reduction and voluntary medical male circumcision (VMMC) services.

### Strategic introduction of innovations

#### 1. Adopt virological testing at birth where feasible and most beneficial:

- ensure strengthening of existing EID programme before adding birth testing (increase uptake and guarantee rapid result return);
- create capacity for testing, counselling, and referral at maternity unit by providing training and mentorship;
- guarantee confirmatory testing is undertaken for any infant with a positive result;
- confirm appropriate messages are given to caregivers and infants with negative results are tracked for repeat testing at 6 weeks and beyond as appropriate (i.e. if sick and on completion of breastfeeding);
- assure availability of appropriate ARV formulations to treat neonates at the facility unless reliable referral systems are in place.

## 2. Consider point-of-care (POC) EID introduction and scale up:

- plan for strategic placement (i.e. based on patient volumes, setting prevalence, facility remoteness, use of “hub-and-spoke” model);
- consider strategic selection of platform (i.e. EID alone vs multiplex testing) to maximize access and efficiency;
- optimize the patient flow to maximize the POC approach in the context of multiple use of POC platforms for TB and HIV and to ensure prompt testing and linkage to care;
- integrate service and maintenance, quality assurance and supply chain needs into current plans and laboratory systems (i.e. cartridges, reagents, etc.).

## 3. Innovation to reach adolescents:

- generate demand targeted at different age groups within the adolescent population: mixed media campaigns, use of mobile phone technology, popular events (i.e. sports, performing arts), and peer-to-peer outreach;
- facilitate new opportunities to for testing: mobile, outreach and venue based testing, community and home-based, school- and work-based testing;
- promote self-testing by including adolescents in national implementation plans that consider models for reaching and supporting adolescents for self-testing and link them to confirmatory testing, prevention and treatment services;
- consider technology-supported hotline and referral systems to ensure adolescents have access to care and support.

### Resources

- EID POC: Novel point-of-care tools for early infant diagnosis of HIV (WHO): <http://www.who.int/hiv/pub/toolkits/early-infant-diagnosis-hiv-2017/en/>
- Guidelines on HIV self-testing and partner notification (WHO): <http://www.who.int/hiv/pub/vct/hiv-self-testing-guidelines/en/>
- Consolidated guidelines on HIV testing services (WHO): [http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/179870/1/9789241508926_eng.pdf?ua=1&ua=1)
- PATA Regional Summit Day One – Finding Children with HIV: <http://www.childrenandaids.org/node/438>
- Promising practices and lessons learned from implementation of the ACT initiative: <https://www.pepfar.gov/documents/organization/270700.pdf>
- Adolescent HIV testing, counselling and care online implementation tool (WHO): [http://apps.who.int/adolescent/hiv-testing-treatment/page/HIV\\_Testing\\_and\\_Counselling](http://apps.who.int/adolescent/hiv-testing-treatment/page/HIV_Testing_and_Counselling)
- Reducing age-related barriers to sexual health services (UNICEF): [https://www.childrenandaids.org/sites/default/files/2017-05/SAT%20toolkit\\_Reducing%20Age%20Related%20Sexual%20Barriers%20to%20Sexual%20Health%20Services.pdf](https://www.childrenandaids.org/sites/default/files/2017-05/SAT%20toolkit_Reducing%20Age%20Related%20Sexual%20Barriers%20to%20Sexual%20Health%20Services.pdf)
- Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection 2nd edition (WHO): <http://www.who.int/hiv/pub/arv/arv-2016/en/>
- Unitaid/WHO/Psi HIV Rapid Diagnostic Tests for self-testing , 3rd edition: [https://unitaid.eu/assets/HIV-Rapid-Diagnostic-Tests-for-Self-Testing\\_Landscape-Report\\_3rd-edition\\_July-2017.pdf](https://unitaid.eu/assets/HIV-Rapid-Diagnostic-Tests-for-Self-Testing_Landscape-Report_3rd-edition_July-2017.pdf)

## Drug Optimization

### 1. Adopting WHO-recommended regimens for children and adolescents: ensure age-appropriate optimal regimens, formulations and doses are used. This implies:

- phasing out NNTRI-based regimens and replacing them with optimal regimens and formulations as outlined in the 2018 Optimal Use and Limited-use List formulary;
- in those countries where DTG is being actively promoted, a first-line DTG-based regimen should be provided to all adolescents weighing more than 25 kg (TLD for more than 30 kg), in line with national guidance on DTG use in adolescent girls of child-bearing potential;
- and rapid adoption of upcoming WHO treatment regimen recommendation updates.

Other factors to consider are ensuring functional procurement and supply (quantification, ordering, and distribution), HCW training and continuous mentorship as well as quality of care assessment.

### 2. Prioritizing viral load monitoring for children and adolescents: ensure access to routine viral load monitoring for all children and adolescents and a timely switchover to appropriate second-line regimens when treatment failure is identified.

3. **Set up second- and third-line programmes:** ensure availability of appropriate ARVs and strengthen referral systems to ensure a timely switchover to appropriate regimens. This will require maintenance of functional procurement and supply, specific training and continuous HCW mentorship.
4. **Ensure provision of preventive treatment and care for opportunistic infections** including co-trimoxazole, as well as routine screening and preventive treatment for tuberculosis in all eligible children.
5. **Provide a clinical package for children and adolescents with advanced disease:** ensure children under 5 years as well as older children and adolescents presenting with CD4<200 receive a package of interventions which, depending on age, includes isoniazid-preventive therapy, CrAg and fluconazole prophylaxis, in line with the latest WHO recommendations.

#### Resources

- Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection, 2nd edition (WHO): <http://www.who.int/hiv/pub/arv/arv-2016/en/>
- Fact sheet on Lopinavir and Ritonavir (LPV/r) oral pellets (IATT): <http://www.who.int/hiv/pub/toolkits/iatt-factsheet-lopinavir-ritonavir/en/>
- IATT Paediatric ARV Formulary and Limited-Use List, 2016: <http://apps.who.int/medicinedocs/documents/s23120en/s23120en.pdf>
- Adolescent HIV testing, counselling and care online implementation tool (WHO): <http://apps.who.int/adolescent/hiv-testing-treatment/page/Adherence>
- What's new in adolescent treatment and care: Fact sheet: <http://www.who.int/hiv/pub/arv/arv2015-adolescent-factsheet/en/>
- Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy (WHO): <http://www.who.int/hiv/pub/guidelines/advanced-HIV-disease/en/>
- PATA Regional Summit Day 2. Treating Children with HIV: <http://www.childrenandaids.org/node/439>
- WHO Guidelines for the diagnosis, prevention and management of cryptococcal disease in HIV-infected adults, adolescents and children, 2018: <http://apps.who.int/iris/bitstream/10665/260399/1/9789241550277-eng.pdf?ua=1>
- Latent tuberculosis infection: updated and consolidated guidelines for programmatic management, 2018 (WHO): <http://www.who.int/tb/publications/2018/latent-tuberculosis-infection/en/>

## Service Delivery

### 1. Improve linkages for HIV infected children and adolescents

All HIV-infected children and adolescents should be linked to care immediately and started on ART as soon as possible, depending on their clinical condition.

Strategies to improve linkage include:

- decentralize HIV services;
- integrate HIV services within outpatient and/or MCH



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