

A Brighter Future for Children Living with HIV

Reigniting Progress toward an AIDS-Free Generation in the Covid-19 Era

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THE ISSUE

More than one year into the Covid-19 pandemic, lockdowns, quarantines, and disruptions to trade and transportation have interrupted clinical services and slowed progress in reaching global goals regarding children living with HIV. Ironically, these setbacks come at a time when new diagnostic tools and therapies have made it easier than ever to reach pregnant women and children with HIV prevention, testing, and treatment options. While responding to Covid-19 and preparing for future pandemics will remain high-level global health priorities for the foreseeable future, there is a compelling argument to be made for redoubling efforts to meet ambitious global goals regarding the elimination of pediatric HIV/AIDS by 2030. Such actions will not only safeguard the considerable investments the United States and the global community have already made through the United States' President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund to Fight AIDS, Malaria, and Tuberculosis, national governments, and bilateral and multilateral initiatives. They can also help ensure that the disruptions provoked by the Covid-19 pandemic do not further compound the challenges faced by children living with HIV and that the lessons learned from the crisis guide the development of new strategies to improve services for young people and their families.

INTRODUCTION

The international community has multiple reasons to redouble efforts to meet the needs of children living with HIV/AIDS, including global commitments to Ending Preventable Maternal and Child Death and realizing a Start-Free, Stay-Free, AIDS-Free Generation; existing investments in pediatric HIV programs made by PEPFAR, national governments, the Global Fund, and other bilateral and multilateral mechanisms; and an enhanced response to and sustainable recovery from the Covid-19 pandemic. Decisive leadership, increased funding, and a focus on expanding the use of proven tools for preventing new infections in children and ensuring children living with HIV can access appropriate treatment can effectively contribute to the goal of eliminating AIDS as a public health threat by 2030.

Well before the World Health Organization (WHO) declared the Covid-19 outbreak to be a global pandemic in March 2020, progress in meeting global goals related to pediatric HIV was already off track. Without access to antiretroviral therapy, an estimated 50 percent of children living with HIV will die before they turn five, but in 2019, just 59 percent of HIV-exposed children globally had been tested by two months of age, and just 53 percent of affected children were reported to be taking virus-suppressing medications.¹ In sub-Saharan Africa, home to 88 percent of children living with HIV and where 21 countries prioritized for elimination of mother-to-child transmission of HIV are located, only 50 percent of HIV-exposed children were tested in 2019.² In 2020, an estimated 5 percent of people living with HIV globally were children, yet they account for at least 14

percent of deaths from AIDS.³ Lockdowns, the suspension of educational programs, and the diversion of health resources to Covid-19 response in countries around the world threaten to further widen these gaps by limiting the access of children, as well as pregnant and breastfeeding women, to HIV prevention, testing, and treatment services.⁴

Decisive leadership, increased funding, and a focus on expanding the use of proven tools for preventing new infections in children and ensuring children living with HIV can access appropriate treatment can effectively contribute to the goal of eliminating AIDS as a public health threat by 2030.

There are at least four steps that donors, multilateral organizations, national programs, and advocates can take in developing new global strategies and supporting programs on the ground to restore momentum toward meeting global goals and identify lessons from the pandemic that can guide improvements in service delivery and support for children living with HIV and their families:

- Accelerate the collection and analysis of data to more precisely locate pregnant and lactating women, or women who may become pregnant, and who are at risk of HIV, with prevention, diagnostic services, and treatment; at the same time, improve the use of data to identify young children and adolescents at risk of HIV and reach them quickly with testing and therapy.
- Lower the costs of and increase sustainable access to point-of-care tools for early infant diagnosis.
- Stimulate research on child-friendly drug formulations as well as innovative service delivery methods for prevention, diagnosis, and treatment, applying lessons from the Covid-19 pandemic to improve options for community and health-sector engagement on HIV with pregnant and breastfeeding women and children.
- Incorporate the voices of children and adolescents who have grown up living with HIV into policy deliberations and advocacy campaigns at the district, national, and global levels.

Taking these steps now, as new global strategies from the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Global Fund, and PEPFAR are designed, debated, and implemented, will both stimulate progress toward eliminating pediatric AIDS by 2030 and ensure that the lessons from Covid-19 ignite a renewed effort to secure a bright future for children living with HIV.

GLOBAL GOALS TO END PEDIATRIC HIV/AIDS

Starting in 2000, the Millennium Development Goals (MDGs) directed global attention toward achieving rapid improvements in preventing, diagnosing, and treating HIV infections by 2015.⁵ To ensure continued focus on HIV/AIDS beyond the conclusion of the MDGs, the global community then put forward the Fast-Track Goals to End AIDS by 2030.⁶ Recognizing that technical advances in HIV prevention, diagnostics, and treatments had made it possible to envision an end to AIDS as a global health threat, the Fast-Track Goals emphasized a set of practical measures that could be taken to reduce new infections, sustain people living with HIV on treatment, and reduce healthcare costs. Incremental targets (e.g., that 90 percent of people living with HIV would know their status, 90 percent of those people would be on treatment, and 90 percent of people on treatment would be virally suppressed by 2020, with those numbers rising to 95-95-95 by 2030) enabled the Fast-Track Goals to chart a plan for change over a 15-year period. The expectation was that to eliminate new infections in children, it would be necessary to reach more than 95 percent of pregnant and breastfeeding women with HIV testing and, if necessary, access to antiretroviral therapy.⁷

Building on this vision, the global community approved the Sustainable Development Goals (SDGs) in 2015, with 17 different thematic areas intended to stimulate action to improve planetary health and well-being over the next 15 years. Within SDG 3, which is intended to “ensure healthy lives and promote well-being at all ages,” one target emphasizes “ending AIDS as a public health threat by 2030.” Another incorporates a specific commitment to ending preventable deaths of newborns and children under the age of five.⁸ But recognizing that vulnerability to HIV infection is closely correlated with poverty, food insecurity, and gender inequality, as well as access to quality health services, the SDGs emphasize integrating efforts across several goals to more effectively address the global HIV/AIDS epidemic.⁹

In part to reinforce existing SDG efforts, the United Nations General Assembly issued the Political Declaration on

HIV/AIDS in 2016, which proposed 10 commitments to stimulate progress on reaching the Fast-Track targets. One of the commitments focused specifically on children and envisioned the initiation of at least 81 percent of HIV-positive children younger than 15 on treatment by 2018 and the elimination of new pediatric HIV infections by 2020.¹⁰ These aspirations—including to (1) diagnose and sustainably treat pregnant women to prevent transmission of HIV to their children during pregnancy, birth, or breastfeeding, and (2) identify vulnerable infants early enough to initiate them on antiretrovirals and prevent death—were ambitious but challenging because such programs have historically lagged behind those targeting adults. Activities aimed at identifying older children living with HIV and initiating them on treatment had been slow to gain momentum as well.¹¹

As 2020 approached, and well before the WHO declared the outbreak of the novel coronavirus, SARS-CoV-2, to be a pandemic, it was clear that the world was nowhere close to meeting global goals with respect to pediatric HIV.¹² Despite repeated calls for action, the percentage of HIV-positive pregnant and breastfeeding women globally who received antiretroviral therapy to prevent vertical transmission of the virus between 2015 and 2019 remained relatively stagnant, increasing from 82 percent to just 85 percent, far short of the 95 percent coverage needed to eliminate new pediatric infections. This meant that the number of new pediatric infections averted through programs intended to prevent vertical transmission in 2019 was 220,000, just slightly higher than the estimated 210,000 infections averted four years earlier.¹³ At the end of 2019, an estimated 950,000 children living with HIV between the ages of 0 and 14 were on antiretroviral therapy. This was a modest improvement over 860,000 four years earlier but still 450,000 below the targeted 1.4 million children with lifesaving medications by 2020.¹⁴ And between 2015 and 2019, the number of new HIV infections in children dropped only slightly from an estimated 190,000 per year to 150,000, a far cry from the ambitious 20,000 target envisioned in the Fast-Track scheme.¹⁵

One reason for the slow progress was that the mid-2010s political focus on global HIV goals was not paired with a similar commitment of donor funding or other resources. Despite multiple high-level political statements on HIV/AIDS and ending preventable child death since the early 2000s, overall funding for global HIV/AIDS programs actually decreased during the second decade of the twenty-first century following a peak in 2013, when donors

GLOBAL MILESTONES IN THE FIGHT AGAINST PEDIATRIC HIV

This timeline highlights select milestones in the global fight against pediatric HIV/AIDS.

- JUN. 24, 1983 ● **The first cases of AIDS in children were reported.**
- NOV. 28, 1988 ● **The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) was founded** to advocate for research into the care and treatment needs of children living with HIV.
- JUL. 26, 1994 ● **The Joint United Nations Programme on HIV/AIDS (UNAIDS) was established** by a resolution of the United Nations Economic and Social Council (ECOSOC), and it formally began its work in 1996.
- SEPT. 18, 2000 ● **The United Nations adopted the Millennium Development Goals**, including targets to achieve universal treatment for people living with HIV/AIDS and to halt and begin to reverse the spread of HIV/AIDS by 2015.
- JAN. 22, 2002 ● Following discussion at the G8 and UN General Assembly, **the Global Fund to Fight AIDS, Tuberculosis, and Malaria was established.**
- JUN. 19, 2002 ● **President George W. Bush announced a \$500 million International Mother and Child HIV Prevention Initiative** before announcing the President's Emergency Plan for AIDS Relief (PEPFAR) in his 2003 State of the Union address.
- NOV. 18, 2014 ● **UNAIDS announced a new set of Fast-Track targets to be reached by 2020**, in the interest of ending the AIDS epidemic by 2030. These "90-90-90" goals aimed to achieve 90 percent of people living with HIV knowing their HIV status, 90 percent of people who know their HIV-positive status on treatment, and 90 percent of people on treatment with suppressed viral loads. None of these targets were met by 2020.
- 2015 ● **The "Start Free, Stay Free, AIDS Free" framework was established** in 2015 by a set of partners to end AIDS as a public health threat among children, adolescents, and young women.
- SEPT. 25, 2015 ● **The United Nations adopted the Sustainable Development Goals**, including a target to end the AIDS pandemic by 2030.
- JUN. 8, 2016 ● **United Nations member states adopted a Political Declaration on Ending AIDS**, which includes a commitment to accelerate progress towards ending pediatric AIDS.
- NOV. 17, 2017 ● **The Vatican convened industry, governments, non-governmental organizations, and community leaders for a dialogue** on scaling up early diagnosis and treatment of children and adolescents living with HIV, leading to new commitments and collaboration under the Rome Action Plan.
- MAR. 21, 2021 ● **The UNAIDS Programme Coordinating Board adopted its new 2021-2026 strategy**, which includes a new target to reduce new pediatric HIV infections from 150,000 in 2019 to fewer than 22,000 in 2025.

Source: CSIS aggregation from multiple sources. See endnotes.

committed around \$10 billion to such programs.¹⁶

Following the launch of PEPFAR and through 2008, United States funding for global HIV programs grew for several years, with billions distributed to priority countries and through regional programs.¹⁷ And support for activities related to mother-to-child transmission, as well as orphans and vulnerable children, characterized PEPFAR-supported programs in multiple countries from the beginning. But since 2010, U.S. funding for global HIV activities has plateaued. Channeled primarily through the Department of State and the Global Fund, U.S. funding for overseas HIV programs has hovered at slightly under \$7 billion per year for the past decade, with the percentage of funds dedicated to pediatric services declining from a high of 12.5 percent of the overall total in 2011 to 6.5 percent in 2020.¹⁸ And flatlining or decreasing U.S. support for global HIV/AIDS programs is part of a larger trend: donor country contributions to HIV programs reportedly reduced in 2015–2016 by 7 percent, balanced somewhat by higher contributions from philanthropic organizations and by a greater proportion of funds coming directly from national governments.¹⁹

A second, complicating factor is that the successes between 2000 and 2015 in reaching communities in densely populated or high-burden areas with maternal and pediatric HIV services were not matched by similar

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success in locating HIV-exposed children in rural or sparsely populated areas that may see a relatively small number of births each year. In subregions of countries that have approached epidemic control or where the overall number of HIV-exposed infants born each year is low, testing “becomes more difficult, more expensive and potentially more wasteful if not specifically targeted.”²⁰ In such areas, health centers may wait to gather a large number of tests together before sending them to a centralized laboratory for processing. With limited access to rapid diagnostic tools and reference laboratories, these more difficult-to-reach populations face exceptionally slow turnaround times for

testing results, with many children falling ill before they can even be diagnosed.²¹

PEDIATRIC HIV WITHIN THE COVID-19 PANDEMIC

Since 2020, the Covid-19 pandemic has further disrupted efforts to protect and support children living with HIV. In the early months of the pandemic, the diversion of health workers to outbreak response, conversion of HIV clinics to Covid-19 isolation units, or use of HIV testing platforms to process Covid-19 tests meant that some services, including diagnostic and viral load testing for pregnant and lactating women and for children, were not easily accessible.²² According to a survey from September 2020, pregnant women’s access to HIV testing and treatment in 13 priority countries had dropped by 25 to 50 percent since the beginning of the year, while new treatment initiations for children had also declined by 25 to 50 percent.²³ Recognizing the challenge the diversion of health resources to pandemic response could present to people seeking routine care, the WHO issued guidance for maintaining essential health services, including HIV services, warning that “in sub-Saharan Africa a 6-month interruption of ART would result in an excess of 500,000 adult deaths from HIV infection during a 4-year period.”²⁴ In some places, access to services has begun to recover, but long-term reductions in staff, along with periodic lockdowns and the fact that some people continue to avoid clinics out of fear of being infected with coronavirus, have inevitably led to lower numbers of cases identified, a reduced number of people initiating antiretroviral therapy or refilling prescriptions, and fewer viral load tests to ensure optimization of medications in multiple settings.²⁵

A second set of challenges relates to the transportation delays and logistical logjams provoked by Covid-19-associated travel restrictions and economic disruptions. With air, shipping, and trucking routes suspended, along with port closures and delays in processing customs or export permits, many countries have reported stockouts of antiretrovirals and diagnostic materials.²⁶ India is a key source of pharmaceutical products, particularly for countries in East Africa, and the Covid-19 lockdowns imposed by the Indian government in the spring of 2020 caused severe backups and disrupted global access not only to medications but also to key components of diagnostic tools, such as reagents for early infant diagnostic programs.²⁷ In Kenya, for example, a stockout of a syrup preparation of an antiretroviral drug for children has led to the need to shift to a tablet form of the medicine, which must be mixed with

food and can be difficult for infants under one year of age to consume.²⁸ These ongoing challenges point to a higher risk of delays in optimizing antiretroviral therapy, potentially leading to drug-resistance among children and higher mortality as well.

The Covid-19 cycle of lockdowns and quarantine measures has also contributed to a lower engagement by pregnant women with the health sector across several countries with high HIV burdens. A Global Fund survey of more than 500 health facilities in Africa and Asia showed that between April and September 2020, antenatal care visits fell by 5 percent in sub-Saharan Africa and by 66 percent in several countries in Asia, signaling missed opportunities to test and link pregnant women to treatment and increasing the odds that a child may be infected with HIV.²⁹ Several countries have reported a higher number of pregnancies among adolescent girls during the pandemic, possibly a consequence of higher rates of gender-based violence, clinic closures and lockdowns complicating access to contraceptives, or closures of schools and workplaces that left girls alone at home unsupervised and vulnerable to sexual abuse.³⁰ With adolescents less likely than adults to know their HIV status, ensuring that pregnant adolescents seek antenatal care and HIV testing is important to reduce the likelihood of transmitting HIV to their children.³¹

Recognizing that sustaining HIV services within the Covid-19 context and beyond the pandemic will depend on the strength of the overall health system, a new set of global HIV goals for the 2021–2025 period proposes integrated action around three key themes. These include the removal of societal and legal barriers to HIV services; a set of targets called the ‘95s, to target a higher percentage of access to prevention, testing, treatment, and viral suppression targets; and an emphasis on greater access by people living with HIV to a broader suite of health services, including those for mental health, sexual and reproductive health, and non-communicable diseases.³²

IMPROVING DATA, DIAGNOSTICS, AND DRUG FORMULATIONS

Preventing new pediatric HIV infections and reaching children living with HIV with effective and age-appropriate treatment requires improved data collection, access to rapid diagnostic tools, and formulations of antiretroviral drugs that can be well tolerated by infants and young children.

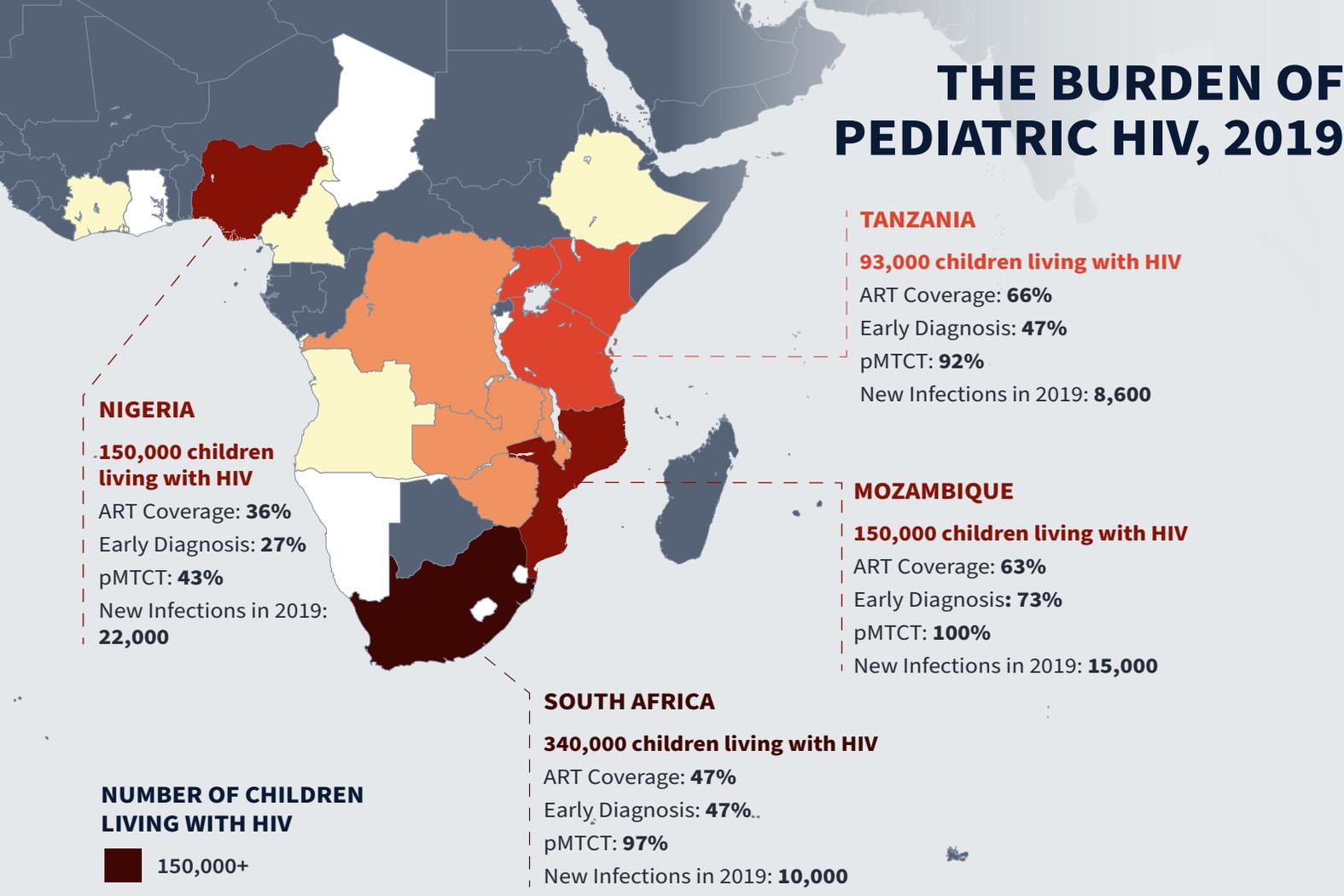
One critical step is locating pregnant or breastfeeding women at risk of HIV, as well as HIV-exposed children, whether in densely settled urban areas or sparsely populated ones. But the lack of timely and high-quality

data to pinpoint the communities where children are living with HIV-positive parents can make such work complicated and time-consuming. In regions or districts where health facilities do not count on access to a computer or internet service for transmission of clinical information to central registries, the ability to upload data may depend on a health worker collecting case numbers from multiple sites and entering it by hand. However, in the pandemic response, some institutions, districts, and countries have been able to report Covid-19 cases to global databases on a daily basis, suggesting that with appropriate financing and political will, it could be possible to accelerate the availability of community-level data for the purpose of identifying HIV-exposed children as well.

Testing infants and initiating those found to be HIV positive on treatment as soon as possible is a similarly critical step. In communities with a low HIV burden that rely on collecting a quantity of blood samples before transferring them to a reference laboratory, it can take weeks to get results back, leading to infant illness or death before antiretroviral therapy can even be initiated.³³ Since the mid-2010s, point-of-care diagnostic devices have made it possible to generate same-day results, rather than sending bloodwork off to central laboratories for assessment. The availability of rapid point-of-care tests makes it possible to initiate a child with a positive HIV test on an antiretroviral regimen very close to the time of diagnosis.³⁴ The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) has worked with Unitaid to introduce and encourage the adoption of point-of-care devices in nine countries, increasing the likelihood that infants will be initiated on antiretroviral therapy.³⁵ And one recent study comparing the time from testing to initiation on therapy between point-of-care diagnostics and reliance on central laboratory results showed that infants who were tested with a point-of-care device were able to access medicine six times faster than those who were not, reinforcing the importance of supporting efforts to expand and sustain point-of-care diagnostic services.³⁶

The WHO recommends the use of point-of-care early infant diagnostic tools, and the United Nations Children’s Emergency Fund (UNICEF) procures and distributes point-of-care tests for diagnosis and viral load testing. But national AIDS programs have been slow to adopt the point-of-care early infant diagnostics because the devices and individual tests are costly and because government officials worry about device maintenance, access to replacement materials, and staff training needs.³⁷ In recent years, the cost per test has decreased, but it remains high enough that it continues to pose a barrier for some programs, suggesting

THE BURDEN OF PEDIATRIC HIV, 2019



TANZANIA

93,000 children living with HIV
 ART Coverage: **66%**
 Early Diagnosis: **47%**
 pMTCT: **92%**
 New Infections in 2019: **8,600**

MOZAMBIQUE

150,000 children living with HIV
 ART Coverage: **63%**
 Early Diagnosis: **73%**
 pMTCT: **100%**
 New Infections in 2019: **15,000**

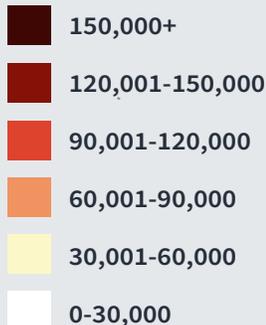
NIGERIA

150,000 children living with HIV
 ART Coverage: **36%**
 Early Diagnosis: **27%**
 pMTCT: **43%**
 New Infections in 2019: **22,000**

SOUTH AFRICA

340,000 children living with HIV
 ART Coverage: **47%**
 Early Diagnosis: **47%**
 pMTCT: **97%**
 New Infections in 2019: **10,000**

NUMBER OF CHILDREN LIVING WITH HIV



	# CHILDREN LIVING WITH HIV	ART COVERAGE	EARLY DIAGNOSIS	PMTCT	NEW INFECTIONS
GLOBAL	1,800,000	53%	60%	85%	150,000
FOCUS COUNTRIES	1,500,000	53%	54%	88%	110,000

Source: UNAIDS, *Progress towards the Start Free, Stay Free, AIDS Free targets: 2020 report* (Geneva: July 2020), https://www.unaids.org/sites/default/files/media_asset/start-free-stay-free-aids-free-2020-progress-report_en.pdf; "Global and regional trends: While there has been promising progress in the HIV response, children continue to be affected by the epidemic," UNICEF, July 2020, <https://data.unicef.org/topic/hivaids/global-regional-trends/>.

The Start Free, Stay Free, AIDS Free framework was established in 2015 to end AIDS as a public health threat among children, adolescents, and young women. The framework identified 23 focus countries that host the largest share of children living with HIV. The map above highlights key progress indicators for the four highest-burden countries in 2019, which collectively accounted for over half of the 110,000 children who acquired HIV infection in the focus countries. All data are estimates for children aged 0-14 years. Botswana, India, and Indonesia are also focus countries but are not shown given a lack of reported data in 2019. (Indicator Definitions: Early diagnosis refers to the percentage of HIV-exposed infants receiving a virological test for HIV within two months of birth. Prevention of mother-to-child transmission (pMTCT) refers to the percentage of pregnant women covered by ART.)

the importance of stimulating greater demand and increasing the number of suppliers to drive down costs to ensure the products are affordable to the lower- and lower-middle-income countries that need them the most.³⁸

Yet even when HIV-exposed children are located, tested in a timely manner, and diagnosed with HIV, ensuring appropriate antiretroviral preparations are available to them must also be a priority. One longstanding challenge for initiating, sustaining, and optimizing treatment for children is that there have been few antiretroviral products specifically formulated or dosed for them. Ideally, children would benefit from the same regimens as adults, which would both simplify procurement processes and facilitate service delivery; however, the availability of antiretrovirals developed for children has typically lagged behind those for adults by 8 to 10 years.³⁹

To address these challenges, the Vatican convened governments, multilateral agencies, civil society groups, and private sector organizations in 2016 to facilitate commitments and partnerships focused on developing child-friendly HIV diagnostics and treatments.⁴⁰ Following a subsequent High-Level Dialogue on Scaling Up Early Diagnosis and Treatment of Adolescents in 2017, diverse groups committed through what has come to be known as the Rome Action Plan to work through creative and multi-sectoral partnerships to reduce the price for early infant diagnostic devices and make pediatric antiretroviral formulations available.⁴¹

In 2018, ViiV Healthcare, the Clinton Health Access Initiative (CHAI), and Unitaid, which had participated in the Vatican-convened High-Level Dialogues, announced agreements with two generic manufacturers to accelerate the development, registration, production, and supply of optimized formulations of the antiretroviral drug dolutegravir for children living with HIV in resource-limited settings.⁴² In 2019, at the International AIDS Society conference in Mexico City, the WHO recommended dolutegravir, which is more easily tolerated than some other antiretroviral drugs, as a first-line drug for all adolescents and adults in lower- and lower-middle-income countries, with additional weight and age-based recommendations for children.⁴³ In 2020, the U.S. Food and Drug Administration (FDA) approved ViiV Healthcare's dispersible tablet formulations of dolutegravir for children over the age of four weeks and weighing more than 3 kg.⁴⁴ And by November of 2020, the FDA granted tentative approval under PEPFAR for a generic formulation of dolutegravir produced by Viatrix Inc.⁴⁵ In December of last year, CHAI, Unitaid, Viatrix, and Macleods announced a new pricing

agreement to make the lower-dose, strawberry-flavored dispersible dolutegravir available in lower- and lower-middle-income countries at a yearly cost of \$36 per child.⁴⁶

SHIFTING POLICY LANDSCAPES

Several new strategies offer opportunities to sharpen the world's focus on children and HIV/AIDS and ensure the disruptions of the Covid-19 era not only do not have a lasting negative effect on global programs for children living with HIV but also serve as catalysts for positive change.

In March 2021, the UNAIDS Programme Coordinating Board approved the agency's new strategy for the period 2021–2025. Among a comprehensive set of high-level targets are two that focus specifically on children: to ensure that three-fourths of children living with HIV will be virally suppressed by 2023 and to decrease new HIV infections in children from 150,000 to 22,000 by 2025. The strategy also emphasizes the importance of increasing access to testing and treatment, including the use of pre-exposure prophylaxis (PrEP) in some circumstances, for women who are pregnant or who may become pregnant and are at risk of HIV. And it highlights the importance of tailored strategies for children, many of which have proven useful under Covid-19 conditions, including the abolition of user fees for clinic visits, scaling up programs that offer peer mentoring, providing greater support for the use of digital and text message appointment reminders, and ensuring a high level of socioeconomic and psychological support for HIV-positive children and their families.⁴⁷

More recently, the PEPFAR process of developing country and regional operational plans resumed in April and May 2021. This round of conversations between the Office of the Global AIDS Coordinator at the Department of State, embassy-based country teams, national governments, and implementing partners includes an emphasis on scaling up activities to prevent transmission from mother to child during pregnancy, birth, or breastfeeding; more carefully identifying and testing HIV-exposed children; and supporting early infant diagnosis programs.⁴⁸

Planning for the new strategy of the Global Fund to Fight AIDS, Tuberculosis, and Malaria is also underway, with the Global Fund's board expected to approve the organization's post-2022 strategy in November 2021, with activities to start in 2023, following the fund's next replenishment. Recognizing that “not all countries face the same challenges regarding eliminating mother-to-child transmission of HIV,” a landscape analysis noted the importance of more in-depth analysis to understand the unique drivers of new infections

in children in different countries or subregions, including “late diagnosis, poor antenatal coverage, retention and mother infection during breastfeeding.”⁴⁹

The development of new global HIV/AIDS strategies within the context of the Covid-19 crisis is well-timed and can allow for the integration of insights from outbreak response while ensuring that lessons from four decades of global HIV/AIDS work can also inform pandemic preparedness activities now and in the future. For some observers, Covid-19-era service adaptations, such as multi-month and community-based dispensing of medications, self-testing, the use of social media platforms such as WhatsApp to facilitate communication between healthcare providers and patients, and the use of telemedicine, where available, are important innovations that should be sustained beyond the period of lockdowns and pandemic precautions.⁵⁰

Recent analysis, for example, suggests that programs that focus on specific diseases, such as HIV/AIDS, nevertheless support broader health security interests even if program funding is not specifically focused on that theme.⁵¹

The historical successes and failures of the global HIV/AIDS response should inform the development of global Covid-19 activities as well.⁵² For example, developing and testing products for adolescents and other pediatric age ranges earlier in the process, rather than waiting until after medications have been approved for adults to commence pediatric-focused research, is an important recommendation for the Covid-19 context that draws directly on the challenges of the global HIV experience.⁵³

Indeed, a High-Level Meeting on AIDS scheduled for June 2021 is focused on “an opportunity to ensure that the world bolsters the resiliency of the HIV response to date, commits to rapid recovery post-Covid-19 and applies the lessons learned from the colliding epidemics of HIV and Covid-19 to create more resilient societies and health systems that are ready to meet future health challenges.”⁵⁴ In particular, discussion will center on “intersecting inequalities,” looking at disparities in access to healthcare, education, work, and housing and within legal and justice systems, humanitarian situations, community, and family settings.⁵⁵

RECOMMENDATIONS

To fulfill global commitments to an AIDS-Free Generation and Ending Preventable Maternal and Child Death, secure existing investments through PEPFAR to HIV/AIDS programs, and support movement toward a recovery from the social, economic, and political disruptions of the Covid-19 pandemic, global progress in ensuring

an AIDS-Free generation requires donors, multilateral organizations, national programs, and advocates to prioritize four critical steps:

Real-time collection and analysis of data to locate pregnant and lactating women, or women who may become pregnant, and who are at risk of HIV, with prevention, diagnostic services, and treatment. Improved data should be used at the same time to identify young children and adolescents at risk of HIV and reach them quickly with testing and therapy. The rapid scale-up of community-level Covid-19 data collection suggests this can be done with the right combination of financing, training, and political will.

Lower costs and increased access to point-of-care devices for early infant diagnosis. To ensure HIV-exposed children are diagnosed and initiated on antiretroviral treatment at the earliest opportunity, market-shaping efforts to lower prices and generate demand for point-of-care devices can make a significant difference.

The stimulation of public-private partnerships for intensified research on child-friendly drug formulations, as well as innovative service delivery methods for prevention, diagnosis, and treatment. Lessons from Covid-19 adaptations that have facilitated new modes of community and health-sector engagement with pregnant and breastfeeding women, as well as children at risk of HIV, can inform new avenues of research.

Incorporation of the views of children and adolescents living with HIV into policy deliberations and advocacy campaigns at the district, national, and global levels. Hearing directly from children and adolescents living with HIV, along with their families and caregivers, can promote a greater understanding of the challenges they face and meaningfully integrate their ideas into global HIV response.

Taken together, these actions can help advance progress toward meeting global goals to dramatically reduce the number of new HIV infections in children and eliminate AIDS as a public health threat by 2030. They can protect the historical investments national governments, the United States, and the global community have already made to address the challenge of pediatric HIV. And they can help ensure the lessons learned within the Covid-19 pandemic guide the development of new strategies to improve the lives of children worldwide. ■

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