# TRANSFORMING VISION INTO REALITY

The Global Alliance Progress Report on Ending AIDS in Children by 2030

#### © Joint United Nations Programme on HIV/AIDS (UNAIDS), 2024

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <u>https://creativecommons.org/licenses/by-nc-sa/3.0/igo/</u>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that UNAIDS endorses any specific organization, products or services. The use of the UNAIDS logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by UNAIDS. UNAIDS is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<u>http://www.wipo.int/amc/en/mediation/rules</u>).

**Suggested citation.** Transforming Vision into Reality: The 2024 Global Alliance Progress Report on Ending AIDS in Children by 2030. Geneva: Joint United Nations Programme on HIV/AIDS; 2024. Licence: CC BY-NC-SA 3.0 IGO.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNAIDS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by UNAIDS in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by UNAIDS to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall UNAIDS be liable for damages arising from its use.

UNAIDS/JC3124E

Cover photo © UNICEF/UN063424/Schermbrucker Malawi

Happiness Mbewe, 18 years old, living with HIV, plays with her children at home in Blantyre, Malawi. She receives HIV-related treatment and care services offered by UNICEF and its partners.



FOREWORD	6
EXECUTIVE SUMMARY	8
PROGRESS TOWARDS 2030 MILESTONES AND THE IMPACT OF THE GLOBAL ALLIANCE	NRY 8   DS 2030 MILESTONES AND THE IMPACT OF THE GLOBAL ALLIANCE 14   mic among children and adolescents: a global update 17   Iar 1: early testing and optimized treatment for infants, children and adolescents 24   Iar 2: closing the treatment gap for pregnant and breastfeeding women with HIV 40   ical transmission 49   Iar 3: preventing new HIV infections among pregnant and breastfeeding dwomen 49   Iar 4: addressing rights, promoting gender equality and overcoming access barriers 54   FACT SHEETS   public of the Congo 60   60 60   72 76
The HIV epidemic among children and adolescents: a global update	17
Progress in pillar 1: early testing and optimized treatment for infants, children and adolescents	24
<b>Progress in pillar 2:</b> closing the treatment gap for pregnant and breastfeeding women with HIV to prevent vertical transmission	40
<b>Progress in pillar 3:</b> preventing new HIV infections among pregnant and breastfeeding adolescents and women	49
Progress in pillar 4: addressing rights, promoting gender equality and overcoming access barriers	54
CONCLUSION	58
ANNEX: COUNTRY FACT SHEETS	59
Angola	
Cameroon	
Côte d'Ivoire	
Democratic Republic of the Congo	
Kenya	
Mozambique	
Nigeria	
South Africa	
Uganda	80
United Republic of Tanzania	84
Zambia	88
Zimbabwe	92

#### TABLES

	<b>Table 1.</b> Progress in reducing new HIV infections and AIDS-related deaths among children (0–14 years old) and adolescents (15–19 years old), global and in Global Alliance countries, 2015, 2021 and 2023	9
	<b>Table 2.</b> Progress towards 2030 milestones and the impact of the Global Alliance: global and in Global Alliance countries, 2015, 2021 and 2023	12
FIG	GURES	
	<b>Figure 1.</b> Number of new HIV infections among children (0–14 years old) versus scenario without antiretroviral therapy available to pregnant and breastfeeding women, global, 2000–2023	9
	<b>Figure 2.</b> Numbers of children living with HIV 0–14 years old, new HIV infections and AIDS-related deaths among children living with HIV 0–14 years old in Global Alliance countries with available data, 2023	16
	<b>Figure 3.</b> Numbers of children living with HIV 0–14 years old: global and Global Alliance countries, 1990–2023	17
	<b>Figure 4.</b> Numbers of children living with HIV 0–19 years old by five-year age group: global, 1990–2023	19
	<b>Figure 5.</b> Numbers of children living with HIV 0–19 years old by five-year age group: Global Alliance, 1990–2023	19
	<b>Figure 6.</b> Numbers of new HIV infections among children 0–14 years old: global and Global Alliance countries, 1990–2023	23
	<b>Figure 7.</b> Numbers of AIDS-related deaths among children 0–14 years old: global and Global Alliance countries, 1990–2023	23
	<b>Figure 8.</b> Percentage of HIV-exposed children tested for HIV by two months of age: global and Global Alliance countries, 2011–2023	27
	<b>Figure 9.</b> Full immunization coverage: proportion of children 12–23 (or 24–35) months old vaccinated with eight essential antigens (BCG, polio 1-3, DPT 1-3, measles), Global Alliance countries with available data	30
	<b>Figure 10.</b> HIV testing and treatment cascade for children (0–14 years old) and adults (15+ years old): global, from 2021 to 2023	31
	<b>Figure 11.</b> HIV testing and treatment cascade for children (0–14 years old) and adults (15+ years old): Global Alliance, from 2021 to 2023	31
	<b>Figure 12.</b> Antiretroviral therapy coverage trends for children 0–14 years old and adults (15+ years old) living with HIV, global and Global Alliance, 2015–2023	32
	<b>Figure 13.</b> Antiretroviral therapy coverage gaps among children living with HIV 0–14 years old by five-year age group: global and Global Alliance countries, 2023	33
	<b>Figure 14.</b> Comparison of antiretroviral therapy coverage between children 0–14 years old and adults 15+ years old living with HIV: Global Alliance countries with available data, 2021 and 2023	34
	Figure 15. Comparison of viral load suppression between children 0–14 years old and adults	35

15+ years old living with HIV: Global Alliance countries with available data, 2021 and 2023

<b>Figure 16.</b> New HIV infections among children 0–14 years old and antiretroviral therapy coverage among pregnant and breastfeeding women globally, 2010–2023	42
<b>Figure 17.</b> New HIV infections among children 0–14 years old and antiretroviral therapy coverage among pregnant and breastfeeding women in Global Alliance countries, 2010–2023	42
<b>Figure 18.</b> Vertical transmission rates: Global Alliance countries with available data, 2015, 2021 and 2023	44
<b>Figure 19.</b> Number of children acquiring HIV from vertical transmission and underlying factors: global and in Global Alliance countries, 2023	45
<b>Figure 20.</b> Numbers of new HIV infections among adolescent girls and young women (15–24 years old): global and Global Alliance countries, 1990–2023	50
<b>Figure 21.</b> Condom use during high-risk encounters with non-marital, non-cohabitating partners among women: percentage reporting condom use in the past 12 months in Global Alliance countries with available data	52
<b>Figure 22.</b> Condom use during higher-risk sex (multiple partners) among women: percentage of women 15–49 years old who had multiple partners in the past 12 months and reported condom use in their last sexual encounter: Global Alliance countries with available data	52
<b>Figure 23.</b> Intimate partner violence: percentage of women who are afraid of their husband or partner [most of the time] and have experienced physical or sexual violence by their husband or partner among ever-married or ever-partnered women: Global Alliance countries with available data	55
<b>Figure 24.</b> Legal2.0: WBL 2024, selected data for the Safety legal indicator: Global Alliance countries with available data	56
<b>Figure 25.</b> Female literacy rates: percentage of literate women: Global Alliance countries with available data	57

#### BOXES

Box 1. Empowering youth: the impact of innovative health models in Global Alliance countries	20
Box 2. Closing the testing gap among children in Nigeria	27
<b>Box 3.</b> United Republic of Tanzania drives improvements in early infant diagnosis and timely linkage to services	29
<b>Box 4.</b> Mozambique provides a roadmap for optimizing HIV treatment and improving viral load suppression among children living with HIV	37
<b>Box 5.</b> Transforming HIV care for children: the impact of clinic–community collaboration in Johannesburg, South Africa	38
<b>Box 6.</b> Closing the testing and treatment gap for pregnant and breastfeeding women living with HIV in Kenya	43
Box 7. Empowering communities to lead on efforts to prevent new infections among children	47
Box 8. Engaging women and girls: a critical element of success	53

# FOREWORD



#### WINNIE BYANYIMA

**UNAIDS Executive Director** 

We can end AIDS in children.

With the medicines and science available, we can ensure that all babies are born – and remain – HIV-free, and that all children who are living with HIV get on and stay on treatment.

Yet shockingly, whilst roughly three-quarters of adults living with HIV globally are on lifesaving antiretroviral therapy, only about half of children are. If they don't receive treatment, almost half of children living with HIV will die before the age of two.

We can be inspired by the progress advanced by the coming together of communities, governments, the UN and partners in the Global Alliance to End AIDS in Children. Spearheading the Alliance are 12 African countries that, together, are home to two-thirds of new HIV infections and AIDS-related deaths in children. They have united in their commitment to end AIDS in children by 2030, working to improve access to treatment and prevention services for children and for pregnant and breastfeeding women, and to address the lack of rights that hinder young women's access to health care.

The data included in this report shows how the Global Alliance is saving and transforming children's lives. It shows how globally new HIV infections in children are decreasing and are decreasing relatively faster in Global Alliance countries than outside. In several Global Alliance countries, more than 90% of pregnant and breastfeeding women were on antiretroviral therapy in 2023, though other countries lagged behind. The number of adolescent girls and young women who acquire HIV each year has decreased, and the number of children who die from AIDS-related causes each year has also decreased. But, as the report sets out, progress is not fast enough and not inclusive enough. That is why it also points to where, and how, leaders need to accelerate progress to reach agreed and collective goals. There is an urgent need to increase access to HIV prevention, testing, treatment, and comprehensive care services for infants, children, and adolescents. This requires stepping up action on preventing and detecting new HIV infections among pregnant and breastfeeding mothers and ensuring treatment, and support, for all pregnant and breastfeeding mothers who are living with HIV. It requires tackling gender-based violence and promoting gender equality to protect young women's health and safety.

In this report you will find accounts of inspiring and innovative community and government programmes across Global Alliance countries. These include peer education, early infant diagnosis, and programmes to increase children's access to essential medicines.

The report shows how a range of Global Alliance countries have succeeded in overcoming significant obstacles to enhance the health and well-being of children, adolescents, and young women.

It is time now to apply all lessons to all Global Alliance countries.

The death of any child from AIDS-related causes is not only a tragedy, but also an outrage. Where I come from, *all* children are *our* children. We must be the generation that ends AIDS in children. This report shows what we can achieve, together, and guides us how.

# EXECUTIVE SUMMARY

Ending AIDS among children is feasible, but it is a critical piece of unfinished business in the global fight against HIV.

The Global Alliance to End AIDS in Children (Global Alliance), launched in July 2022, works with women living with HIV and their families, national governments and partners to mobilize leadership, funding and action to end AIDS in children as a public health threat by 2030. The Global Alliance supports efforts to end AIDS in children across 12 countries, which together account for 66% of new HIV infections and 64% of AIDS-related deaths among children.

This status report shows how far we have come—and how much further we must go—if we hope to meet the global commitments to end AIDS in children. It offers a snapshot of global progress and permits an early assessment of the impact of the Global Alliance's work. This report highlights the transformative work that is being undertaken in Global Alliance countries to accelerate gains towards ending AIDS in children, underscoring the urgent need to apply good practices, emerging innovations and critical lessons learned to overcome the barriers that slow progress.

### Important progress is being made towards ending AIDS in children globally.

The number of new infections among children (0–14 years old) living with HIV is declining as a result of the impact of HIV prevention efforts. Globally, since 2000, vertical transmission programmes have averted an estimated 4 million [2.9 million–5.8 million] infections among children 0–14 years old (Figure 1).

The number of new HIV infections among children in 2023 (an estimated 120 000 children [83 000–170 000] globally, including 77 000 [55 000–110 000], or 66%, in the Global Alliance countries) represents a 38% decline since 2015 and a 17% decline since 2021. The number of older adolescents (15–19 years old) who acquired HIV in 2023 (an estimated 140 000 [39 000–240 000] adolescents, including 77 000 [14 000–130 000], or 56%, in the Global Alliance countries) represents a 33% decline since 2015 and an 11% decline since 2021 (Table 1).

#### Globally, since 2000, vertical transmission programmes have averted an estimated 4 million infections among children 0–14 years old

600 000 500 000 Number of new HIV infections 400 000 4 million new HIV infections 300 000 averted among children 200 000 100 000 0 2000 2003 2006 2009 2012 2015 2018 2021 2023 - Current status with antiretroviral therapy available to pregnant and breastfeeding women - Scenario if no antiretroviral therapy had been available to pregnant and breastfeeding women

**Figure 1** Number of new HIV infections among children (0–14 years old) versus scenario without antiretroviral therapy available to pregnant and breastfeeding women, global, 2000–2023

Source: UNAIDS special analysis of epidemiological estimates, 2024.

AIDS-related deaths among children (0–14 years old) have decreased. In 2023, an estimated 76 000 children (0–14 years old) [53 000–110 000] died from AIDS-related causes, including 49 000 [34 000–66 000], or 64%, in the Global Alliance countries. Globally, this represents a 43% decline since 2015 and a 14% decline since 2021 (Table 1).

### AIDS-related deaths among children (0–14 years old) have decreased.

Globally, the proportion of HIV-exposed children who receive HIV testing within the first two months of life has increased from 50% [43-61%] in 2015 to 67% [58-83%] in 2023. The transition to dolutegravir (DTG)-based regimens, along with enhanced efforts in adherence and retention, is helping to improve rates of viral suppression. Further innovation—including through improved service delivery and emerging biomedical approaches (such as administration of long-acting injectable options)—has the potential to increase children's rates of HIV viral suppression.

**Table 1** Progress in reducing new HIV infections and AIDS-related deaths among children (0–14 years old) and adolescents (15–19 years old), global and in Global Alliance countries, 2015, 2021 and 2023

PROGRESS IN REDUCING NEW HIV INFECTIONS AND AIDS-RELATED DEATHS		2015	2021	2023	PERCENTAGE CHANGE FROM 2021 TO 2023
New HIV infections					
	Global	<b>190 000</b> [140 000–270 000]	140 000 [100 000–200 000]	120 000 [83 000–170 000]	-17%
Children (0–14 years old)	Global Alliance	120 000 [89 000–180 000]	94 000 [68 000–130 000]	<b>77 000</b> [55 000–110 000]	-18%
AIDS-related deaths					
	Global	130 000 [93 000–190 000]	<b>89 000</b> [62 000–120 000]	76 000 [53 000–110 000]	-14%
Children (0–14 years old)	Global Alliance	85 000 [60 000–120 000]	57 000 [40 000–78 000]	<b>49 000</b> [34 000–66 000]	-15%
New HIV infections					
Adolescents (15–19 years old)	Global	200 000 [58 000–350 000]	150 000 [43 000–260 000]	140 000 [39 000–240 000]	-11%
	Global Alliance	130 000 [24 000–220 000]	92 000 [17 000–160 000]	77 000 [14 000–130 000]	-16%
AIDS-related deaths					
	Global	18 000 [13 000–24 000]	16 000 [11 000–21 000]	14 000 [10 000–19 000]	-9%
Adolescents (15–19 years old)	Global Alliance	12 000 [8800–15 000]	11 000 [8100–14 000]	10 000 [7400–13 000]	-8%

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

Several Global Alliance countries have achieved robust coverage of lifelong antiretroviral therapy among pregnant and breastfeeding women living with HIV, exceeding 90%, with Uganda nearing 100%, United Republic of Tanzania at 98% and South Africa at 97%. A subset of countries range between 80% and 90% coverage, including Mozambique at 90%, Zambia at 90%, Angola at 89%, Kenya at 89%, Zimbabwe at 88% and Côte d'Ivoire at 84%. Efforts to prevent vertical HIV transmission are a key element of the triple elimination initiative, which aims to prevent vertical transmission of HIV, syphilis and hepatitis B.

Several Global Alliance countries have achieved robust coverage of lifelong antiretroviral therapy among pregnant and breastfeeding women living with HIV, exceeding 90%, with Uganda nearing 100%, United Republic of Tanzania at 98% and South Africa at 97%. Intensified efforts to curb HIV infections have helped to reduce the number of adolescent girls and young women (15–24 years old) who acquired HIV in 2023 globally and in Global Alliance countries (Table 2). Strategies being rolled out to strengthen HIV prevention among pregnant and breastfeeding adolescents and women include partner testing, HIV self-testing, preexposure antiretroviral HIV prophylaxis (PrEP) and various social, structural and behavioural interventions.

Progress towards eliminating AIDS in children tends to be greater in Global Alliance countries than in non-Global Alliance countries. Since 2021, declines in new HIV infections among children are similar in Global Alliance countries (18%) and globally (17%), as are declines in AIDS-related deaths among children (15% versus 14%). Likewise, since 2021, the reduction in new HIV infections among older adolescents (15–19 years old) has been greater in Global Alliance countries, with a 16% decline, versus the global average of 11% (Table 1).

Global Alliance countries in 2023 had higher coverage of early infant diagnosis (71% [62–88%]) than the world as a whole (67% [58-83%]), and coverage of antiretroviral therapy for pregnant and breastfeeding women living with HIV in 2023 was modestly higher in Global Alliance countries (85% [74% to >98%]) than the global average (84% [72% to >98%]). Improvements in Global Alliance countries are the result of intensified national leadership and commitment as well as the collaboration of diverse partners to support innovation and the scale-up of proven tools and strategies.

Improvements in Global Alliance countries are the result of intensified national leadership and commitment as well as the collaboration of diverse partners to support innovation and the scale-up of proven tools and strategies.

> Global Alliance countries are innovating to overcome barriers and accelerate progress towards ending AIDS in children. To reach infants and children who were not identified during routine early infant diagnosis with additional opportunities to test for HIV, South Africa, a Global Alliance country, now has a policy of universal HIV testing of children at 18 months, regardless of documented HIV exposure. Global Alliance countries are applying both service and technological innovations to reduce the rate of vertical transmission, including mobilizing mentor mothers, integrated and coordinated care for mother–baby pairs and more frequent viral load screening of mothers and also beginning planning for the potential future scale-up of long-acting injectable antiretroviral medicines to improve retention in care. Case studies in this report highlight ways that Global Alliance countries are leveraging innovation to close critical service gaps.

But progress is far too slow, with an array of barriers impeding efforts to end AIDS in children.

Only 48% of children living with HIV globally and in Global Alliance countries achieved viral load suppression, versus 73% of adults globally and 79% in Global Alliance countries.

> Despite the progress achieved, neither the world nor Global Alliance countries are currently on track to reach the HIV-related commitments for children and adolescents, and the pace of progress in preventing new HIV infections and AIDS-related deaths among children has slowed in recent years (Table 2).

#### An estimated 590 000 children globally were not receiving life-saving treatment in 2023, including 400 000 (or 68%) living in Global Alliance countries.

Although early infant diagnosis coverage is higher in Global Alliance countries than globally, only four Global Alliance countries have achieved at least 80% coverage—South Africa (90% [75–99%]), Kenya (87% [76–99%]), Zimbabwe (84% [75–99%]) and Uganda (82% [74–95%])— while some have much lower rates, including Nigeria (18% [16–22%]) and Angola (14% [11–17%]).

In 2023, only 57% [41–75%] of children living with HIV were receiving life-saving treatment versus 77% [62–90%] of adults globally (Table 2). An estimated 590 000 [430 000–920 000] children globally were not receiving life-saving treatment in 2023, including 400 000 [300 000–640 000] (or 68%) living in Global Alliance countries. Among these children, 60% were older than five years.

Only 48% [39–60%] of children living with HIV globally and in Global Alliance countries achieved viral load suppression, versus 73% [66–81%] of adults globally and 79% [72–87%] in Global Alliance countries. This is well short of the 2023 goal of achieving 75% viral suppression among children receiving HIV treatment, towards the 2025 target of 90% viral suppression (Table 2).

Key factors contributing to continued new infections among children include challenges relating to maternal access to antiretroviral therapy during pregnancy or breastfeeding, HIV transmission during pregnancy or breastfeeding, cessation of antiretroviral therapy during pregnancy or breastfeeding and the failure to achieve viral suppression. Key factors contributing to continued new infections among children include challenges relating to maternal access to antiretroviral therapy during pregnancy or breastfeeding, HIV transmission during pregnancy or breastfeeding, cessation of antiretroviral therapy during pregnancy or breastfeeding and the failure to achieve viral suppression.

Over the past decade, both globally and in Global Alliance countries, the proportion of pregnant and breastfeeding women living with HIV who access antiretroviral therapy has remained stagnant—reaching 84% globally and 85% in Global Alliance countries in 2023 (Table 2). Although this notable coverage has reduced the number of new HIV infections among children, it falls short of the goal of ensuring universal (100%) coverage.

Given the breastfeeding period, the vertical transmission is not declining and exceeds 20% in two Global Alliance countries—Nigeria (23% [21–26%]) and the Democratic Republic of the Congo (26% [22–30%]).

#### Given the breastfeeding period, the vertical transmission is not declining and exceeds 20% in two Global Alliance countries—Nigeria (23%) and Democratic Republic of the Congo (26%).

Gaps in HIV prevention among reproductive-age women also slow progress towards ending AIDS in children. The number of adolescent girls and young women (15–24 years old) who were newly infected with HIV in 2023 (210 000 [130 000–280 000]) is more than four times higher than the global goal of reducing the annual number of new infections in this population to less than 50 000 (Table 2).

Gender inequalities increase women's vulnerability to HIV and diminish their ability to access essential services. Globally, nearly one in three women have encountered some form of violence during their lifetime, with adolescent girls and young women disproportionately affected by intimate partner violence. The four Global Alliance countries with available data are not currently on track to achieve the target of ensuring that by 2025 less than 10% of women, key populations and people living with HIV experience gender-based inequalities and gender violence.

#### Reforms in laws and policy frameworks are essential to mitigate the vulnerability of women and girls to violence and human rights violations.

Reforms in laws and policy frameworks are essential to mitigate the vulnerability of women and girls to violence and human rights violations. Three Global Alliance countries lack legislation addressing various forms of domestic violence, nine lack laws or provisions criminalizing marital rape without conditions and eight countries allow exceptions to age-of-marriage laws. These legal reforms should be accompanied by investments in girls' education and initiatives aimed at reshaping inequitable gender norms.

**Table 2** Progress towards 2025 Global Targets and the impact of the Global Alliance: global and in Global Alliancecountries, 2015, 2021 and 2023

PROGRESS TOWARDS 2030 MILESTONES		2015	2021	2023	2025 TARGET
Ensure that all pregnant and breastfeeding	women living with H	IIV are receiving li	felong antiretrov	viral therapy	
Antiretroviral therapy coverage among	Global	81% [70% to >98%]	83% [70% to >98%]	84% [70% to >98%]	100%
pregnant and breastfeeding women	Global Alliance	86% [70% to >98%]	85% [70% to >98%]	85% [70% to >98%]	100 %
Reduce the number of adolescent girls and y	young women acqui	ring HIV to less th	an 50 000 by 20	25	
Adolescent girls and young women	Global	<b>330 000</b> [220 000–450 000]	240 000 [150 000–320 000]	210 000 [130 000–280 000]	
(15–24 years old) newly infected with HIV	Global Alliance	<b>220 000</b> [140 000–300 000]	160 000 [97 000–210 000]	130 000 [81 000–170 000]	50 000
Ensure that 90% of people living with HIV a	re accessing treatme	ent			
Children living with HIV (0–14 years old)	Global	40% [28–52%]	54% [28–52%]	57% [28–52%]	<b>90</b> %
receiving treatment	Global Alliance	41% [28–52%]	54% [28–52%]	57% [28–52%]	7076
Ensure that 90% of people living with HIV a	re accessing treatme	ent			
Adolescents (15–19 years old) who are on	Global	30%	55%	64%	<b>90</b> %
treatment	Global Alliance	32%	58%	68%	
Ensure that 75% of all children living with H	IV have suppressed	viral loads by 202	3 and 86% by 20	)25	
Children living with HIV (0–14 years old) who have suppressed viral loads	Global	<b>26%</b> [22–33%]	43% [22–33%]	48% [22–33%]	86%
	Global Alliance	<b>27%</b> [22–33%]	43% [22–33%]	48% [22–33%]	

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

Although it is clearer than ever that we can end AIDS in children, it is equally clear that critical gaps are undermining our efforts. It will be essential to support continued gains in high-performing countries while drawing on the contributions of diverse partners to focus on addressing the well-documented barriers to swifter progress. Leveraging technological advances and sharing lessons learned on strategies for overcoming service bottlenecks will be vital to success.

It will be essential to support continued gains in high-performing countries while drawing on the contributions of diverse partners to focus on addressing the well-documented barriers to swifter progress. Leveraging technological advances and sharing lessons learned on strategies for overcoming service bottlenecks will be vital to success.

# PROGRESS TOWARDS 2030 MILESTONES AND THE IMPACT OF THE GLOBAL ALLIANCE

Markedly reducing the HIV burden among children represents one of the most important accomplishments of the global HIV response. Since 2010, the annual number of children newly infected with HIV has declined by 62%, while AIDS-related deaths among children have fallen by 67% (Table 1). The number of children who acquired HIV in 2023 (120 000 [83 000–170 000]) was the fewest since the late 1980s.

### The number of children who acquired HIV in 2023 (120 000) was the fewest since the late 1980s.

Despite these gains, the effort to end AIDS among children is far from over, representing a key piece of unfinished business in the global fight against AIDS. Globally, only 57% [41–75%] of children living with HIV received life-saving treatment in 2023 versus 77% [62–90%] among adults living with HIV—a gap that is widening. The pace of progress in preventing new HIV infections and AIDS-related deaths among children has slowed in recent years, and the world as a whole is not currently on track to eliminate vertical HIV transmission or to meet global targets for treatment and viral suppression among children (Tables 1 and 2). In 2023, only 48% [39–60%] of children living with HIV had suppressed viral loads well short of the global target of 75% viral suppression coverage (Tables 1 and 2).

Marshalling the world's resources, expertise and political commitment to end AIDS among children is the purpose of the Global Alliance to End AIDS in Children (Global Alliance) (1). The Global Alliance is a strategic and action-oriented alliance of multiple stakeholders at the national, regional and global levels that works with women living with HIV and their families, national governments and partners to mobilize leadership, funding and action to end AIDS in children by 2030. The Global Alliance focuses its work on children (0–14 years old) and older adolescents (15–19 years old) living with HIV, infants and children exposed to HIV, pregnant and breastfeeding women and girls who are living with HIV (including marginalized and key populations) and pregnant and breastfeeding women and girls who are HIV-negative but at risk of acquiring HIV.

Through intensified advocacy, a focus on addressing inequities, promotion of innovation and technical excellence and mutual accountability, the Global Alliance gives priority to action across four pillars:

- 1. Accessible testing, optimized treatment and comprehensive care for infants, children and adolescents living with and exposed to HIV.
- 2. Closing the treatment gap for pregnant and breastfeeding girls and women living with HIV and optimizing continuity of treatment.
- 3. Preventing and detecting new HIV infections among pregnant and breastfeeding adolescent girls and women.
- 4. Addressing rights, gender equality and the social and structural barriers that hinder access to services.

Since its launch in July 2022, the Global Alliance has worked to catalyse progress towards ending AIDS in children in 12 focus countries: Angola, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Kenya, Mozambique, Nigeria, South Africa, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.



These 12 countries accounted for 66% of new HIV infections among children in 2023 and for 64% of AIDS-related deaths in children. Hopes for ending AIDS in children worldwide depend in large measure on accelerating progress in these 12 countries (Figure 2).<sup>1</sup>

This report offers a comprehensive summary of efforts to end AIDS in children in the 12 countries that have been the focus of the Global Alliance's work in its first three years. It aims to increase global action and commitment on ending AIDS in children and to summarize early evidence of the added value of the Global Alliance. The report highlights key achievements, identifies critical gaps and distils available evidence on optimal strategies to address ongoing challenges. Drawing from countryreported data on Global AIDS Monitoring indicators as well as UNAIDS 2024 epidemiological estimates, the report offers insights regarding the gaps and patterns seen in the data, with an eye towards accelerating progress towards ending AIDS in children.

<sup>1</sup> HIV estimates for Cameroon were not concluded by the time this report was published. However, country-informed estimates for Cameroon are included in the total estimates for the global, regional and Global Alliance categories.

Following a review of the status of the HIV epidemic among children and adolescents, the report examines progress in each of the four pillars of the Global Alliance, with attention to HIV prevention and treatment targets related to children set out in the Global AIDS Strategy 2021–2026 (2) and the 2021 Political Declaration on HIV and AIDS (3). Snapshots of progress in each of the 12 countries are included as annexes to this report. In addition to providing a snapshot in time based on the latest available evidence, the report also examines trends over time, identifying where progress is accelerating, stagnating or deteriorating.

A key message from this report is that it is now clearer than ever that we can end AIDS among children. In each of the pillars of the Global Alliance's work, multiple countries have made transformative progress over the last two years to overcome obstacles and to enhance the health and well-being of children, adolescents and their mothers and families. Now we must take these lessons, sharpen and intensify our efforts and apply those lessons across all 12 Global Alliance countries.

**Figure 2** Numbers of children living with HIV 0–14 years old, new HIV infections and AIDS-related deaths among children living with HIV 0–14 years old in Global Alliance countries with available data, 2023



Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

To end AIDS in children, the engagement, coordination and mutual accountability of all key stakeholders—governments, international organizations, communities and civil society—is essential. As the gaps and factors that show progress vary across settings, effectively leveraging countryand context-specific data is critically important to overcome these obstacles.

#### In 2023, an estimated 1.4 million children were living with HIV, including 930 000, or 68%, in the Global Alliance countries.

### The HIV epidemic among children and adolescents: a global update

In 2023, an estimated 1.4 million [1.1 million–1.7 million] children were living with HIV, including 930 000 [760 000–1.2 million], or 68%, in the Global Alliance countries (Figure 3). Three countries—Nigeria (17%), South Africa (17%) and Mozambique (16%)—account for nearly half of all children living with HIV in the 12 Global Alliance countries in 2023. As a result of the positive impact of prevention services and as children age into adulthood, the number of children living with HIV (0–14 years old) has continued to decline.



Figure 3 Numbers of children living with HIV 0–14 years old: global and Global Alliance countries, 1990–2023

UNAIDS epidemiological estimates, 2023 (https://aidsinfo.unaids.org).

Globally, an estimated 1.0 million [750 000–1.3 million] older adolescents (15–19 years old)<sup>2</sup> [680 000–1.3 million], including 680 000 [500 000–820 000] in the 12 Global Alliance countries, were living with HIV in 2023. An estimated 140 000 [39 000–240 000] adolescents were newly infected with HIV, with 77 000 [14 000–130 000], or 56%, in the Global Alliance countries.<sup>3</sup> Globally, more than 70% of the new HIV infections among older adolescents were among adolescent girls, with the remaining 30% among adolescent boys. In the 12 Global Alliance countries, 85% of new HIV infections among older adolescent girls, with the remaining 15% among adolescent boys.

#### Globally, an estimated 1.0 million older adolescents (15–19 years old), including 680 000 in the 12 Global Alliance countries, were living with HIV in 2023.

In 2023, an estimated 14 000 [10 000–19 000] older adolescents (15–19 years old) died from AIDS-related causes, with 10 000 [7400–13 000], or 71%, in the Global Alliance countries. Globally, this represents a 22% decline since 2015 and a 9% decline since 2021, and a 15% reduction in Global Alliance countries, with an 8% decline since 2021.

As the annual number of children acquiring HIV decreases and existing children living with HIV grow older, the age distribution of children and older adolescents (0–19 years old) living with HIV has evolved over time (Figures 4 and 5). In 2023, infants and very young children (0–4 years old) comprised a declining portion, representing 16% globally and 17% in Global Alliance countries, whereas older children 5–14 years old accounted for a similar proportion of 41% globally and 42% in Global Alliance countries. On the other hand, older adolescents (15–19 years old) living with HIV represented 43% globally and 42% in Global Alliance countries in 2023; many of these adolescents acquired HIV through sexual transmission instead of vertical transmission (Box 1).

<sup>2</sup> Adolescents are 10–19 years old. This report specifically focuses on older adolescents (15–19 years old) to distinguish them from younger adolescents (10–14 years old, with children being defined here as 0–14 years old). Older adolescence is a period when many people become sexually active and older adolescent girls and young women become pregnant.

<sup>3</sup> The modelled estimates of the numbers of older adolescents have considerable uncertainty bounds. Changes over two years should only be considered as indicative.

#### GLOBAL



Figure 4 Numbers of children living with HIV aged 0–19 years old by five-year age group: global, 1990–2023

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

#### **GLOBAL ALLIANCE**



Figure 5 Numbers of children living with HIV 0–19 years old by five-year age group: Global Alliance, 1990–2023

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

#### **READY+ & ZVANDIRI**

Empowering youth: the impact of innovative health models in Global Alliance countries Innovative models and efforts to improve the health and well-being of young people, placing young people at the centre of the HIV response, are having a positive impact in Global Alliance countries.

The READY+ model, which is now being implemented in seven countries (Angola, Eswatini, Malawi, Mozambique, United Republic of Tanzania, Zambia and Zimbabwe), is a youth-centred comprehensive model that integrates peer support and is underscored by the meaningful and ethical engagement of young people. The model not only educates and mobilizes young people to make informed decisions about their health and rights and to secure livelihoods, but also intervenes to ensure the readiness of other key stakeholders—including parents and caregivers, service providers and policy decision-makers—to take action that supports the resilience, empowerment, bodily autonomy, freedom and agency of young people. Aligned with the Global Alliance priorities, READY+ also provides support for young mothers and their babies, including ensuring that young moms receive tailored peer support, and that mother and baby pairs are linked to care and support.

Starting with government buy-in (via a memorandum of understanding), READY+ is implemented by consortium partners (Frontline AIDS, PATA, REPSSI, Y Plus Global). A key focus of the READY+ model is increasing the accountability of decision-makers and partners to enhance gender equality and protect, promote and fulfil the sexual and reproductive health and rights of adolescents and young people living with HIV. READY+ has transformed clinics that previously had no adolescent services to develop designated space to serve and offer adolescent-friendly services, with a focus on health-care provider training and capacity building for delivering rights-based, stigma-free HIV and sexual and reproductive health services. Through the READY+ scorecard, young people provide ongoing feedback that drives improvements in service delivery. Through the READY Academy, young people are provided with structured learning opportunities and seed funding for implementing youth-led community initiatives.

An evaluation of the first four years of READY+ (2016–2020) found that every US\$ 1 invested generated US\$ 1.81 in social returns. The study further highlighted the sustainability of the effects of READY+, projecting that the social return on each dollar invested could grow to US\$ 2.65 over the next five years, even without any further interventions. The first phase of READY+ (2016–2021) reached more than 30 000 young people, and the second phase (2021–2026) will reach more than 41 000 young people across the Global Alliance countries (5).

Zvandiri is one programme implementing the READY+ model, scaling up peer-led, mental health and psychosocial support services for children and adolescents living with HIV. Zvandiri has mobilized 5500 trained, supervised peer counsellors to reach more than 190 000 children and adolescents living with HIV with essential support services. Expanded in phases since 2016, Zvandiri currently operates in eight of the 12 Global Alliance countries (Angola, Côte d'Ivoire, Mozambique, South Africa, Uganda, United Republic of Tanzania, Zambia and Zimbabwe). Zvandiri has developed guidelines, tools and systems to embed peer counsellors living with HIV in health-care facilities and community systems. Peer counsellors are trained and supervised to provide holistic support to children and young people living with HIV (0–24 years old), addressing such needs as HIV testing, disclosure, adherence, retention and viral suppression, eliminating vertical HIV transmission, mental health, PrEP, sexual and reproductive health and rights, cervical cancer, substance use and tuberculosis.

Evaluations and programme data, including a cluster-randomized controlled trial, confirm that the Zvandiri approach improves the quality of adolescent-friendly services, enhances the uptake of HIV testing, supports continuity of treatment, increases rates of viral suppression and improves mental health outcomes of children and adolescents living with HIV (4). South–South, government-led partnerships have enabled cross-country learning and sharing of best practices among the eight participating countries.

Globally, programmes for preventing the transmission of HIV during pregnancy, birth and breastfeeding have averted an estimated 4 million infections among children (0–14 years old) since 2000 (Figure 1). However, coverage of services to prevent vertical transmission has plateaued both globally and in Global Alliance countries, with rates at 84% [72% to >98%] globally and 85% [74% to >98%]in Global Alliance countries in 2023 (Table 2).

Coverage of services to prevent vertical transmission has plateaued both globally and in Global Alliance countries, with rates at 84% globally and 85% in Global Alliance countries.

In 2023, an estimated 120 000 children (0–14 years old) [83 000–170 000] were newly infected with HIV, with 77 000 [55 000–110 000], or 66%, in the Global Alliance countries. Globally, this represents a 38% decline since 2015 and a 17% decline since 2021. This reduction has been slightly greater in Global Alliance countries, with an 18% decline since 2021 (Figure 6).

Several Global Alliance countries have shown that new HIV infections among children can be markedly reduced. Since 2021, and since the Global Alliance launch, seven Global Alliance countries have reduced the number of children newly infected with HIV by more than 20% from 2021 to 2023. These countries include Kenya (37%), Zambia (30%), Mozambique (24%), United Republic of Tanzania (24%), Zimbabwe (23%), Angola (22%) and South Africa (22%). Similarly, several countries have reported substantial declines from 2021 to 2023 in new HIV infections among adolescents—37% in Zambia, 34% in Kenya, and 31% in Mozambique.

However, the epidemic's disproportionate health impact on children remains pronounced. Globally, although children (0–14 years old) accounted for just 3% of all people living with HIV in 2023, they represented 12% of all AIDS-related deaths.

In 2023, an estimated 76 000 children (0–14 years old) [53 000–110 000] died from AIDS-related causes, including 49 000 [34 000–66 000], or 64%, in Global Alliance countries. Globally, this represents a 67% decline since 2010, a 43% decline since 2015 and a 14% decline since 2021. This reduction has been greater in Global Alliance countries, with a 15% decline since 2021 (Figure 7). Five Global Alliance countries (Zambia (26%), Kenya (25%), Zimbabwe (22%), Angola (21%) and South Africa (21%)) have reduced the number of AIDS-related deaths among children by more than 20% from 2021 to 2023.

However, the epidemic's disproportionate health impact on children remains pronounced. Globally, although children (0–14 years old) accounted for just 3% of all people living with HIV in 2023, they represented 12% of all AIDS-related deaths.

From 2021 to 2023, AIDS-related deaths declined by 9% among adolescents globally and by 8% in the 12 Global Alliance countries, with the most marked progress reported in Kenya (26%).





Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

**Figure 7** Numbers of AIDS-related deaths among children 0–14 years old: global and Global Alliance countries, 1990–2023



Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

**PROGRESS IN PILLAR 1** 

# EARLY TESTING AND OPTIMIZED TREATMENT FOR INFANTS, CHILDREN AND ADOLESCENTS

© UNICEF/UN0656494/Schermbrucker Uganda



Many children living with HIV continue to be left behind by HIV testing and treatment efforts.

Globally, in 2023, HIV treatment coverage was significantly higher for adults (77%) than for children (57%). The treatment disparity between adults and children is increasing over time, with the global gap of 20 percentage points in life-saving treatment coverage for children being the largest ever recorded (Figure 12). In Global Alliance countries in 2023, HIV treatment coverage gap was even higher—57% for children and 84% for adults (Figure 12). HIV treatment coverage in Global Alliance countries ranged from 27% (Angola) and 29% (Nigeria) to 77% (Uganda). Gaps at each stage of the testing and treatment cascade undermine efforts to reach children with lifesaving treatment. In 2023, although 87% of adults living with HIV globally knew their HIV status, only 66% of children living with HIV had a known HIV status (Figures 10 and 11).

The treatment disparity between adults and children is increasing over time, with the global gap of 20 percentage points in life-saving treatment coverage for children being the largest ever recorded.

Ensuring early diagnosis of HIV among children

Children's outcomes along the testing and treatment cascade indicate that knowledge of HIV status (the first 95) represents the most significant gap for children living with HIV both globally and in the Global Alliance countries (Figures 10 and 11).

The world has committed to ensure that 95% of children living with HIV are tested within the first two months of life. Early diagnosis is essential, since infants infected with HIV during pregnancy or childbirth have a substantially elevated risk of dying before their first birthday (6).

In 2023, early infant diagnosis coverage was 67% globally and slightly higher in Global Alliance countries (71%) (Figure 8). Progress in early infant diagnosis coverage varies among Global Alliance countries, with four countries achieving more than 80% coverage, such as South Africa (90%), Kenya (87%), Zimbabwe (84%) and Uganda (82%), whereas some have lower rates, including Nigeria (18%) and Angola (14%).

In addition to expanding early infant diagnosis, urgent attention is needed to expand testing options for older children, who may be missed by early infant diagnostic services or acquire HIV during breastfeeding. South Africa, a Global Alliance country, now has a policy of universal HIV testing of children at 18 months, regardless of documented HIV exposure.

Innovative methods are being implemented in Global Alliance countries to close HIV testing gaps among children and improve the effectiveness and efficiency of early infant diagnosis, including using point-of-care testing methods to improve turnaround for results.

To increase the comprehensiveness of coverage for early infant diagnosis, some Global Alliance countries have taken steps to improve the quality of systems to deliver testing services to HIV-exposed infants. In Uganda, a records review in regions with the largest number of infants living with HIV has helped to identify missed opportunities for intervention and informed service planning to close gaps. In 11 health-care facilities in Nigeria, a systematic quality improvement initiative increased the percentage of HIV-exposed children tested within the first two months of life from 66% to 83% while also markedly increasing the return rate for infant test results (Box 2). After the United Republic of Tanzania implemented a registration system for HIV-exposed infants, increased early infant diagnosis coverage from 82% to 92% from 2022 to 2023—approaching the 95% target (Box 3).

In addition to expanding early infant diagnosis, urgent attention is needed to expand testing options for older children, who may be missed by early infant diagnostic services or acquire HIV during breastfeeding.

> Studies in Global Alliance countries and other countries in sub-Saharan Africa with a high burden of HIV have demonstrated that using point-of-care tools for infant diagnosis increases testing coverage and return rates and enables early initiation of HIV treatment (7). Unlike traditional early infant diagnosis, which requires transporting testing samples to a centralized laboratory and a return visit by the mother and newborn to the clinical site, point-of-care testing is conducted at the site where the individual receives care. Whereas standard early infant diagnosis typically takes several days or weeks to return results, point-of-care testing delivers results on the same day the specimen is drawn, often within one hour. The speed with which point-of-care testing delivers results reduces loss to follow-up or delays in treatment initiation, and point-of-care testing also improves service access in remote or resource-limited settings.

Point-of-care testing has been found to be a cost-effective means of improving survival among children living with HIV (8,9). A 2022 qualitative study in Zimbabwe found that, although point-of-care birth testing is already highly acceptable to mothers living with HIV, uptake could be improved by enhancing the privacy of testing services and educating health-care workers and communities about the importance of birth testing (10).

Countries are working to implement additional testing strategies to reach older children. This emphasis reflects the reality that many children acquire HIV after two months of age, including through breastfeeding, and that even with very high coverage in postnatal settings, early infant diagnostic services will miss some children.

In the Taraba state of Nigeria, health-care workers provide counselling and oral swab-based HIV self-testing kits to HIV-affected households, increasing knowledge of HIV status among children and adolescents in these households from 65% to 86% over a five-month period in 2022 (Box 2).





Sources: Global AIDS Monitoring, 2024 (https://aidsinfo.unaids.org) and UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

BOX 2

#### NIGERIA

Closing the testing gap among children in Nigeria Since 2020, fewer than one in five children exposed to HIV have been tested within two months of birth. To close the testing gap among children, Nigeria is taking action to address two aspects of this challenge: (1) expanding coverage of early infant diagnostic services and (2) investing in other methods to improve access to HIV testing for older children and those missed by early infant diagnostic services.

In 2022–2023, concerted efforts were undertaken to increase coverage of early infant diagnostic services in 11 health-care facilities in Rivers and Taraba states, using a replicable Program Optimization Approach developed by the Elizabeth Glaser Paediatric AIDS Foundation. Following a baseline assessment that identified service gaps, health-care workers were trained in the Program Optimization Approach. Support was provided to health-care facility quality improvement teams by offering continual coaching, learning sessions and ongoing monitoring of the progress of quality improvement projects through the Foundation's web-based digital app POA-PM. The model aims to empower health-care workers to embrace and advance quality improvement methods and become change agents in their work settings. As one approach spawned by the initiative, dried-blood spot sample collection was decentralized and scaled up to antenatal clinics, paediatric clinics and communities outside a traditional laboratory setting.

The Program Optimization Approach contributed to participating healthcare facilities' markedly increasing their early infant testing from 66% at baseline to 83% within 12 months. The proportion of early infant test results returned rose from 41% to 79%. The initiative also indicated that home visits were more effective than conventional in-facility appointments in achieving increased early infant testing and underscored the benefits of comprehensive education about preventing vertical transmission.

In addition to increasing the proportion of children living with HIV who are diagnosed early, Nigeria also strengthened family index testing as another means of reaching children with HIV testing. From August 2022 to December 2022, caregivers from five health-care facilities provided HIV-affected households in Taraba State with oral 2414 HIV self-tests for children (2–19 years old) of people living with HIV. A root cause analysis that identified gaps in the uptake of family index testing informed this approach.

In addition, the Elizabeth Glaser Paediatric AIDS Foundation trained health-care workers in performing oral-based HIV self-tests and in strong programme documentation. Stakeholders convened during regular review meetings to analyse programme results and address challenges implementation challenges.

Of the 2414 HIV self-tests distributed to households, 70% were unassisted testing, and 97% of those who used self-tests had results reported. The proportion of biological children (2–19 years old) in these households who received HIV testing increased from 65% when family index testing was facility-based to 86% after the distribution of HIV self-tests to households was introduced. Over five months, the initiative identified 12 children with reactive tests; all test results were confirmed, and the 12 children initiated antiretroviral therapy. Nine other children had indeterminate results, which were all confirmed as negative.

In addition to increasing access to testing and identifying 12 previously undiagnosed children living with HIV, the initiative found that HIV self-tests are well accepted, suggesting that family-centred strategies increase testing demand and improve testing result return rates. Since 2022, the initiative has successfully scaled to an additional 12 health-care facilities.

#### BOX 3

#### UNITED REPUBLIC OF TANZANIA

United Republic of Tanzania drives improvements in early infant diagnosis and timely linkage to services Over the last decade, the United Republic of Tanzania has increased the proportion of HIV-exposed infants who receive HIV testing within two months of birth. However, as recently as 2022, one in five HIV-exposed infants did not obtain early diagnostic services.

In 2022–2023, the United Republic of Tanzania, with surge support from the United States President's Emergency Plan for AIDS Relief (PEPFAR), implemented new procedures to increase early infant diagnostic services in the more than 3000 facilities that serve pregnant and breastfeeding women living with HIV on the mainland. To drive registration of HIV-exposed children, the country linked registration with each infant's first immunization and also gave priority to using these registration cards for data entry. Registered infants were proactively tracked for early infant diagnosis and receiving other necessary services.

These policy and programmatic changes were informed by a systematic analysis of the flow of pregnant women living with HIV through health-care services, which helped to identify missed opportunities for early infant diagnosis. The country changed its national guidelines, with the aim of ensuring the registration of all HIV-exposed infants within seven days of birth. Health-care providers were then trained on the policy change and on actions to implement the new approach.

This innovative policy change achieved marked positive results. From 2022 to 2023, the percentage of HIV-exposed children who were registered in the national tracking system increased from 7% to 66%. The proportion of HIV-exposed children tested within their first two months of life rose from 81% to 92%.

This experience holds important lessons for efforts to accelerate progress under pillar 1, including the value of international partners working hand in hand with governments and health-care facilities. The systematic mapping exercises provided essential data needed to guide and inform the policy and programmatic changes. Early registration of HIV-exposed infants has driven substantial improvements in early infant diagnosis coverage and timely access to services.

Because of budget constraints, workers at some facilities were unable to receive training on the policy change, underscoring the need for dedicated resources to drive improvement in service uptake and outcomes. Experience also indicates that ongoing mentorship helps in increasing health worker adherence to the new policy guidelines. Avenues to strengthen HIV case-finding also include better integration of HIV testing with existing health services for children. For example, immunization programmes reach large numbers of children, with full vaccination rates for eight priority antigens ranging in Global Alliance countries from 31% in Angola to 80% in Kenya (Figure 9). Other entry points for HIV testing include child-focused nutrition and tuberculosis services.

Countries are also undertaking intensified efforts to increase knowledge of HIV status and linkage to HIV treatment among older adolescents. To strengthen HIV diagnosis and linkage to care among older adolescents, a three-year project in Mozambique (2020–2023) enabled 61 870 marginalized adolescents and young people to access HIV and sexual and reproductive health services, resulting in new diagnoses among 1209 young people, 92% of whom were linked to antiretroviral therapy. A multi-step case-finding initiative, including key entry point testing and index contact tracing, improved linkage to care among adolescents from 75% in 2019 to 99% in 2023 in three districts in KwaZulu-Natal province in South Africa.

Overall, HIV testing and treatment cascade outcomes in Global Alliance countries (Figure 11) are roughly equivalent to cascade outcomes globally (Figure 10) and have been since 2021.

Ensuring access to early, optimized HIV treatment

Existing tools and strategies need to be fully leveraged, and further research is also required to generate even more effective and efficient tools to close HIV testing and treatment gaps for children (Figure 12).

**Figure 9** Full immunization coverage: proportion of children 12–23 (or 24–35) months old vaccinated with eight essential antigens (BCG, polio 1-3, DPT 1-3, measles), Global Alliance countries with available data



Source: Demographic and Health Surveys (DHS) Program. Stat Compiler (https://statcompiler.com).

#### GLOBAL

**Figure 10** HIV testing and treatment cascade for children (0–14 years old) and adults (15+ years old): global, from 2021 to 2023



Source: UNAIDS special analysis of epidemiological estimates, 2024.

#### **GLOBAL ALLIANCE**

**Figure 11** HIV testing and treatment cascade for children (0–14 years old) and adults (15+ years old): Global Alliance, from 2021 to 2023



Source: UNAIDS special analysis of epidemiological estimates, 2024.

**Figure 12** Antiretroviral therapy coverage trends for children 0–14 years old and adults (15+ years old) living with HIV, global and Global Alliance, 2015–2023





#### **GLOBAL ALLIANCE**



Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

Only three Global Alliance countries achieved more than 70% treatment coverage for children, with Uganda at 77% [71–83%], Zambia at 71% [71–83%] and Kenya at 70% [54–88%]. However, this is still below the global treatment coverage target (*11*). Three Global Alliance countries had treatment coverage of less than 50%, including the Democratic Republic of the Congo at 44% [33–56%], Nigeria at 29% [25–32%] and Angola at 27% [22–34%]. Most Global Alliance countries experienced only slight increases in HIV treatment coverage for children from 2021 to 2023, although coverage in Mozambique rose from 57% [48–63%] to 67% [55–75%] during this period.

As a result of coverage gaps, an estimated 580 000 children living with HIV globally in 2023 were not accessing life-saving treatment, with a significant proportion (68%, or 400 000) children in Global Alliance countries (Figure 13). Among children living with HIV but not accessing antiretroviral therapy, the majority were 5–14 years old (61%) and 39% were 0–4 years old globally (40% in Global Alliance countries).

In recent years, Global Alliance countries have made important, yet modest, progress towards increasing treatment coverage for children (Figure 14). In 2023, treatment coverage among children in the 12 Global Alliance countries ranged from 27% in Angola and 29% in Nigeria to 71% in Zambia and 77% in Uganda.

Treatment coverage among adults is higher in every Global Alliance country than among children (Figure 14). Adult treatment coverage exceeds 80% in eight of the 12 Global Alliance countries and is higher than 95% in three countries (Kenya, Zambia and Zimbabwe). Several countries made gains in adult treatment coverage from 2021 to 2023, including from 71% to 87% in Mozambique and from 74% to 90% in Nigeria.

**Figure 13** Antiretroviral therapy coverage gaps among children living with HIV 0–14 years old by five-year age group: global and Global Alliance countries, 2023



Source: UNAIDS special analysis of epidemiological estimates, 2024.

Global Alliance countries are taking action to improve linkage to HIV treatment for children and retention in services. In 2024, for example, Cameroon undertook a surge strategy in 10 regions to increase treatment coverage for children and adolescents.

Optimizing the quality of treatment services for children is essential for maximizing the proportion of children living with HIV who achieve viral suppression. In 2023, only 48% of children living with HIV globally and in Global Alliance countries achieved viral load suppression versus 73% of adults globally and 79% in Global Alliance countries (Figures 10 and 11).

**Figure 14** Comparison of antiretroviral therapy coverage (%) between children 0–14 years old and adults 15+ years old living with HIV: Global Alliance countries with available data, 2021 and 2023



Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).
Progress varies among Global Alliance countries (Figure 15). Four countries, including Zambia (67%), Kenya (65%), Uganda (63%) and the United Republic of Tanzania (61%), achieved viral load suppression rates exceeding 60% among children living with HIV. However, in two Global Alliance countries, viral load suppression was less than 40%, including the Democratic Republic of the Congo (36%) and Nigeria (25%).

It appears unlikely, both globally and in Global Alliance countries, that the goal of 75% of all children living with HIV having suppressed viral loads by 2023 and 86% by 2025, in accordance with the global targets, will be achieved (11).

**Figure 15** Comparison of viral load suppression between children 0–14 years old and adults 15+ years old living with HIV: Global Alliance countries with available data, 2021 and 2023



Source: UNAIDS epidemiological estimates, 2024 (<u>https://aidsinfo.unaids.org</u>).

Global Alliance countries are innovating to improve rates of viral suppression among children. In the Ankole region of Uganda, a communityled project provides directly observed therapy to households with children living with HIV with unsuppressed viral loads. Similar efforts are also being made to increase viral suppression among adolescents living with HIV, including the Adolescence Triple Zero initiative in 30 health-care facilities in Zimbabwe, which trains health-care workers and Adolescence Triple Zero community champions to support adolescents in reaching the project's goals—zero missed appointments, zero missed doses, zero viral load.

The transition to dolutegravir (DTG)-based regimens is helping to improve rates of viral suppression. After the World Health Organization (WHO) in 2018 recommended using DTG-based regimens as first-line treatment for children living with HIV (12), countries began transitioning children living with HIV to DTG 10 mg. Studies show that DTG-based regimens are superior to regimens previously used to treat children living with HIV (13), with rates of viral suppression increasing in the two years following the transition to DTG (14). Over the past year, studies have documented the effectiveness of various DTG-based regimens, including using DTG in combination with different NRTI backbones containing abacavir, tenofovir alafenamide fumarate or tenofovir disoproxil fumarate (15). A study in six countries in sub-Saharan Africa, including two Global Alliance countries, confirmed the safety of DTG-based regimens for children and adolescents living with HIV (16). Earlier concerns regarding reports of neural tube defects among some children born to mothers receiving DTG-based regimens have been resolved by subsequent studies that have found no such link (17–19). Early experience in transitioning to DTG underscores the importance of routine viral load testing and patient tracking to reduce loss to follow-up and improve health outcomes (20). In Mozambique, a systematic approach to the DTG transition resulted in marked improvements in viral suppression for children 0–9 years old.

Further innovation—including by improving service delivery in Global Alliance countries and emerging biomedical approaches (such as administering long-acting injectables)—has the potential to increase rates of HIV viral suppression among children (Box 4). Early results from the IMPAACT trial found that initiating HIV treatment among children very early was associated with durable viral suppression and evidence that HIV reservoirs were restricted, potentially enabling long-term HIV remission (21). A separate analysis of data from the IMPAACT study found that more than 80% of children receiving very early antiretroviral therapy had CD4 counts of 1500 cells/mm<sup>3</sup> during their first year of life (22).

#### MOZAMBIQUE

Mozambique provides a roadmap for optimizing HIV treatment and improving viral load suppression among children living with HIV In 2022, Mozambique began introducing DTG-based regimens for children weighing 3–19.9 kg in accordance with WHO recommendations.

Recognizing the challenges associated with undertaking this rapid, major change in clinical procedures, Mozambique undertook a multicomponent process. The country updated its antiretroviral medicine guidelines and its dosing charts for children. Information, education and communication materials on the change in guidelines were developed and broadly disseminated, and regional meetings were convened to increase awareness of the new treatment regimen. Both health-care providers and civil society groups, including people living with HIV, received in-person and online training on the transition. Training efforts specifically focused on community health-care workers, such as mentor mothers, peer workers, counsellors and case managers for orphans and vulnerable children. To help drive uptake of and adherence to the new policy, the country implemented supervision and technical assistance visits to service sites. To enhance treatment adherence, Mozambique also implemented multimonth dispensing of the new DTGbased regimen for children older than two years.

Among the 640 service sites that had successfully transitioned all children living with HIV to DTG-based regimens by July 2022, rates of viral load suppression among HIV-exposed infants who received a polymerase chain reaction or HIV antibody test markedly increased from 2022 to 2023—from 56% to 71% among children younger than one year, from 52% to 80% among children 1–4 years old and from 79% to 85% among children 5–9 years old.

Mozambique's success in effecting the transition to DTG-based regimens for children provides a replicable model other countries can use in their efforts to optimize HIV treatment for children. To date, the transition has occurred in 1780 sites, covering all children living with HIV who are receiving antiretroviral therapy.

Mozambique has provided a roadmap for optimizing HIV treatment for children. This experience also underscores why optimizing treatment for children is so important. By aligning practice with WHO recommendations, Mozambique has significantly improved viral load suppression among children living with HIV 0–9 years old, thereby improving their health outcomes and quality of life. An emerging promising biomedical innovation is the use of broadly neutralizing antibodies as an alternative to traditional antiretroviral therapy among children. In a proof-of-concept study, a substantial share of children living with HIV who received only broadly neutralizing antibodies as treatment maintained viral suppression (23). Innovative formulations of antiretroviral therapy—such as oral films (24) and long-acting injectables (25)—also have the potential to increase children's retention in care. For these and other service innovations that might be validated following further study, ensuring swift access in low- and middle-income countries will be essential (Box 5).

Service integration can improve efficiency and outcomes for both HIV testing and viral load monitoring for children. In Zambia, integrating priority HIV testing on GeneXpert platforms, typically used for tuberculosis testing, notably improved the operations of the country's diagnostic programme, increasing onsite testing efficiency and enhancing same-day return of results (26).

### BOX 5

### ANOVA

Transforming HIV care for children: the impact of clinic-community collaboration in Johannesburg, South Africa A clinic collaboration model to enhance psychosocial support is aiding clinics in Johannesburg, South Africa to improve treatment outcomes for children living with HIV. The ANOVA model uses a multidisciplinary team approach that builds on community ownership and engagement to address the needs of children who experience barriers to HIV care services, adherence and viral suppression.

The model was co-designed through a multistep clinic and community stakeholder engagement and development process. Through these engagements, stakeholder roles and service offerings were clarified, and referral processes and tools were developed. Clinic and community-based implementing teams received in-service training to identify client needs, identify and address implementation barriers, map roles and responsibilities and strategize on how to solve key challenges.

Under the model, team members at clinics and children's support organizations identify children living with HIV who need enhanced support, especially those with unsuppressed viral loads, psychosocial challenges or disengagement from care. Children are then referred to organizations for community-based support interventions under the domains of health, stability, schooling and safety. Case-conference discussions are then convened with the clinic and community team to further support children who are experiencing more complex psychosocial challenges and barriers to care. A case conference is a structured meeting or discussion held to identify a client's needs and plan and then monitor their care to ensure that all their needs are met through a coordinated, multidisciplinary approach across service providers. Within the case-conference discussions, tasks are allocated based on team members' respective expertise and time frames established for delivering needed support. Subsequent case-conference meetings, which are sometimes held virtually when appropriate, are used to monitor the progress of the allocated client support interventions and adapt approaches as needed, with a two-page conferencing form enabling ongoing tracking. Clinicians, social workers, social auxiliary workers, mentors from community-based organizations and childcare and youth care workers form part of the multidisciplinary team who attend initial and follow-up case-conference discussions.

Clinics that care for larger volumes of children living with HIV and are implementing Child, Adolescent and Family Care Days have been given priority for support to implement the model. The number of clinics implementing this model doubled from 2022 to 2023—from 16 to 28—and the number of case conferences increased from 29 quarterly meetings in mid-2022 to 72 in 2023. As of March 2024, 151 children and adolescents were enrolled in case-conference support. Over the past year, 1252 children and adolescents living with HIV have been referred to community-based organizations that provide support to orphans and vulnerable children. The clinic–community collaboration model has catalysed the development of district and subdistrict engagement platforms that focus on strengthening person-centred support for children and adolescents living with HIV.

Implementation of this model has enabled the clinic-community partnership to address the specific needs of individual children and their mothers. In the case of one child living with a disability, the clinic support team provided the household with a stroller to ease the mother's difficulty in attending clinic visits. For one child who had disengaged from care, did not attend school and had no support grant in place, the communitybased organization paid home visits to enable school enrolment, reinitiate treatment and provide food parcels; as a result of these support services, this same child now has suppressed viral loads and is attending school.

Among the five of the 20 enrolled children who disengaged from care, three were in support for re-engagement and now have suppressed viral loads. For one child who was disengaged in care and struggling at a mainstream school, the community-based organization also used home visits to enrol the child in another school that is a much better fit. The child is now involved in a life skills programme and a community-based support group and also has suppressed viral loads.

Experience indicates that engagement between clinics and communitybased organizations has helped to address the social and structural barriers affecting children and adolescents living with HIV and improved the sustainability of the approach. By involving the child and the parent or guardian in some case conferences, the programme has been able to ensure that their voices are heard and that they have input into their own health services. The model requires ongoing supportive supervision, troubleshooting and engagement to optimize its cohesiveness and impact. **PROGRESS IN PILLAR 2** 

# CLOSING THE TREATMENT GAP FOR PREGNANT AND BREASTFEEDING WOMEN WITH HIV TO PREVENT VERTICAL TRANSMISSION

© UNICEF/UN0513287/Dejongh DRC



The Global AIDS Strategy 2021–2026 (2) calls for actions to ensure that at least 95% of pregnant and breastfeeding women receiving antiretroviral therapy have suppressed viral loads by 2025. Attaining this target requires women's ready access to HIV testing and treatment services, robust retention in care and actions to address women's access and retention barriers.

Over the past decade, both globally and in Global Alliance countries, the proportion of pregnant and breastfeeding women living with HIV who access antiretroviral therapy has remained stagnant—reaching 84% [72% to >98%] globally and 85% [74% to >98%] in Global Alliance countries in 2023 (Figures 16 and 17). Although this level of coverage has contributed to steady reductions in the number of children newly infected with HIV, current coverage falls considerably short of the target of ensuring that 100% of pregnant and breastfeeding women living with HIV receive lifelong antiretroviral therapy.

In Global Alliance countries, progress in providing lifelong HIV treatment to pregnant and breastfeeding women living with HIV varies considerably. Several countries have achieved robust coverage exceeding 90%, with Uganda nearing 100%, United Republic of Tanzania at 98% and South Africa at 97%. A subset of countries ranges between 80% and 90% coverage, including Mozambique at 90%, Zambia at 90%, Angola at 89%, Kenya at 89%, Zimbabwe at 88% and Côte d'Ivoire at 84%. However, some countries are displaying markedly lower antiretroviral therapy coverage among pregnant and breastfeeding women, such as the Democratic Republic of the Congo at 40% and Nigeria at 33%.

Maximizing treatment coverage is critical not only for the health and well-being of pregnant and breastfeeding women but also to prevent transmission to newborns and infants. In countries where mothers living with HIV breastfeed, including all 12 Global Alliance countries, eliminating vertical transmission requires that the transmission rate be less than 5% at the end of breastfeeding (Box 6).

Only one Global Alliance country (South Africa) has a transmission rate below this threshold (2%), although Uganda is close to this target (6%). The vertical transmission rate, including the breastfeeding period, is not declining and exceeds 20% in two Global Alliance countries—Nigeria (23%) and the Democratic Republic of the Congo (26%). This includes a high transmission rate during breastfeeding, with rates of 10% in the Democratic Republic of the Congo and 9% in Nigeria. Postnatal transmission rates are high and around 5% in Angola, Côte d'Ivoire, Mozambique and the United Republic of Tanzania (Figure 18).

In most Global Alliance countries, the vertical transmission rate at six weeks of age is greater than the transmission rate from breastfeeding. However, the rate of transmission from breastfeeding is higher than the rate of transmission during pregnancy and delivery in Uganda, the United Republic of Tanzania and Zambia (Figure 18).

### GLOBAL





Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org/).



### **GLOBAL ALLIANCE**

**Figure 17** New HIV infections among children 0–14 years old and antiretroviral therapy coverage among pregnant and breastfeeding women in Global Alliance countries, 2010–2023

Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org/).

### BOX 6

#### KENYA

Closing the testing and treatment gap for pregnant and breastfeeding women living with HIV in Kenya In addition to ensuring that services to prevent vertical transmission are routinely available, it is essential to optimize the quality of these services. Through the Rapid Results Initiative, Kenya implemented a coordinated set of strategic actions to improve HIV testing and treatment outcomes for pregnant and breastfeeding women.

Focusing on 1688 facilities across all 47 counties, Kenya implemented the Initiative from September to December 2023. Before implementation, Kenya engaged with key stakeholders, trained health-care workers and front-loaded essential commodities. At the targeted facilities, the country analysed facility-specific data to identify gaps and support rigorous tracing of clients who had been lost to follow-up. Ministry of Health personnel and members of the project's technical working group also mentored facility personnel. At the community level, health authorities supported and engaged in extensive advocacy and community mobilization.

Kenya created a national Rapid Results Initiative dashboard for real-time monitoring for quality improvement. An adopt-a-county initiative was launched, with members of the technical working group adopting individual counties for providing focused support on key technical issues, such as service delivery, commodities, laboratories and monitoring and evaluation. Innovation approaches, such as the Kanban management approach, which aids in understanding and managing service delivery risks and obstacles (27), were used to improve facility operations.

Actions were also taken to optimize supply chain management for testing and treatment services for pregnant and breastfeeding women. After the Rapid Results Initiative projected the need for key commodities, the National Order Management Team used a one-off smart push to obtain the commodities, with subsequent orders based on consumption and allocation assumptions. Commodities were supplied to both health-care facilities and the subnational teams that monitored commodities on a weekly basis.

The Rapid Results Initiative enhanced the capacity of health-care workers, improved documentation on and tracing of missed appointments and strengthened the supply system for essential test kits. According to monitoring of key performance indicators, 66% of missed appointments for an HIV test were effectively traced, and 89% of missed appointments for optimization with DTG-based regimens were traced.

Although the Rapid Results Initiative substantially improved HIV testing and treatment outcomes for pregnant and breastfeeding women and their children, it grappled with considerable challenges, including initial shortages of test kits and reagents and inadequate HIV treatment services in some facilities. Documentation and reporting of results was also challenging in some settings because of suboptimal procedures and intermittent Internet connectivity. By identifying these challenges, the Rapid Results Initiative enabled immediate corrective action.

An important feature of the Rapid Results Initiative is its replicability. With appropriate stakeholder engagement and adaptations based on local needs, the Rapid Results Initiative offers an approach that can be scaled up in other settings.



### Figure 18 Vertical transmission rates: Global Alliance countries with available data, 2015, 2021 and 2023

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

Across the 12 Global Alliance countries, actions are being taken to close the treatment gap for pregnant and breastfeeding women living with HIV. In Zimbabwe, a 15-session integrated mother-baby course in Mashonaland West Province has focused on preventing and addressing postpartum depression among mothers living with HIV through cognitive-behavioural therapy, stress management, support groups and early stimulation for young people.

### Global challenges in vertical HIV transmission urgent need to be addressed by improving access to antiretroviral therapy and promoting viral suppression among pregnant and breastfeeding women.

Global challenges in vertical HIV transmission urgent need to be addressed by improving access to antiretroviral therapy and promoting viral suppression among pregnant and breastfeeding women (Figure 19). Globally and in Global Alliance countries, several factors are contributing to vertical transmission, notably: not receiving antiretroviral therapy for pregnant or breastfeeding women (global: 48%, Global Alliance: 47%), acquiring HIV during pregnancy or breastfeeding (global: 24%, Global Alliance: 25%), discontinuing antiretroviral therapy during pregnancy or breastfeeding (global: 19%, Global Alliance: 18%) and the inability to achieve viral suppression despite adherence to antiretroviral therapy (global: 9%, Global Alliance: 10%).

**Figure 19** Number of children acquiring HIV from vertical transmission and underlying factors: global and in Global Alliance countries, 2023



Mother acquired HIV during pregnancy or breastfeeding Mother did not receive antiretroviral therapy during pregnancy or breastfeeding

📕 Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 💦 📕 Mother was receiving antiretroviral therapy but did not achieve viral supression

Source: UNAIDS epidemiological estimates, 2024 (https://aidsinfo.unaids.org).

Technological innovations, including long-acting injectable formulations that avoid the need to take a pill every day, hold potential promise for improving treatment outcomes for pregnant and breastfeeding women living with HIV (28). A 2024 study found that long-acting cabotegravir and rilpivirine are suitable treatment options for adolescents living with HIV, achieving concentrations comparable to those reported for adults receiving these long-acting injectable formulations (29). A separate analysis of study results found that long-acting injectable antiretroviral medicine regimens were acceptable and tolerable among adolescents living with HIV (30). Safety data on the use of cabotegravir and rilpivirine during pregnancy and breastfeeding are still pending. Continued research is needed to evaluate the safety and efficacy of future long-acting injectable options during pregnancy and breastfeeding, and focused action is required to ensure accelerated access to long-acting regimens in low- and middle-income countries.

A separate analysis of study results found that long-acting injectable antiretroviral medicine regimens were acceptable and tolerable among adolescents living with HIV.

In a recent clinical trial in Burkina Faso and Zambia, the vertical transmission rate was reduced by combining frequent viral load screening among mothers living with HIV and initiating lamivudine syrup as prophylaxis among breastfeeding infants of mothers with viral load of 1000 copies per mL or higher (*31*). Long-acting agents have the potential to minimize the risk of vertical transmission during breastfeeding, and several novel postnatal prophylactic agents are currently being investigated (*32*). Finding ways to strengthen HIV prevention during breastfeeding is a key component of efforts to end AIDS among children (*33, 34*).

Strengthening programmes to prevent vertical transmission will yield benefits not only for efforts to end AIDS but also towards eliminating other diseases. The triple elimination initiative aims to prevent the vertical transmission of three diseases—HIV, syphilis and hepatitis B (*35*).

Integrating HIV into broader maternal, neonatal and child health services can aid in preventing vertical HIV transmission during breastfeeding (Box 7). Secondary analysis of data from a randomized controlled trial in South Africa found that integrating these services improved women's engagement in care and postpartum viral suppression, with especially notable improvements for women with unintended pregnancies (*36*).

### mothers2mothers

Empowering communities to lead on efforts to prevent new infections among children A global leader in efforts to end vertical HIV transmission, African nongovernmental organization mothers2mothers reached more than 700 000 people with health services in 2023 across 10 countries in sub-Saharan Africa (Angola, Ghana, Kenya, Lesotho, Malawi, Mozambique, South Africa, Uganda, United Republic of Tanzania and Zambia). Founded in 2001, mothers2mothers uses a tried-and-tested model of training, employing and supporting women living with HIV to serve as community health workers (Mentor Mothers). The women whom mothers2mothers employs, despite often facing initial stigma for their HIV status, have transformed into trusted role models, leaders and breadwinners for their families. They are now integral partners in efforts to minimize the risk of vertical HIV transmission, playing a crucial role in building sustainable and resilient health systems.

Following the launch of the Global Alliance and in response to the need to accelerate action towards the triple elimination of vertical transmission, mothers2mothers revised their core strategy to deliver a strengthened package of integrated primary care including syphilis, hepatitis B, tuberculosis and malaria as well as HIV. The strategy builds on two decades of work to build the capacity of mothers living with HIV to become community providers. To date, mothers2mothers has reached 700 000 people across 10 countries. By 2026, the strategy aims to end the vertical transmission of HIV, reduce by one third the number of preventable deaths among children and adolescents and achieve triple elimination of HIV, syphilis and hepatitis B.

mothers2mothers works across all four pillars of the Global Alliance. Under pillar 1, mothers2mothers aims to end the vertical transmission of HIV and meet the needs of children living with HIV. Using a family-centric approach, Mentor Mothers collaborate with parents, caregivers and communities to provide case finding, testing, treatment initiation and retention in care for children, adolescents and adults. To better identify clients and ensure their continued care, mothers2mothers has integrated additional services such as nutrition, immunization and treatment for related conditions such as malaria to improve adherence. Innovations include employing nurses in Lesotho for HIV testing and viral load monitoring, community-based tracing and testing in Angola and tailored services for orphans and vulnerable children in South Africa. These efforts have yielded significant results-in 2022, mothers2mothers virtually eliminated vertical HIV transmission among its clients for the ninth consecutive year, and 97% of the children supported by mothers2mothers who tested positive for HIV accessed treatment. The transmission rate among clients enrolled in mothers2mothers is 0.5%.

mothers2mothers supports progress under the third pillar of the Global Alliance—preventing new infections among pregnant and breastfeeding adolescent and adult women. In four countries (Lesotho, Mozambique, South Africa and Zambia), mothers2mothers has integrated demand creation, distribution and adherence services for PrEP into the service model for serodiscordant couples. Across all the mothers2mothers programmes, only 0.45% of clients who were HIV negative at enrolment acquired HIV in 2022.

Innovation is a touchstone of mothers2mothers's efforts to build on its legacy of effective service delivery. mothers2mothers community health workers deliver a blend of in-person and digital services, engaging clients not only in person but also through phone calls and text messages. An interactive WhatsApp chatbot tool, the Virtual Mentor Mother Platform, is now available in 28 languages across nine countries, enabling mothers2mothers to broaden its reach and provide needed support on demand. In 2022, mothers2mothers documented more than 500 000 client interactions through its electronic services.

Engaging male partners is another pivotal strategy for mothers2mothers. Through door-to-door visits, household interactions and conversations with all family members, Mentor Mothers give priority to the health and well-being of fathers, uncles and brothers as well as women and children. mothers2mothers has learned that the ongoing involvement of men ensures that they actively support the health journeys of their children and partners while also accessing services for their own health needs.

Continued research is needed to evaluate the safety and efficacy of future long-acting injectable options during pregnancy and breastfeeding, and focused action is required to ensure accelerated access to long-acting regimens in low- and middle-income countries. **PROGRESS IN PILLAR 3** 

# PREVENTING NEW HIV INFECTIONS AMONG PREGNANT AND BREASTFEEDING ADOLESCENTS AND WOMEN

© UNICEF/UNI459173/Schermbrucker – Zambia



Intensified efforts to curb HIV infections have helped to reduce the number of adolescent girls and young women who acquire HIV globally and in Global Alliance countries.

> Intensified efforts to curb HIV infections have helped to reduce the number of adolescent girls and young women who acquire HIV globally and in Global Alliance countries (Figure 20). These gains result primarily from the prevention benefits of antiretroviral therapy and from the expansion of dedicated prevention programmes aimed at enabling women and girls to prevent HIV acquisition.

The global AIDS targets aim to reduce to less than 50 000 by 2025 the number of new HIV infections among adolescent girls and young women (15–24 years old), a priority population for HIV prevention generally and specifically for preventing vertical HIV transmission. In 2023, 210 000 [130 000–280 000] adolescent girls and young women acquired HIV globally, substantially exceeding the global target. In Global Alliance countries, this same group accounted for 130 000 [81 000–170 000] new infections in 2023 (Figure 20).

Since women have an increased risk of acquiring HIV during late pregnancy and postpartum (37), strengthening HIV prevention for reproductive-age women in community, antenatal and postnatal settings is an important strategy to accelerate progress towards ending AIDS in children.





Household survey data in Global Alliance countries underscores the importance of strengthening HIV prevention among women of reproductive age. Across the 12 countries, women's median age at first sexual intercourse ranges from 15.9 years (Mozambique) to 18.7 years (Zimbabwe) (*38*). In five Global Alliance countries (Angola, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo and Nigeria), fewer than one in five married women currently use a modern form of contraception, and less than half of married women use contraception in nine countries (*38*).

Among women in Global Alliance countries, the proportion who reported using a condom during the last episode of higher-risk sex with a non-marital, non-cohabitating partner varied from 22% in the United Republic of Tanzania to 65% in Zimbabwe, with less than half reporting condom use in 10 of the 12 countries (Figure 21).

Among women having high-risk sex with multiple partners, less than half reported using a condom in all but one of the 12 Global Alliance countries (South Africa, 58%) (Figure 22). Condom use during sex among women reporting multiple sex partners is especially uncommon in the Democratic Republic of the Congo (12%), United Republic of Tanzania (13%) and Côte d'Ivoire (19%).

Several strategies exist to strengthen HIV prevention among pregnant and breastfeeding adolescents and women. One is testing women's partners, which can help to identify previously undiagnosed infection and aid couples in adopting measures to reduce the risk of HIV transmission. In rural Kenya, a randomized controlled trial found that providing HIV self-tests to coupled, older adolescent women (15–19 years old) and counselling these women on how to avoid negative reactions from partners significantly increased self-reports that partners had been tested and that couples had been tested together (*39*). Available evidence highlights the importance of expanding HIV self-testing initiatives to strengthen HIV prevention among adolescent girls, including giving priority to younger individuals and couples in sub-Saharan Africa while taking steps to minimize the risk of intimate partner violence (*40*).

Given the elevated risk of acquiring HIV among pregnant and breastfeeding women from their male partners, especially in settings with a high burden of HIV infection, retesting in prenatal and postnatal settings of women who previously tested HIV-negative can help to identify new infections and enable rapid prevention intervention.

Giving priority to pregnant and breastfeeding women for biomedical HIV prevention interventions can also enhance the health and wellbeing of women and prevent vertical HIV transmission. In rural Kenya and Uganda, a dynamic client-centred programme that offered a choice of prevention methods (such as PrEP versus postexposure prophylaxis), service location (clinic versus out of facility) and testing approach (selftesting versus provider-administered) increased the coverage of biomedical HIV prevention in prenatal and postnatal settings by 40% and increased coverage during the months when women were at risk of acquiring HIV by 38% (*41*). In a study of young women (18–24 years old) in Kampala, Uganda, peer-delivered HIV self-testing and PrEP were found to be both feasible and acceptable (*42*). **Figure 21** Condom use during high-risk encounters with non-marital, non-cohabitating partners among women: percentage reporting condom use in the last 12 months in Global Alliance countries with available data



Source: Demographic and Health Surveys (DHS) Program. Stat Compiler. https://statcompiler.com.

**Figure 22** Condom use during higher-risk sex (multiple partners) among women: percentage of women 15–49 years old who had multiple partners in the past 12 months and reported condom use in their last sexual encounter: Global Alliance countries with available data



Source: Demographic and Health Surveys (DHS) Program. Stat Compiler. https://statcompiler.com

The benefits of biomedical prevention tools for reproductive-age women are amplified when they are complemented by social, structural and behavioural prevention interventions (Box 8). The DREAMS initiative of PEPFAR nests biomedical prevention interventions in a broader package of services to improve educational, livelihood and social support outcomes for adolescent girls and young women in 10 African countries, including seven Global Alliance countries (Kenya, Mozambique, South Africa, Uganda, United Republic of Tanzania, Zambia and Zimbabwe). Early evidence indicates that new HIV infections among adolescent girls and young women are declining faster in districts with DREAMS programmes than in districts not served by DREAMS (43).

Since women have an increased risk of acquiring HIV during late pregnancy and postpartum (37), strengthening HIV prevention for reproductiveage women in community, antenatal and postnatal settings is an important strategy to accelerate progress towards ending AIDS in children.

### BOX 8

Engaging women and girls: a critical element of success A key element of success across all the four pillars is the effective engagement and leadership of women and girls living with HIV. The International Community of Women Living with HIV Eastern Africa has worked with other regional ICW networks to empower women and girls living with HIV in the 12 Global Alliance countries, including training women on how to access and analyse data to improve service quality and engage political leaders on ending AIDS among children. Networks of women living with HIV have partners with UNICEF, WHO and UNAIDS to mobilize 15 Global Alliance Community Champions for Children across seven Global Alliance countries, implementing communications and advocacy workplans to improve the reach, quality and equity of HIV services for children and to leverage the global digital space to amplify for a mass audience the voices of children living with HIV and their caregivers. **PROGRESS IN PILLAR 4** 

# ADDRESSING RIGHTS, PROMOTING GENDER EQUALITY AND OVERCOMING ACCESS BARRIERS

© UNICEF/UN0656248/Schermbrucker Uganda



Stigma, discrimination, gender inequalities and gender-based violence not only increase the vulnerability of women living with or at risk of acquiring HIV but also reduce women's ability or willingness to access essential prevention and treatment services (44).

Globally, nearly one in three women have encountered some form of violence during their lifetimes, with adolescent girls and young women disproportionately affected by intimate partner violence.

More than one in four (26%) women 15 years and older worldwide have suffered violence perpetrated by partners at least once since becoming 15 years old. In sub-Saharan Africa, intimate partner violence prevalence is notably high, with one in five experiencing intimate partner violence within the past 12 months (45).

One global AIDS target provides that, by 2025, less than 10% of women, key populations and people living with HIV will experience gender-based inequalities and gender violence. The four Global Alliance countries with available data are not on track to achieve this target, with the percentage of women experiencing intimate-partner physical or sexual violence ranging from 19% in Côte d'Ivoire to 34% in the United Republic of Tanzania (Figure 23). In three of the four countries with recent survey data (Kenya, Mozambique and United Republic of Tanzania), more than two thirds of women say they are afraid most of the time of experiencing physical or sexual violence at the hands of a husband or intimate partner.

Global Alliance countries are investing in programmes to combat stigma, change harmful gender norms and prevent and/or address gender-based violence. In the Manicaland Province of Zimbabwe, the Peace Hut initiative improved service access over four years (2019–2023) for 1120 people by educating women about child marriage and women's human rights and assisting 163 women who experienced gender-based violence.

**Figure 23** Intimate partner violence: percentage of women who are afraid of their husband or partner [most of the time] and have experienced physical or sexual violence by their husband or partner among ever-married or ever-partnered women: Global Alliance countries with available data



Source: Demographic and Health Surveys (DHS) Program. Stat Compiler. https://statcompiler.com.

Ending the impunity that often surrounds the perpetration of genderbased violence is essential to address the global pandemic of violence against women and girls, since gender-based violence is more prevalent in settings with no legal consequences. At least three Global Alliance countries (Cameroon, Democratic Republic of the Congo and United Republic of Tanzania) have no legislation addressing the various types of domestic violence, including physical, sexual or mental violence (Figure 24) (46). In nine of 12 countries (all but Angola, Mozambique and South Africa), no law or provision explicitly criminalizes marital rape without qualifications (47). Only four countries (Cameroon, Kenya, Nigeria and Zambia) impose criminal penalties for perpetrators of sexual harassment in educational settings (47).

## Aligning policy frameworks with principles of gender equality is essential.

Aligning policy frameworks with principles of gender equality is essential. The legal age of marriage for girls ranges from 18 to 21 years in the 12 Global Alliance countries, and 10 of the 12 countries impose penalties for authorizing or entering into an underage marriage. However, eight of the 12 countries permit exceptions to age-of-marriage laws. Taking these exceptions into account, four countries (Angola, Cameroon, South Africa and United Republic of Tanzania) allow girls as young as 15 years to become married (47).

In addition to legal reform, concerted, sustained investments are needed in programmes to change inequitable gender norms, since surveys find that substantial shares of national populations say that a husband beating his wife can sometimes be justified (48).



Figure 24 Legal2.0: WBL 2024, selected data for the Safety legal indicator: Global Alliance countries with available data.

Source: Legal2.0: WBL 2024. https://genderdata.worldbank.org/en/indicators.

Investing in the education of women and girls not only helps prevent HIV but also advances women's broader health and well-being (49). In Kenya and Zimbabwe, women's literacy rates exceed 90%, demonstrating how strategic investments can yield results (Figure 25). By contrast, less than half of women in Côte d'Ivoire and Mozambique are literate, according to recent household surveys.

Stigma, discrimination, gender inequalities and gender-based violence not only increase the vulnerability of women living with or at risk of acquiring HIV but also reduce women's ability or willingness to access essential prevention and treatment services.

> A key strategy to address the social and structural factors that impede service access for pregnant and breastfeeding women is to enable and support empowered communities to deliver essential services. The Global AIDS Strategy aims to ensure that at least 30% of testing and treatment services will be delivered by community-led organizations by 2025 and that 80% of HIV prevention services for key populations will be community led. With respect to societal enablers, the Global AIDS Strategy aims that at least 60% of such programmes with be provided by community-, key population– and women-led organizations by 2025.

Figure 25 Female literacy rates: percentage of literate women: Global Alliance countries with available data



Source: Demographic and Health Surveys (DHS) Program. Stat Compiler. https://statcompiler.com

# CONCLUSION

Taken together, current trends lead to two key conclusions. First, marked progress in reducing new HIV infections and AIDS-related deaths among children and adolescents is feasible. Second, progress varies considerably among Global Alliance countries, with increases in cases reported in some countries. Current trends underscore the urgency of accelerating progress in each of the four strategic pillars of the Global Alliance, with specific attention to closing inequalities in service access and outcomes.

This report underscores the importance of sustained global and local efforts, enhanced community engagement and robust monitoring and adaptation of strategies. Context-specific pathways and action plans to close gaps in efforts to end AIDS need to be developed and implementation carefully monitored. Planning is also critical to ensure the long-term sustainability of HIV programmes for children and adolescents.

Political leadership and commitment are essential. In addition to putting sound policies in place, essential funding must be mobilized, since substantial gaps persist between the resources needed to end AIDS in children and the resources currently available. In 2024, the Coalition for Children Affected by AIDS estimated that the global resource gap for services to prevent vertical HIV transmission amounted to US\$ 89 million, while the amount available for antiretroviral therapy for children was US\$ 231 million short of what is needed. Reaching the goal of ending AIDS in children requires urgent steps to close these resource gaps (50).

Taken together, current trends lead to two key conclusions. First, marked progress in reducing new HIV infections and AIDS-related deaths among children and adolescents is feasible. Second, progress varies considerably among Global Alliance countries, with increases in cases reported in some countries. Current trends underscore the urgency of accelerating progress in each of the four strategic pillars of the Global Alliance, with specific attention to closing inequalities in service access and outcomes.



# **COUNTRY FACT SHEETS**

© UNICEF/UNI394624/Dejongh – Burkina Faso



# ANGOLA

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



**18.3** 2015–2016 DHS

Percentage of HIV-exposed children tested for HIV by two months of age, 2023  $% \left( {\left( {{{\rm{NN}}} \right)_{\rm{NN}}} \right)_{\rm{NN}} \right)$ 



#### New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding

Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 🛛 📕 Mother was receiving antiretroviral therapy but did not achieve viral supression



### Adolescent girls and young women 15–24 years old acquiring HIV, 2015–2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023  $\,$ 





Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

#### HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



# CAMEROON

Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)



Knowledge of HIV prevention, women and men, most recent survey (%)



© UNICEF/UN0656416/Schermbrucker Uganda

ERADED GO =1993

# CÔTE D'IVOIRE

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding

Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 🛛 📕 Mother was receiving antiretroviral therapy but did not achieve viral supression



Adolescent girls and young women 15-24 years old acquiring HIV, 2015-2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

47.5

2011-2012

68.8 Men

2011-2012

DHS

Men

DHS

Children 0-14 years old and older adolescents 15-19 years old living with HIV by 5-year age group, 2015-2023





HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



### **DEMOCRATIC REPUBLIC OF THE CONGO**

100

90

80

70

60

50

40 30

20

10

Percentage

#### Numbers of children living with HIV 0-14 years old, 1990-2023

New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023

10 000

9000

8000

7000

6000

5000

4000

3000

2000

1000

(plo

(0-14 years

**HIV infections** 

New



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023





Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



#### New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding

Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 🛛 📕 Mother was receiving antiretroviral therapy but did not achieve viral supression



Adolescent girls and young women 15-24 years old acquiring HIV, 2015-2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

33.4

Men 2013-2014

DHS



Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

Children 0-14 years old and older adolescents 15-19 years old living with HIV by 5-year age group, 2015–2023





HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023





Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



#### New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding 🛛 📕 Mother did not receive antiretroviral therapy during pregnancy or breastfeeding

Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 📃 Mother was receiving antiretroviral therapy but did not achieve viral supression





Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)



Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023







#### HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



# MOZAMBIQUE

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0-14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015-2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



New HIV infections among children from vertical transmission and underlying factors, 2023



📕 Mother acquired HIV during pregnancy or breastfeeding 💦 📕 Mother did not receive antiretroviral therapy during pregnancy or breastfeeding

Mother did not continue antiretroviral therapy during pregnancy or breastfeeding 🛛 📕 Mother was receiving antiretroviral therapy but did not achieve viral supression


Adolescent girls and young women 15–24 years old acquiring HIV, 2015–2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023





Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

### HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



## NIGERIA

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0-14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015-2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months



New HIV infections among children from vertical transmission and underlying factors, 2023



📕 Mother acquired HIV during pregnancy or breastfeeding 💦 📕 Mother did not receive antiretroviral therapy during pregnancy or breastfeeding



#### Adolescent girls and young women 15-24 years old acquiring HIV, 2015-2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

Children 0-14 years old and older adolescents 15-19 years old living with HIV by 5-year age group, 2015–2023





Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



# **SOUTH AFRICA**

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding



Adolescent girls and young women 15–24 years old acquiring HIV, 2015–2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)



### Not available

Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023



Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023



HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



# UGANDA

Numbers of children living with HIV 0-14 years old, 1990-2023







New HIV infections among children 0-14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015-2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



### New HIV infections among children from vertical transmission and underlying factors, 2023



📕 Mother acquired HIV during pregnancy or breastfeeding 💦 📕 Mother did not receive antiretroviral therapy during pregnancy or breastfeeding



Adolescent girls and young women 15–24 years old acquiring HIV, 2015–2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)

Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023





Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



## UNITED REPUBLIC OF TANZANIA

100

90

80

70

60

50

40

30

20

10

0

Percentage

Numbers of children living with HIV 0-14 years old, 1990-2023

New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023

16 000

12 000

8000

6000

4000

2000

0

14 000 🔋

years

10 000 **14**-0

infections

È

New







Percentage of pregnant women who had no antenatal visits, most recent survey

2015 2016 2017 2018 2019 2020 2021 2022 2023

Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)



Percentage of HIV-exposed children tested for HIV by two months of age, 2023  $% \left( 1-\frac{1}{2}\right) =0$ 



### New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding



Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023





HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



Numbers of AIDS-related deaths among children 0–14 years old, 2015–2023

## ZAMBIA

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding 🛛 📕 Mother did not receive antiretroviral therapy during pregnancy or breastfeeding





Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)



Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023





Numbers of AIDS-related deaths among children 0-14 years old, 2015-2023

HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



## ZIMBABWE

Numbers of children living with HIV 0-14 years old, 1990-2023



Six-week and final (after breastfeeding) transmission rate (%), 2015, 2021 and 2023



New HIV infections among children 0–14 years and antiretroviral therapy coverage among pregnant and breastfeeding women, 2015–2023



Coverage of services to prevent vertical transmission — New HIV infections (0–14 years old)

Percentage of pregnant women who had no antenatal visits, most recent survey



Percentage of HIV-exposed children tested for HIV by two months of age, 2023



### New HIV infections among children from vertical transmission and underlying factors, 2023



Mother acquired HIV during pregnancy or breastfeeding



Adolescent girls and young women 15–24 years old acquiring HIV, 2015–2023

Condom use at last higher-risk sex (with a non-marital, non-cohabiting partner), women and men 15–49 years old, most recent survey (%)



Children 0–14 years old and older adolescents 15–19 years old living with HIV by 5-year age group, 2015–2023



Numbers of AIDS-related deaths among children 0–14 years old, 2015–2023



HIV testing and treatment cascade for children (0-14 years old) and adults (15+ years old), 2021-2023



## REFERENCES

- 1. UNAIDS, WHO, UNICEF. The Global Alliance to End AIDS in Children. Geneva: UNAIDS; 2022 (<u>https://www.unaids.org/en/topic/alliance-children</u>, accessed 3 July 2024).
- 2. Global AIDS Strategy 2021–2026: end inequalities. End AIDS. Geneva: UNAIDS; 2021 (<u>https://www.unaids.org/en/resources/documents/2021/2021-2026-global-AIDS-strategy</u>, accessed 3 July 2024).
- Political Declaration on HIV and AIDS: Ending Inequalities and Getting on Track to End AIDS by 2030. Geneva: UNAIDS; 2021 (<u>https://www.unaids.org/en/resources/documents/2021/2021\_political-declaration-on-hiv-and-aids</u>, accessed 3 July 2024).
- Mavhu W, Willis N, Mufuka J, Bernays S, Tshuma M et al. Effect of a differentiated service delivery model on virological failure in adolescents with HIV in Zimbabwe. Lancet Glob Health. 2020;8:e264–75. doi: 10.1016/ S2214-109X(19)30526-1.
- 5. READY+: valuing our work. Brighton: Frontline AIDS; 2023 (<u>https://frontlineaids.org/resources/ready-valuing-our-work</u>, accessed 3 July 2024).
- Newell ML, Coovadia H, Cortina-Borja M, Rollins N, Gaillard P, Dabis F. Mortality of infected and uninfected infants born to HIV infected mothers in Africa: a pooled analysis. Lancet. 2004;364:1236–43. doi: 10.1016/ S0140-6736(04)17140-7.
- 7. Bianchi F, Cohn J, Sacks E, Bailey R, Lemaire J-F, Machekano R et al. Evaluation of a routine point-of-care intervention for early infant diagnosis of HIV: an observational study in eight African countries. Lancet HIV. 2019;6:e373–81. doi: 10.1016/S2352-3018(19)30033-5.
- Frank SC, Cohn J, Dunning L, Sacks E, Walensky RP, Mukherjee S et al. Clinical effect and cost–effectiveness of incorporation of point-of-care assays into early infant HIV diagnosis programmes in Zimbabwe: a modelling study. Lancet HIV. 2019; 6:e182–90. doi: 10.1016/S2352-3018(18)30328-X.
- 9. le Roux S, Odayar J, Sutcliffe CG, Salvatore PP, de Broucker G, Dowdy D et al. Cost–effectiveness of pointof-care versus centralized, laboratory-based nucleic acid testing for diagnosis of HIV in infants: a systematic review of modelling studies. Lancet HIV. 2023;10:e320–31. doi: 10.1016/S2352-3018(23)00029-2.
- 10. Sacks E, Katirayi L, Kaeberle B, Mafaune HW, Chadambuka A, Tachiwenyika E et al. 'The baby will have the right beginning': a qualitative study on mother and health workers views on point-of-care HIV birth testing across 10 sites in Zimbabwe. BMC Pedatr. 2022;14:546. doi: 10.1186/s12887-022-03601-x.
- 11. Understanding measures of progress towards the 95–95–95 HIV testing, treatment and viral suppression targets. Geneva: UNAIDS; 2024 (<u>https://www.unaids.org/en/resources/documents/2024/progress-towards-95-95-95</u>, accessed 3 July 2024).

- Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach, 2021 update. Geneva: World Health Organization; 2021 (<u>https://iris.who.int/handle/10665/342899</u>, accessed 3 July 2024).
- 13. Turokova A, White E, Mujuru HA, Kekitilnwa AR, Kityo CM, Violari A et al. Dolutegravir as first- or second-line treatment for HIV-1 infections in children. N Engl J Med. 2021;385:2531–43. doi: 10.1056/NEJMoa2108793.
- 14. Davendra A, Kohler M, Letsika M, Khooa H, Motaboli L, Lerotholi M et al. HIV viral suppression in children and adolescents 2 years after transition to dolutegravir: a multicentre cohort study. AIDS. 2024;38:1013–23. doi: 10.1097/QAD.00000000003835.
- 15. Waalewign H Szubert AJ, Wasmann RE, Wiesner L, Chabala C, Bwakura-Dangarembizi et al. First pharmacokinetic data of tenofovir alafenamide fumarate and tenofovir with dolutegravir or boosted protease inhibitors in African children: a substudy of the CHAPAS-4 trial. Clin Infect Dis. 2023;77:875–82. doi: 10.1093/cid/ciad267.
- 16. Bacha JM, Diamini S, Anabwani F, Gwimile J, Kanyw JB, Farirai J et al. Realizing the promise of dolutegravir in effectively treating children and adolescents living with HIV in real-world settings in 6 countries in eastern and southern Africa. Pediatr Infect Dis. J 2023;42:576–81. doi: 10.1097/INF.00000000003878.
- 17. Gill MM, Khumalo P, Chouraya C, Kunene M, Diamini F, Hoffman HJ et al. Strengthening the evidence: Similar rates of neural tube defects among deliveries regardless of maternal HIV status and dolutegravir exposure in hospital birth surveillance in Eswatini. Open Forum Infect Dis. 2023;10:ofad441. doi: 10.1093/ofid/ofad441.
- Zash R, Holmes LB, Diseko M, Jacobson D, Mayondi G, Mabuta J et al. Update on neural tube defects with antiretroviral exposure in the Tsepamo Study, Botswana. 24th International AIDS Conference, Montreal, Canada, 29 July–2 August. (Abstract PELBB02; <u>https://programme.aids2022.org/Abstract/ Abstract/?abstractid=12759</u>, accessed 3 July 2024).
- 19. Kourtis AP, Zhu W, Lampe MA, Huang YA, Hoover KW. Dolutegravir and pregnancy outcomes including neural tube defects in the USA during 2008–20: a national cohort study. Lancet HIV. 2023;10:e588–96. doi: 10.1016/S2352-3018(23)00108-X.
- 20. Tukei VJ, Herrera N, Masitha M, Masenyetse L, Mokone Maj, Mokone Maf et al. Optimizing antiretroviral therapy for children living with HIV: experience from an observational cohort in Lesotho. PLoS One. 2023;18:e0288619. doi: 10.1371/journal.pone.0288619.
- Persaud D, Bryson Y, Nelson BS, Tierney C, Cotton MF, Coletti A et al. HIV-1 reservoir size after neonatal antiretroviral therapy and the potential to evaluate antiretroviral therapy-free remission (IMPAACT P115): a phase 1/2 proof-of-concept study. Lancet HIV. 2024;11:e20–30. doi: 10.1016/S2352-3018(23)00236-9.
- 22. Nelson BR, Tierney C, Persaud D, Jao J, Cotton MF, Bryson V et al. Infants receiving very early antiretroviral therapy have high CD4 counts in the first year of life. Clin Infect Dis 2023;8:76:e744–7. doi: 10.1093/cid/ciac695.
- 23. Shapiro RL, Ajibola G, Maswabi K, Hughes M, Nelson BS, Niesar A et al. Broadly neutralizing antibody treatment maintains HIV suppression in children with favorable reservoir characteristics in Botswana. Sci Trans Med 2023;5:15. doi: 10.1126/scitranslmed.adh0004.
- 24. Kirlane AR, Abouzid Om, Minahan D, Bensel T, Hill AL, Selinger C et al. Development of an oral onceweekly drug delivery system for HIV antiretroviral therapy. Nat Commun. 2018;9:2. doi: 10.1038/s41467-017-02294-6.

- 25. Naschman S, Townsend CL, Abrams EJ, Archary M, Capparelli E, Clayden P et al. Long-acting or extendedrelease antiretroviral products for HIV treatment and prevention in infants, children, adolescents, and pregnant and breastfeeding women: knowledge gaps and research priorities. Lancet HIV. 2019;6:e552-e558.
- 26. Girdwood S, Pandey M, Machila T, Warrier R, Gautam J, Mukumbwa-Mwenechanya M et al. The integration of tuberculosis and HIV testing on GeneXpert can substantially improve access and same-day diagnosis and benefit tuberculosis programmes: a diagnostic network optimizing analysis in Zambia. PLoS Glob Public Health. 2023;3:e0001179. doi: 10.1371/journal.pgph.0001179.
- 27. The official guide to the Kanban method. Houston (TX): Kanban University; 2024 (<u>https://kanban.university/kanban.guide</u>, accessed 3 July 2024).
- 28. Abrams EJ, Capparelli E, Ruel T, Mirochnick M. Potential of long-acting products to transform the treatment and prevention of human immunodeficiency virus (HIV) in infants, children, and adolescents. Clin Infect Dis 2022;75(Suppl. 4):S562–70. doi: 10.1093/cid/ciac754.
- 29. Gaur AH, Capparelli EV, Calabrese K, Baltrusaitis K, Marzinke MA, McCoig C et al. Safety and pharmacokinetics of oral and long-acting injectable cabotegravir or long-acting injectable rilpivirine in virologically suppressed adolescents with HIV (IMPAACT 2017/MOCHA): a phase 1/2, multicentre, open-label, non-comparative, dose-finding study. Lancet HIV. 2024;11:e211–21. doi: 10.1016/S2352-3018(23)00300-4.
- Lowenthal ED, Chapman, J, Ohrenschall R, Calabrese K Baltrusaitis K, Heckman B et al. Acceptability and tolerability of long-acting injectable cabotegravir and rilpivirine in the first cohort of virologically suppressed adolescents living with HIV (IMPAACT 2017/MOCHA): a secondary analysis of a phase 1/2, mulitcentre, open-label, non-comparative dose-finding study. Lancet HIV. 2024;11:e222–32. doi: 10.1016/S2352-3018(23)00301-6.
- 31. Kankasa C, Menncier A, Sakana BLD, Molès J-P, Mwiya M, Chunda-Liyoka C et al. Optimised prevention of postnatal HIV transmission in Zambia and Burkina Faso (PROMISE-EPI): a phase 3, open-label, randomized controlled trial. Lancet. 2024;403:1362–71. doi: 10.1016/S0140-6736(23)02464-9
- 32. Ruel T, Penazzato M, Zech JM, Archary M, Cressey TR, Goga A et al. Novel approaches to postnatal prophylaxis to eliminate vertical transmission of HIV. Glob Health Sci Pract. 2023;11:e2200401. doi: 10.9745/GHSP-D-22-00401.
- 33. Van de Perre P, Scarlatti G, Moore PL, Molès J-P, Nagot N, Tylieskär et al. Preventing breast milk HIV transmission using broadly neutralizing monoclonal antibodies: one size does not fit all. J Immun Inflamm Dis. 2024;12:e1216. doi: 10.1002/iid3.1216.
- Dugdale CM, Ufio O, Alba C, Permar SR, Stranix-Chibanda L, Cunningham CK et al. Cost–effectiveness of broadly neutralizing antibody prophylaxis for HIV-exposed infants in sub-Saharan African settings. J Int AIDS Soc. 2023;26:e26052. doi: 10.1002/jia2.26052.
- 35. Cohn J, Owiredu MN, Taylor MM, Easterbrook P, Lesi O, Francoise B et al. Eliminating mother-to-child transmission of human immunodeficiency virus, syphilis and hepatitis B in sub-Saharan Africa. Bull World Health Organ. 2021;99:287–95. doi: 10.2471/BLT.20.272559
- Brittain K, Brown K, Phillips T, Zerbe A, Pellowski J, Remien RH et al. Why do integrated maternal HIV and healthcare services work? A secondary analysis of a randomized controlled trial in South Africa. AIDS Behav. 2023;27:3831–43. doi: 10.1007/s10461-023-04097-x.
- 37. Thomson KA, Hughes J, Baeten JM, John-Stewart G, Celum C, Cohen CR et al. Increased risk of HIV acquisition among women throughout pregnancy and during the postpartum period: a prospective per-coital-act analysis among women with HIV-infected partners. J Infect Dis. 2018;218:16–25. doi: 10.1093/infdis/jiy113.

- 38. Stat Compiler. Rockville (MD): Demographic and Health Surveys (DHS) Program; 2024 (<u>https://statcompiler.</u> <u>com</u>, accessed 3 July 2024).
- 39. Wango CN, Chakrabarti A, Bair EF, Thirumurthy H, Ochillo M, Okumu O et al. Access to oral fluid-based human immunodeficiency virus self-tests increases testing among male partners of adolescent girls in Kenya: a randomized controlled trial. J Adolesc Health. 2023;73:632–9. doi: 10.1016/j.jadohealth.2023.02.031.
- 40. Gottert A, Pulerwitz J, Conserve DF. Providing HIV self-tests to adolescent girls to promote partner and couples testing: a welcome addition to the HIV prevention toolkit (with caveats). J Adolesc Health. 2023;73:614–5. doi: 10.1016/j.jadohealth.2023.07.005.
- 41. Kabami J, Koss CA, Sunday H, Biira E, Nyabuit M, Balzer LB et al. Randomzied trial of dynarmic choices HIV prevention at antenatal and postnatal care clinics in rural Uganda and Kenya. J Acquir Immune Defic Syndr. 2024;95:447–55. doi: 10.1097/QAI.00000000003383.
- 42. Nakalega R, Mukiza N, Menge R, Kizito S, Babirye JA, Kuteesa CN, Maawanda D et al. Feasibility and acceptability of peer-delivered HIV self-testing and PrEP for young women in Kampala, Uganda. BMC Public Health. 2023;16:1163. doi: 10.1186/s12889-023-16081-0.
- Saul J, Cooney C, Hosseini PR, Beamon T, Toiv N, Bhatt S et al. Modeling DREAMS impact: trends in new HIV diagnoses among women attending antenatal care clinics in DREAMS countries. AIDS. 2022;36(Suppl. 1):S51–9. doi: 10.1097/QAD.00000000003259.
- 44. UN Women, AVAC, Athena Initiative, Salamander Trust. Key barriers to women's access to HIV treatment: a global review. New York: UN Women; 2021 (<u>https://www.unwomen.org/en/digital-library/publications/2017/12/key-barriers-to-womens-access-to-hiv-treatment#:~:text=The%20most%20 frequently%20cited%20barriers,related%20employment%20refusal%2C%20and%20other, accessed 3 July 2024).</u>
- 45. Violence against women and girls—what the data tell us. Washington (DC): World Bank; 2022 (<u>https://genderdata.worldbank.org/en/data-stories/overview-of-gender-based-violence</u>, accessed 3 July 2024).
- 46. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization; 2013 (<u>https://iris.who.int/handle/10665/85239</u>, accessed 3 July 2024).
- 47. Gender data portal: all indicators [online database]. Washington (DC): World Bank; 2024 (<u>https://genderdata.</u> <u>worldbank.org/en/indicators</u>, accessed 3 July 2024).
- 48. Explore the data [online database]. New York: UN Women; 2024 (<u>https://data.unwomen.org/data-portal</u>, accessed 3 July 2024).
- 49. Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, Allen NB et al. Our future: a Lancet commission on adolescent health and wellbeing. Lancet. 2016;387:2423–78. <u>https://doi.org/10.1016/S0140-6736(16)00579-1</u>.
- 50. Children and adolescents affected by AIDS: expenditures, needs and resource gaps. New York: Coalition for Children Affected by AIDS; in press.







## S The Global Fund





UNAIDS Joint United Nations Programme on HIV/AIDS

20 Avenue Appia 1211 Geneva 27 Switzerland

+41 22 791 3666

unaids.org