



# FOR EVERY **CHILD,** END AIDS

Seventh Stocktaking Report, 2016

Throughout this report, the term 'children' applies to all children below the age of 18 years, including adolescents, as defined in the Convention on the Rights of the Child. The United Nations defines adolescents as persons aged 10–19 years, and youth as persons aged 15–24 years.

Because HIV-related stigma persists, UNICEF takes steps to safeguard the identities of children and their mothers in accordance with their wishes and with global standards of child rights and protection. UNICEF obtains written consent from people living with the virus before identifying them as such in photographs and other media. Unless otherwise stated, people depicted in this publication, and in the accompanying materials online, should not be assumed to be living with HIV.

Note: Data in this report are drawn from the most recent available statistics from UNICEF and other United Nations agencies.

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Designed by Era Porth

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# FOREWORD

For almost three decades, the fight against HIV/AIDS was at the top of the world's health agenda – an urgent priority that commanded commitment and compelled action.

That sense of urgency helped drive a global movement to end AIDS – from grassroots to governments to global organizations and partnerships. Targeted investment in innovation to reach and treat those at greatest risk have produced significant results, averting millions of new infections and giving new hope to families living with HIV around the world.

We may be justly proud of this progress, but we cannot let the world conclude that it means our struggle is over.

It is far from over – especially for children.

Despite our enormous progress, over half of the world's new infections last year were among women, children and adolescents. Every day, around 400 children become infected – enough to fill nearly six school buses. Far too many pregnant women living with HIV are still not receiving treatment, putting their own lives, and the lives and futures of their unborn children, at risk. Far too many children have dropped out of treatment, or never received it in the first place.

The situation is especially dire for adolescents – and for adolescent girls most of all.

Every two minutes, an adolescent between the ages of 15 and 19 is infected with HIV – two thirds of them girls. And while deaths due to AIDS have decreased for all other age groups since 2010, among adolescents deaths have actually increased. AIDS is a leading cause of death of adolescents globally – and especially in sub-Saharan Africa.

We have not come this far to give up the fight. Together, we need to recapture the urgency that this issue deserves.

To end AIDS in children once and for all, we need to focus on both treatment and prevention, with a deeper focus on the life cycle of the child, beginning during pregnancy, in infancy and childhood, and through adolescence.

We need to finish the job of preventing mother-to-child transmission by providing lifelong HIV treatment to 95 per cent of pregnant women living with HIV by 2018 and maintaining support for them throughout their lives.

We also need to urgently scale up HIV testing – including at birth, at six to eight weeks of age, and throughout the breastfeeding period – and increasingly with a focus on adolescents, with programmes that directly target those at greatest risk: adolescent girls, gay and bisexual boys, adolescents who use drugs, and sexually exploited youth.

Just as urgently, we need to scale up treatment coverage to 95 per cent of all children and adolescents living with HIV by 2018. That means reaching those children who have fallen through the cracks and have not been tested, or who have dropped out of regular care and treatment altogether. And it also means integrating our efforts to reach children living with HIV with health, nutrition and protection services.

Fortunately, there is no mystery about what to do. This is a disease that we know how to prevent and treat, and new innovations are increasing our ability to reach children and communities living far from clinics and medical care.

What we need is a resurgence of will – and a rejection of complacency.

Because wouldn't this generation of children one day look back and wonder how we could have been so close to ending AIDS – how we had the proven knowledge to do so – and still fell short?

Wouldn't they ask why we threw away our success – why we squandered our great progress – when we were so close?

We are in a position to change the story – and finish the fight.

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A handwritten signature in black ink that reads "Anthony Lake".

Anthony Lake  
Executive Director, UNICEF

# INTRODUCTION

In recent years, as the number of people accessing life-saving drugs has soared, there has been an increasing sense of jubilee in the AIDS response community. However, those entrenched in the plight of children and adolescents remain sobered. Yes, 18.2 million people are now accessing treatment,<sup>1</sup> and yes, since 2000, thanks to prevention of mother-to-child transmission (PMTCT) efforts, 1.6 million new paediatric infections were prevented.<sup>2</sup> But drill down and it becomes apparent that this progress has been uneven globally and that children have been left behind. The AIDS epidemic remains one of the major human rights issues of our time.

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. In working towards these goals, UNICEF is guided by the Convention on the Rights of the Child (CRC) and strives to establish children's rights as enduring ethical principles and international standards of behaviour towards children. UNICEF has a long history of addressing HIV as a key element of promoting the health and rights of children and adolescents.

How is it that in 2016 children are dying of AIDS-related causes? In fact, children aged 0–4 years living with HIV are the most at risk of AIDS-related deaths of any age group.<sup>3</sup>



1.6 million new paediatric infections have been prevented since 2000.

Global solidarity in the AIDS response, formed and marked by its past successes and failures as documented in the United Nations Secretary-General's Report for the High-Level Meeting on Ending AIDS in April 2016,<sup>4</sup> must include the most vulnerable children and women if AIDS is ever to become an issue of the past. Furthermore, talk of achievements must not dampen the momentum, or dilute the political will, needed today to end AIDS for every child.

There is an emerging and worrisome stagnation in the number of new HIV infections globally – 2.1 million annually. With every new infection, there is an individual who must have access to life-saving, lifelong treatment. The number of pregnant women living with HIV, an estimated

## CHILDREN

ONLY  
HALF



of HIV-exposed babies are tested for HIV by the recommended age of 2 months.

Of the **1.8M** children under 15 living with HIV, **HALF** are on treatment.

**70%** reduction in AIDS-related deaths among children (0–4) since 2000, globally.



1.4 million, has remained relatively unchanged for the past six years.<sup>5</sup> Adolescent girls remain disproportionately affected by HIV and AIDS, and the proportion of children aged 0–14 years receiving treatment remains appallingly low.<sup>6</sup> A much larger and younger demographic, drug resistance, low levels of knowledge on how to prevent new infections, persistent gender-based violence and decreased donor funding all add up to a situation that threatens the youngest and most vulnerable, unravelling the fabric of the global community and the great progress achieved in the past several decades.

Addressing the following known and emerging challenges is the clearest path to success in ending AIDS.

### CHALLENGE #1: CHILDREN ARE STILL DYING OF AIDS-RELATED CAUSES

Children aged 0–4 years living with HIV face the highest risk of AIDS-related death compared with all other age groups<sup>7</sup> – HIV progresses quickly in babies. Just half of the 1.8 million children (aged 0–14 years) living with HIV are

on treatment, and treatment initiation in sub-Saharan Africa only starts on average at nearly 4 years of age.<sup>8</sup> The AIDS response must focus on solutions for this extremely vulnerable population. Preventing new infections through improved access and retention in care, as well as testing and starting treatment early, are the best ways to end AIDS among the youngest children. In an age when the tools and knowledge are at hand to prevent and treat HIV infection in children, new infections and deaths among this age group reflect a collective failure to prioritize children, including an inability to implement and adapt new science and solutions to the unique needs of children so that they can survive and thrive.

### CHALLENGE #2: ADOLESCENT HIV INFECTION RATES ARE PROJECTED TO RISE

The number of adolescents living with HIV has increased by 28 per cent since 2005. With demographic trends indicating that the youth population is growing fast, the challenges posed by HIV will multiply if new infections among 15–19-year-olds are not halted. In Africa, the total population of 10–24-year-olds will rise to

## ADOLESCENTS



HIV remains a **global issue** when it comes to prevention among adolescents. Almost **32%** of new HIV infections among adolescents (15–19) occurred outside sub-Saharan Africa.

Every **two** minutes an adolescent (15–19) is newly infected with HIV.



**13.4M** children (0–17) have lost one or both parents to AIDS.



more than three quarters of a billion by 2060<sup>9</sup> and thus, the estimated number of adolescents newly infected with HIV is expected to increase, even if the current progress in reducing the HIV incidence rate is maintained. If progress in reducing the incidence rate stalls, the results could be devastating. If the incidence rate were to remain at 2015 levels instead of continuing at its current rate of decline, the estimated number of new HIV infections among adolescents (aged 15–19 years) would increase to 280,000 annually by 2020, to 330,000 annually by 2025, and to 390,000 annually by 2030. The cumulative impact of this could result in as many as 740,000 additional adolescents becoming infected with HIV between 2016 and 2030.<sup>10</sup>

These demographic trends are not uniform across the globe; in fact, there is significant regional variation. The regions with the greatest

projected increase in their adolescent population size – Eastern and Southern Africa and West and Central Africa – are also the regions with the greatest burden of HIV among adolescents.

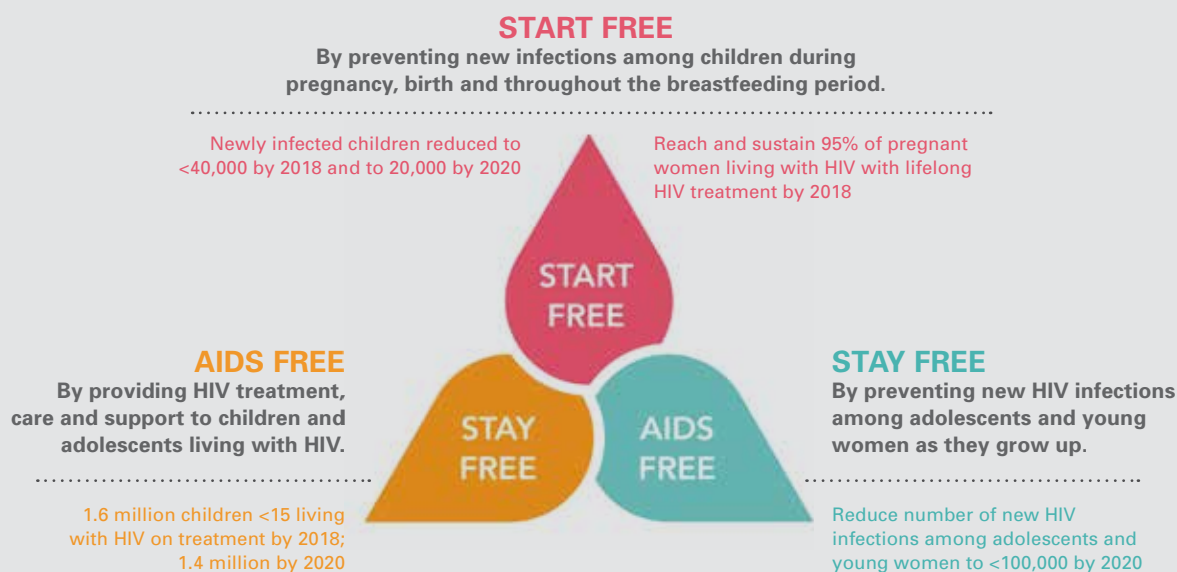
### CHALLENGE #3: SYSTEMS AND RESOURCES ARE OVERSTRETCHED WHILE DEMANDS FOR HIV PREVENTION AND TREATMENT INCREASE

In 2015, approximately 55 per cent of new HIV infections (1.1 million of 2.1 million) were among women, children and adolescents.

Escalating numbers of people living with HIV and increasing youth populations in need of HIV prevention services stress existing health, education and protection systems

#### BOX 1

### Super Fast Track to End AIDS for children, adolescents, young women and expectant mothers



Source: Elizabeth Glaser Pediatric AIDS Foundation, United States President's Emergency Plan for AIDS Relief (PEPFAR), UNAIDS, UNICEF and World Health Organization (WHO), <<https://free.unaids.org/>>.



that are necessary components of the HIV response. These same systems are already overwhelmed, often not able to manage the needs of those caught in natural, human-made and humanitarian crises, and those experiencing gender-based violence – in particular, women, girls and young people who identify as lesbian, gay, bisexual or transgender.<sup>11</sup>

Strategies for building system resilience and sustainability are more important than ever and the investments needed to reach the end of AIDS by 2030 will be substantial. In a time of limited resources, working with other development sectors will be critical for both addressing the funding gaps and driving a more sustainable HIV response.

The ‘Start Free, Stay Free, AIDS Free’ framework proposes a ‘super-fast-track’ approach to HIV prevention, treatment, care and support services for children, adolescents and young women. It holds the potential to end the AIDS epidemic among women, mothers, infants, adolescents and young girls by 2030. But this plan will require urgent commitment and collaboration across development sectors to achieve results as current projections fall short of meeting the global targets for children. The missing link that will determine whether super-fast-track targets will be met is the political commitment to sustain continued investment in proven interventions for women, children and adolescents, and to bring them to scale rapidly.

## MAJOR GLOBAL COMMITMENTS AND STRATEGIES FOR CHILDREN, ADOLESCENTS AND AIDS

- 2000** ··· □ United Nations Millennium Declaration
- 2001** ··· □ Millennium Development Goals  
□ Declaration of Commitment on HIV/AIDS
- 2006** ··· □ Political Declaration on HIV and AIDS
- 2010** ··· □ Getting to Zero: 2011–2015 Strategy  
□ United Nations Secretary-General’s Global Strategy for Women’s and Children’s Health and the Every Woman Every Child Movement  
□ Global Commission on HIV and the Law
- 2011** ··· □ Political Declaration on HIV and AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS  
□ Global Plan Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping their Mothers Alive  
□ Investment Approach for an Effective Response to HIV/AIDS
- 2012** ··· □ Committing to Child Survival: A Promise Renewed  
□ Family Planning 2020
- 2013** ··· □ Double Dividend Framework
- 2014** ··· □ Fast-Track – Ending the AIDS Epidemic by 2030  
□ PEPFAR 3.0  
□ Accelerating Children’s HIV/AIDS Treatment Initiative (ACT)  
□ Determined, Resilient, Empowered, AIDS-free, Mentored and Safe (DREAMS)
- 2015** ··· □ Global Plan Target Year  
□ ALL IN to #EndAdolescentAIDS  
□ Sustainable Development Goals  
□ Global Strategy for Women’s, Children’s and Adolescents’ Health (2016–2030)
- 2016** ··· □ Start Free, Stay Free, AIDS Free – Super-Fast Track
- 2020** ··· □ Start Free, Stay Free, AIDS Free/Super-Fast Track Target Year
- 2030** ··· □ Sustainable Development Goals Deadline



CHAPTER 1  
SUPPORT  
OVER A  
LIFETIME





.....  
*Friday embraces his daughter Emily, 15 months old, with Emily's mother, Mary. "My daughter brings me joy," says Friday. "She's healthy and always playful. She makes me very happy."*  
.....

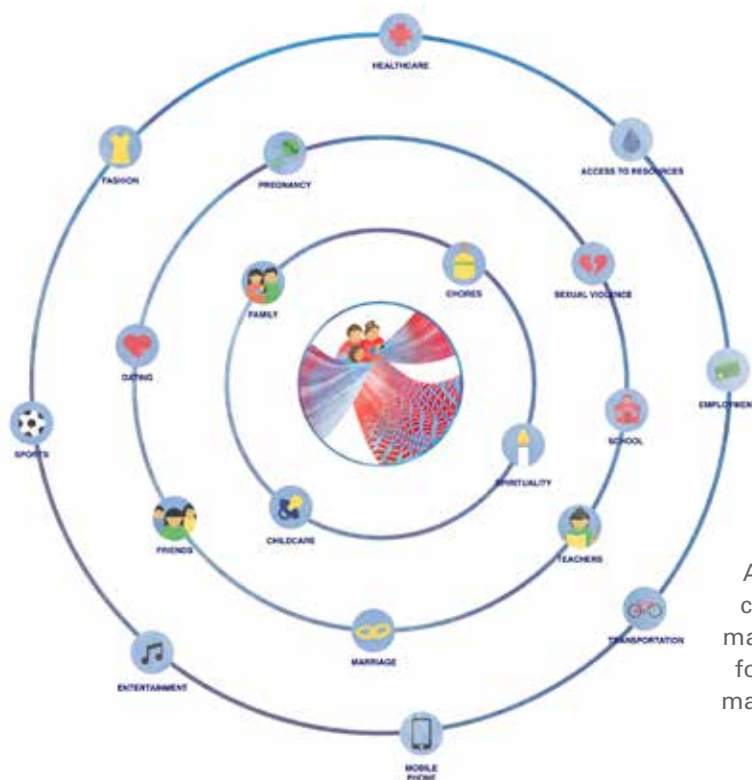
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Individuals and families have complex lives with a multitude of needs and concerns that evolve day to day, year to year, and decade to decade: “Where will I live?” “How will I feed my family?” “How do I keep my children healthy?” “How will I get to the clinic for my appointment?” “How can I find a job?”

One constant is that people require support from systems that address their evolving needs: evidence-based public health policies; robust health systems that include supportive communities and compassionate health-care providers; educational systems that deliver quality learning; and equitable protection systems that safeguard the most vulnerable members of communities from violence, exploitation and abuse.

## INTEGRATED SERVICES TO MEET THE NEEDS OF WOMEN AND CHILDREN

**1. HIV-specific interventions.** HIV-specific, high-impact interventions are necessary but alone are not sufficient for sustainable HIV responses. Efficacious HIV interventions include prevention of mother-to-child transmission (PMTCT); antiretroviral therapy (ART); condom programming; harm reduction for injecting drug users; voluntary medical male circumcision; behavioural change interventions;<sup>12</sup> and antiretroviral pre-exposure prophylaxis (PrEP).<sup>13</sup> National systems must be resilient to changes in HIV epidemiology, including being able to respond to geographic and social inequities in the HIV response. Systems must adapt to health emergencies, and support by



A healthy life and an empowered community are made possible by many components that intersect to form a tightly woven fabric that is maintained and adapted over time.

**We need a people-centred response to the AIDS epidemic that removes all obstacles in the path of people’s access to HIV prevention and treatment services.**

Michel Sidibé, Executive Director of the Joint United Nations Programme on HIV/AIDS (UNAIDS) and Under-Secretary-General of the United Nations

education, protection and social service sectors must be explored in each context.

## 2. Health, education and protection services.

HIV-integrated services delivered by the health, education and protection sectors are necessary for the efficient and effective implementation of HIV interventions and also contribute to broader development outcomes.<sup>14</sup> For example, maternal and child health days, or child malnutrition treatment programmes, may offer an opportunity to identify new paediatric and maternal HIV cases while improving child health outcomes. HIV testing in schools may yield more effective adolescent uptake of testing in certain areas.<sup>15</sup> Furthermore, integrated HIV, maternal and drug-dependency services have demonstrated promising outcomes for both HIV and opiate addiction.<sup>16</sup>



HIV testing in schools may yield more effective adolescent uptake of testing.

## 3. Strengthened social services.

Protection and education responses are necessary to address the underlying social, economic and political barriers that impede HIV and broader development outcomes. Children are more than twice as likely as adults to live in extreme poverty, with nearly 385 million children living in extreme poverty today.<sup>17</sup> Cash transfers for adolescents have been found to improve access to health, education and nutrition. Cash transfers also strengthen social networks and improve HIV and AIDS outcomes by increasing access to treatment and prevention and reducing adolescent vulnerability and risk-taking.<sup>18</sup> Appropriate health insurance plans



can provide financial protection and enhance utilization among enrolled populations, including mothers and their infants.<sup>19</sup> Such plans can also foster social inclusion while reducing out-of-pocket expenses for health care.<sup>20</sup>

A child- and adolescent-centred approach incorporates HIV programmes and services to accomplish the following:

- Locate at-risk or HIV-positive individuals. This involves identifying at-risk women, children and adolescents, diagnosing HIV and providing appropriate service referrals.
- Treat and retain people living with HIV in comprehensive care and support services. This involves provision of appropriate ART and wrap-around care services, and retaining individuals living with HIV in lifelong treatment and care.
- Support people to stay HIV-free. This involves empowering at-risk adolescents, women and children, especially key populations with high rates of new infections, to protect themselves from becoming infected with HIV.



CHAPTER 2  
MOTHERS  
AND  
CHILDREN





.....  
*Thanks to the prevention of mother-to-child transmission,  
34-year-old Queen gave birth to Neo, who is free of HIV.*  
.....

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The scale-up of prevention of mother-to-child transmission, particularly in the past five years, is one of the greatest public health achievements of recent times. Services are increasingly integrated, new ways of delivering those services have been introduced, and antiretroviral regimens to prevent children from acquiring HIV and support maternal health have improved (Figure 2.1). Still, too many women, children and adolescents are being left behind (Figure 2.2).

## PROGRESS

The Global Plan Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping Their Mothers Alive (Global Plan) demonstrated that with political commitment and resources, remarkable progress in addressing HIV among women and children worldwide can be achieved. In 2015, an estimated 1.4 million pregnant women were living with HIV, of which more than 1 million received the most effective regimens of antiretroviral medications (ARVs) for PMTCT, with an estimated 79 per cent coverage in sub-Saharan Africa (Figure 2.3).<sup>21</sup> This occurred in part because countries have rapidly transitioned to the 'test and start' approach

using the simplified 'one pill once a day' fixed dose combination treatment delivered for life (known as Option B+). As of 2016, all 22 Global Plan countries had adopted this approach.<sup>22</sup>

FIGURE 2.1

### Global summary of the HIV epidemic in women and children, 2015

	Global	sub-Saharan Africa	% of global
<b>Estimated number of women (15+ yrs.) living with HIV</b>	17,800,000	14,200,000	80
<b>Estimated number of pregnant women living with HIV</b>	1,400,000	1,300,000	90
<b>Estimated number of children (&lt;15 yrs.) living with HIV</b>	1,800,000	1,600,000	87
<b>Estimated number of children (&lt;15 yrs.) newly infected with HIV</b>	150,000	120,000	84
<b>Estimated number of children (&lt;15 yrs.) dying of AIDS-related causes</b>	110,000	91,000	86

Source: UNAIDS 2016 estimates.



Clayton, 8 months, is free of HIV thanks to the treatment and support his mother received throughout pregnancy, delivery and breastfeeding.



**FIGURE 2.2**

**Trends indicate the 2018 and 2020 targets for preventing new infections among children (aged 0-14) will be missed**

2016–2020 projections based on current trends and 2016–2020 target projections, global



Note: Data not available for Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS). Projections were made by applying the annual rate of reduction (ARR), which is essentially the % decline per year, between 2010 and 2015 and applying that to future years 2016–2020. Regional targets were defined by assuming the target 2010–2018 and 2010–2020 ARR in each region should match that expected at the global level.  
Source: UNICEF analysis of UNAIDS 2016 estimates, July 2016.

Increased maternal access to ARVs since 2000 has resulted in groundbreaking progress in preventing new infections among children. Globally, an estimated 1.6 million new infections among children were averted between 2000 and 2015.<sup>23</sup> In the 21 Global Plan countries in sub-Saharan Africa, between 2009 and 2015, there was a 60 per cent decline in new HIV infections among children – from an estimated 270,000 to 110,000 (Figure 2.4).<sup>24</sup>

In 2016, the World Health Organization (WHO) and partners announced that Armenia, Belarus and Thailand had joined Cuba in receiving official



**Armenia, Belarus, Cuba and Thailand have received official validation of the elimination of mother-to-child transmission of HIV.**

validation of having eliminated mother-to-child transmission of HIV.<sup>25</sup> Thailand is the first country with a major HIV epidemic (440,000 people living with HIV in 2015) to receive such a validation.<sup>26</sup>

Gains made in bridging the treatment gap among children are equally impressive. In 2009, approximately one in seven children living with HIV in the 21 Global Plan countries in Africa had access to ART. This gap declined to one in two in 2015. In the past six years alone, treatment scale-up for children in these 21 Global Plan countries grew threefold from 15 per cent to 51 per cent from 280,000 to 730,000 children on treatment, and AIDS-related deaths among children (aged 0–14 years) were reduced by 53 per cent between 2009 and 2015, from 170,000 to 82,000<sup>27</sup> – around 10 per cent less than the decline observed for new infections in children due to scale-up of PMTCT services.<sup>28</sup>

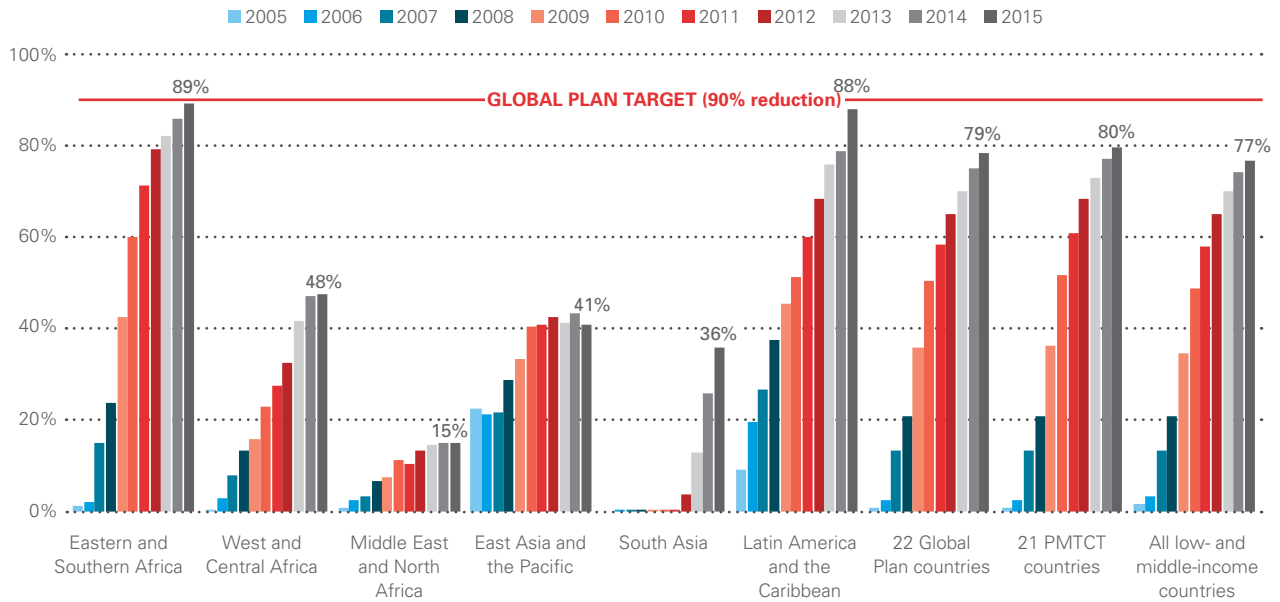


*A child living with HIV in Tajikistan learns about the medication that, if taken consistently, offers a long, healthy life.*

**FIGURE 2.3**

**PMTCT antiretroviral coverage has increased significantly across most regions**

Percentage of pregnant women living with HIV receiving most effective antiretroviral medicines for PMTCT, by UNICEF regions, 2005–2015

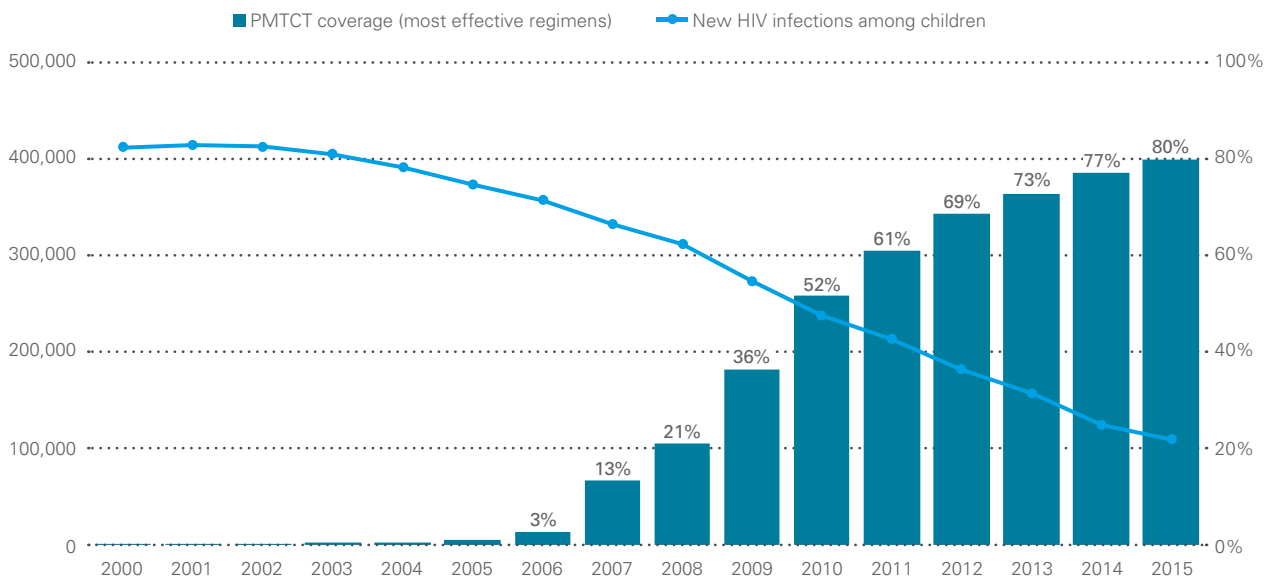


Note: Excludes single-dose nevirapine; data not available for Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS).  
Source: UNAIDS/UNICEF/WHO Global AIDS Response Progress Reporting and UNAIDS 2016 estimates.

**FIGURE 2.4**

**Since 2000, new paediatric HIV infections decreased by nearly 75 per cent in Global Plan countries as more pregnant women living with HIV received ART**

Percentage of pregnant women living with HIV receiving most effective antiretroviral medicines for PMTCT and new HIV infections among children



Source: UNICEF analysis of UNAIDS 2016 estimates.

## CHALLENGES

In 2015, an estimated 150,000 children (aged 0–14 years) were newly infected with HIV globally, and nearly 85 per cent of them live in sub-Saharan Africa (*Figure 2.5*).<sup>29</sup> The majority of these infections occurred during the breastfeeding period (*Figure 2.6*). The shift in the timing of HIV transmission from mother to child has created a new urgency for focusing on adherence to medicines and retaining mothers and infants in care to the end of the breastfeeding period.<sup>30</sup>



**The majority of new infections among children (0–14) are now occurring during the breastfeeding period.**

Half of the 1.8 million children (aged 0–14 years) living with HIV globally did not receive antiretroviral HIV treatment in 2015 (*Figure 2.7*). For those children able to receive ART, it came too late, at an average age of initiation of 3.8 years in sub-Saharan Africa.<sup>31</sup> Without timely treatment, one third of children with HIV will die by age 1, and half by age 2.<sup>32</sup> In children under the age of 1, HIV-related mortality peaks occur as early as 2 to 3 months of age, hence the urgent need for these infants to be diagnosed as soon as possible after birth.<sup>33</sup> Yet, less than half of children born to mothers living with HIV in 2015 received an HIV test before reaching 2 months of age,<sup>34</sup> and in many cases, turnaround time from the test to results was substantially delayed (*Figure 2.8*). This situation is compounded by the estimated 330,000 pregnant women living with HIV who did not receive the most effective ARVs for PMTCT in 2015,<sup>35</sup> contributing to new HIV infections in children going unnoticed or being lost to follow-up.

These gaps in diagnosis, treatment and retention in care have resulted in some 110,000 children worldwide - approximately 300 each day - dying of AIDS in 2015.<sup>36</sup> Special



**Approximately 300 children die AIDS-related deaths every day.**

## BOX 2

### Drug resistance

Becoming resistant to antiretrovirals can be devastating for anyone on HIV medicines. It is even more so for children and adolescents, who rely on effective drug regimens for much longer than adults.

Drug resistance can have many causes, with the most common being lack of adherence to ART. Millions of people living with HIV are on ART already, and their health and well-being depend on taking medicines every day for the rest of their lives. Yet many people – especially children – find it difficult or impossible to adhere to such a rigid schedule, for reasons including the formulations being unpalatable to children because they are too bitter; shortages of medicines ('stock-outs') at clinics and other treatment centres; lack of sufficient nutrition, money, awareness or support; and HIV-related stigma and discrimination. Skipping HIV medicines allows HIV to multiply, which increases the risk that the virus will mutate and produce drug-resistant HIV.

There are warning signs about the spread of drug resistance. A multi-year study recently reported resistance to the ARV drug tenofovir (TDF) – the cornerstone of many first-line ART regimens for older children, adolescents and adults – in a high proportion of people whose treatment had failed. Resistance was highest (57 per cent) among study participants from sub-Saharan Africa, where most people have fewer treatment options overall than those living with HIV elsewhere.<sup>37</sup>

attention is needed to ensure that children have timely access to ART and are retained in care through adolescence and into adulthood.

WHO and UNICEF recommend that breastfeeding mothers living with HIV who are maintained on ART should exclusively breastfeed their infants for the first six months of life and then introduce complementary foods while continuing to breastfeed for 24 months or beyond to optimize child survival and reduce the risk of mother-to-child transmission of HIV. Breastfeeding should then stop only when a nutritionally adequate and



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Longezo, 3 years old, is living with HIV in Malawi. His life was saved when a health worker visited his home and discovered that he was very ill and in need of medical attention.

safe diet without breast milk can be provided. Infants of mothers who receive ART and are breastfeeding should receive six weeks of daily nevirapine prophylaxis. Infants born to mothers with HIV who are at high risk of acquiring HIV<sup>38</sup> should receive 6 to 12 weeks of dual prophylaxis of AZT (twice daily) and nevirapine (once daily), whether they are breastfed or formula fed. Making sure infants are receiving medication is crucial. Alternatives exist for women living with HIV who do not breastfeed.<sup>39</sup>

In addition, preventing new HIV infections among women and girls of childbearing age and meeting the family planning needs of women living with HIV remain critical elements of PMTCT programmes for ending AIDS in children.

## REGIONAL VARIATIONS IN RESPONSE TO PMTCT AND PAEDIATRIC HIV TREATMENT

Inequities among regions and within countries

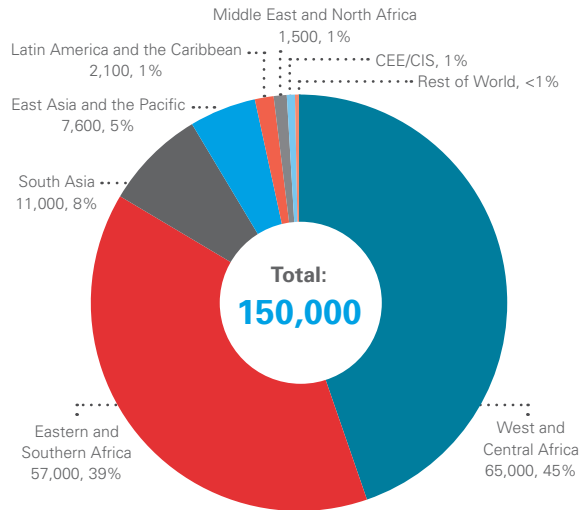
persist in the response to PMTCT and paediatric AIDS. ARV coverage for PMTCT among women with HIV in 2015 remained much lower in West and Central Africa (48 per cent), East Asia and the Pacific (41 per cent), South Asia (36 per cent) and the Middle East and North Africa (15 per cent), compared with Latin America and the Caribbean (88 per cent) and Eastern and Southern Africa (89 per cent).<sup>40</sup> Coverage of early infant diagnosis was low across almost all regions, with only Eastern and Southern Africa providing HIV testing to more than half (60 per cent) of HIV-exposed infants within their first eight weeks of life in 2015 (*Figure 2.8*).<sup>41</sup>

Nearly half of 1.8 million children living with HIV are in only five countries: Nigeria, South Africa, India, Mozambique and Kenya (*Figure 2.9*).<sup>42</sup> An estimated 63 per cent of children (aged 0–14 years) living with HIV in Eastern and Southern Africa were on ART in 2015, compared with only 20 per cent of children in West and Central Africa.<sup>43</sup>

**FIGURE 2.5**

**In 2015, nearly 85 per cent of all new HIV infections among children occurred in sub-Saharan Africa**

Estimated number and percentage of new HIV infections among children (aged 0–14), by UNICEF regions, 2015

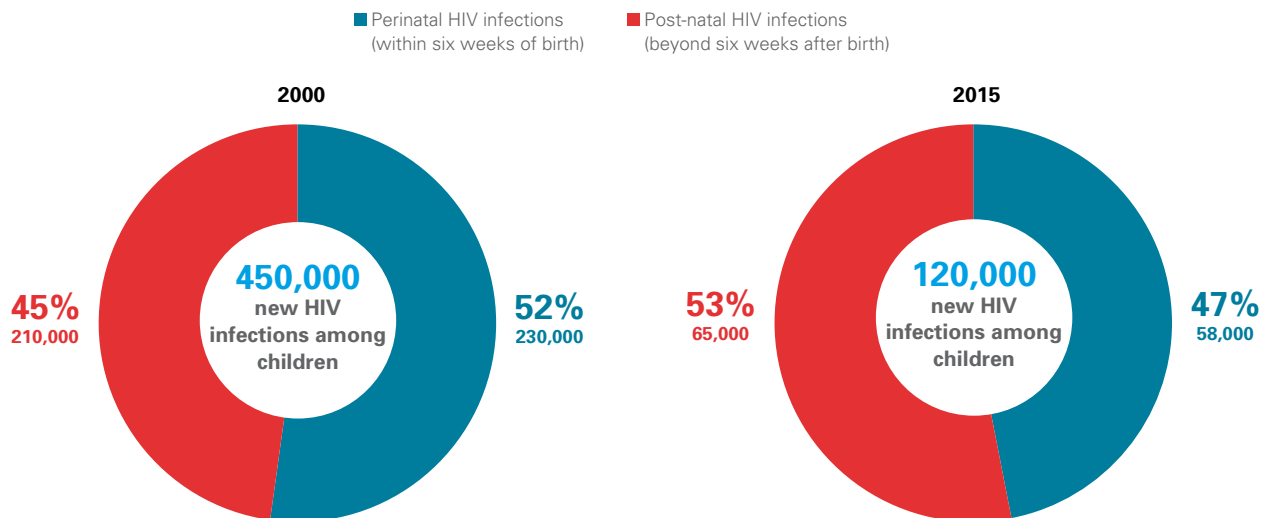


Note: CEE/CIS - Central and Eastern Europe and the Commonwealth of Independent States.  
Source: UNAIDS 2016 estimates.

**FIGURE 2.6**

**More than half of new infections among sub-Saharan children occur after the first six weeks of life**

Estimated number of new HIV infections among children (aged 0–14), sub-Saharan Africa, 2000 vs. 2015

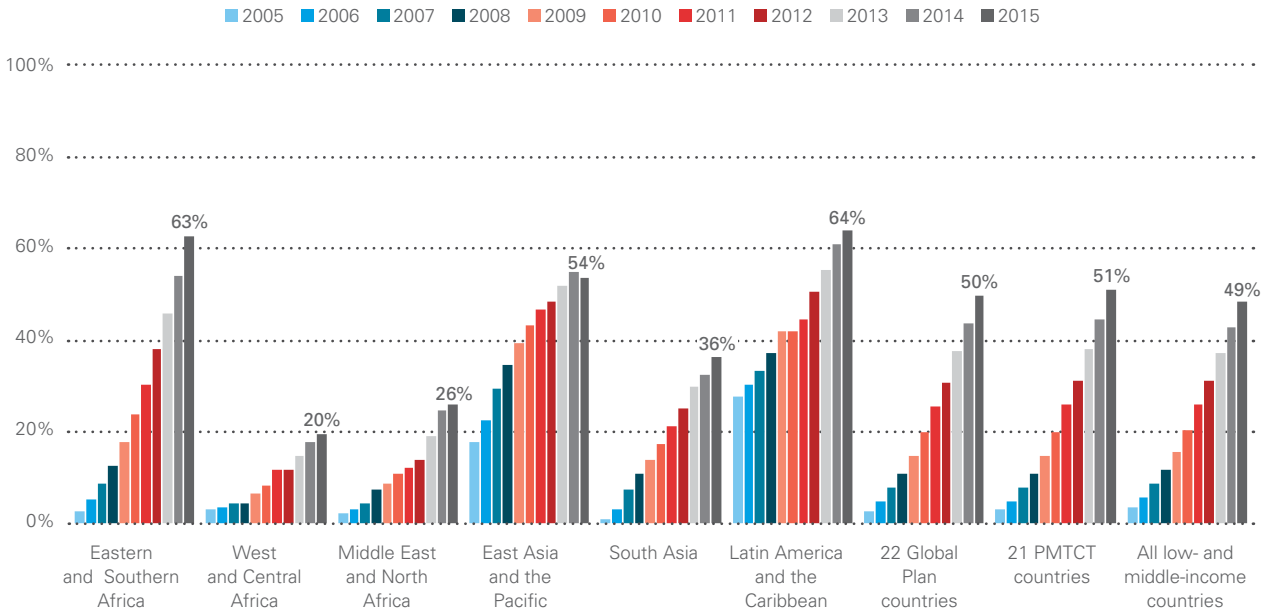


Note: Values may not sum to total due to rounding.  
Source: UNICEF analysis of UNAIDS 2016 estimates.

**FIGURE 2.7**

**Half of children living with HIV are not benefiting from life-saving treatment**

Percentage of children (aged 0–14) living with HIV receiving antiretroviral therapy (ART), by UNICEF regions, 2005–2015

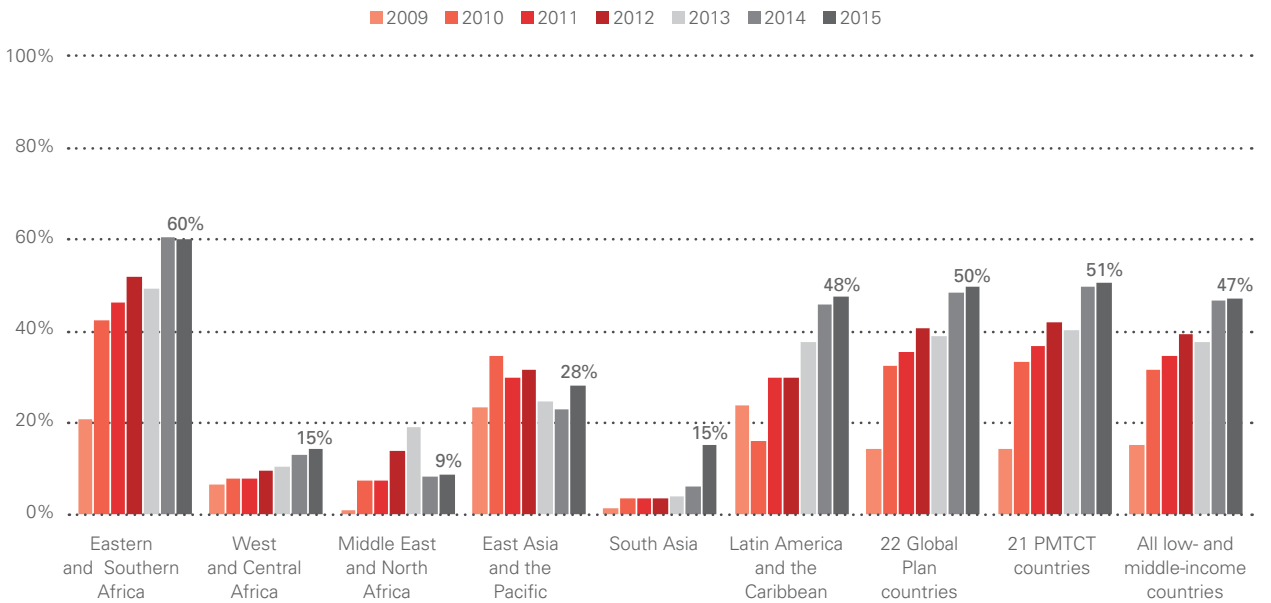


Note: CEE/CIS data not available.  
Source: UNAIDS/UNICEF/WHO Global AIDS Response Progress Reporting and UNAIDS 2016 estimates.

**FIGURE 2.8**

**Early infant diagnosis needs to be scaled up to keep infants alive**

Percentage of infants born to pregnant women living with HIV receiving a virological test for HIV within two months of birth (early infant diagnosis), by UNICEF regions, 2009–2015

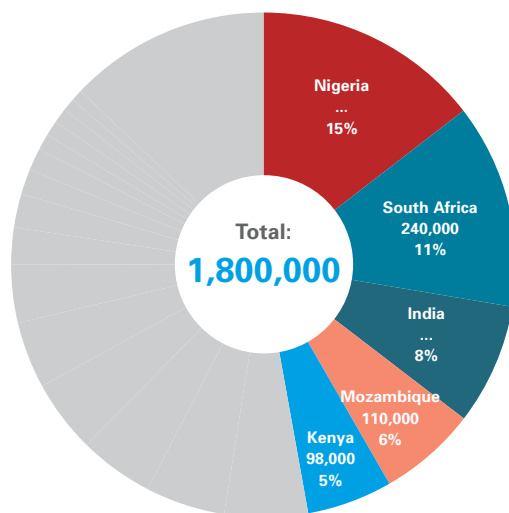


Note: CEE/CIS data not available.  
Source: UNAIDS/UNICEF/WHO Global AIDS Response Progress Reporting and UNAIDS 2016 estimates.

FIGURE 2.9

## Nearly half of 1.8 million children living with HIV are in just five countries: Nigeria, South Africa, India, Mozambique and Kenya

Estimated number and percentage of children (aged 0–14) living with HIV, top five high-burden countries, 2015



Source: UNAIDS 2016 estimates.

## STRATEGIES TO ACCELERATE PROGRESS FOR WOMEN AND CHILDREN

### 1. Innovate, learn and bring to scale efforts that address the loss to follow-up and retention in treatment of women

PMTCT programmes continue to face difficulties in retaining pregnant women and mothers diagnosed as HIV-positive through the series of interventions along the continuum of care, including antenatal care, HIV testing, treatment initiation, continued care and support for adherence to treatment. After delivery, the care continues with infant HIV testing (early and through the end of breastfeeding), optimal infant feeding practices, ARV prophylaxis for the exposed infant, ART initiation and retention in care for infants diagnosed with HIV and continuation of ART in mothers.

Unsupported, women in PMTCT programmes are likely to drop out of care at distinct points along the continuum of care, for example, in the weeks immediately following initiation of treatment or

delivery of the baby. Nationwide facility data from a study from Malawi showed that six months after starting ART using the test-and-start approach, 17 per cent of women were lost to follow-up, with the majority of women leaving in the first three months after ART initiation.<sup>44</sup> Programme data from Uganda indicate that 25 per cent of pregnant and breastfeeding women initiating ART did not return after the first visit, typically scheduled within 30 days of starting treatment.<sup>45</sup>



**Factors that prevent women from continuing their treatment: unwelcoming health facilities; user fees for services; transport difficulties and expenses; insufficient routine counselling and support; and competing priorities for the mother, such as work and family responsibilities.**

Factors that impact follow-up and retention include unwelcoming and disorganized health facilities; user fees for services; transport difficulties and expenses; insufficient routine counselling and support; and competing



priorities for the mother, such as work and family responsibilities. Male partner involvement (as a means of addressing gender dynamics) is one intervention that has shown promise in reducing HIV transmission from mother to child.<sup>46</sup> Research also indicates that peer and community support improves retention.<sup>47</sup>

Stigma is another major obstacle, one that often seems to have a disproportionate impact on women, and must be addressed. The Global Network of People Living with HIV conducted research that found that some HIV-positive pregnant women experience HIV-related stigma when seeking maternal health care and may not receive adequate information and support to prevent vertical transmission or to be retained in care.<sup>48</sup> Many women do not access PMTCT services due to fear of violence or abandonment by male partners, concerns about community-level ostracism or discrimination.<sup>49</sup>

## 2. Integrate HIV services into child survival platforms

Integration is critical to improving health outcomes and efficiency gains. The Double Dividend framework promotes a programming approach with the dual goals of improving paediatric HIV care and child survival in populations where children are at high risk of being infected with HIV.<sup>50</sup> Increasingly, efforts to integrate paediatric HIV testing and treatment with other child health services are showing promise.<sup>51</sup> Integrated HIV, maternal and child health services can help identify cases of HIV among children missed by PMTCT programmes and can facilitate treatment initiation.

- **HIV testing in immunization clinics:** The high level of uptake for diphtheria, pertussis and tetanus immunizations (DPT1 and DPT3) (*Figure 2.10*) provides an excellent opportunity for HIV testing of babies in high-prevalence settings, yet recent data from a select number of countries indicate that this is an untapped potential. A systematic review of five articles that reported on integration of testing in immunization clinics found that 89.5 per cent to 100 per cent of mothers agreed to have their infants tested for HIV during their first DPT

vaccination visit and 56.8 per cent to 86 per cent of mothers returned for results. Increased uptake of HIV testing has also been confirmed in a few studies, with as much as a sevenfold greater proportion of infants receiving HIV testing in immunization clinics than in under-five clinics.<sup>52</sup> Additional research is needed on the cost-effectiveness of this approach, and on the impact of HIV testing on immunization coverage, with particular attention to how HIV-related stigma impacts immunization service delivery.

- **HIV testing in children's clinics and wards:**

There is mounting experience in providing HIV testing to hospitalized or out-patient paediatric populations in high-HIV-prevalence settings. In one hospital in Zambia that tested more than 87 per cent of admitted paediatric patients, 29 per cent of the children were identified as HIV-positive.<sup>53</sup> As PMTCT services are brought to scale, targeted testing of sick children in child health platforms is an important case-finding strategy.

- **HIV testing in nutrition clinics:** HIV and undernutrition are closely linked. More than 85 per cent of the approximately 1.8 million children living with HIV reside in sub-Saharan Africa, where the majority of child deaths are also linked to undernutrition,<sup>54</sup> and malnourished children infected with HIV have an increased risk of mortality. Both facility and community-based therapeutic nutrition centres have been valuable entry points for HIV testing in most countries. Uptake of HIV testing of more than 94 per cent of children in nutrition programmes has been reported.<sup>55</sup> Similarly, pilot programmes in Malawi and Mozambique that integrated HIV and nutrition service delivery have shown major improvements in lives saved by jointly managing HIV and malnutrition.<sup>56</sup>

## 3. Increase early and decentralized rapid HIV testing and diagnosis

Major efforts are required to address the early infant diagnosis gap within the PMTCT continuum and, in particular, to ensure all children born to women living with HIV are tested for HIV soon after birth. WHO recommends that all



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A health worker at a rural clinic in Malawi uses a point-of-care diagnostic machine to run a rapid test for a baby exposed to HIV.

HIV-exposed infants receive a virological test for HIV within four to six weeks after birth. Without immediate access to treatment, approximately 30 per cent of children living with HIV will die within the first year of life, and 50 per cent will die before they reach their second birthday.<sup>57</sup>

Availability and access to HIV diagnostics for children are major bottlenecks to starting treatment promptly. The introduction of a new generation of point-of-care (POC) diagnostics, now WHO pre-qualified for routine use, can break through these bottlenecks, dramatically expanding access to treatment and improving service delivery.

Previously existing options for early infant HIV diagnosis (EID) and viral load (VL) screening to monitor viral suppression used complex, laboratory-based technologies that required specialized personnel. As a result, they have not been able to meet testing needs in resource-limited settings and reach remote populations. Despite efforts to strengthen conventional systems, including the use of dry blood spots for sample transportation from clinics to centralized laboratories, limitations often lead to long turnaround times, high rates of loss to

follow-up, test results that do not reach the patient and delayed treatment decisions.

 **A new generation of point-of-care (POC) diagnostics can break through bottlenecks, dramatically expanding access to treatment and improving service delivery.**

The new POC diagnostics are a game changer. UNICEF and the Clinton Health Access Initiative, with financial support from UNITAID, are working on both the supply and demand sides of the market to increase the availability of a new generation of POC diagnostics for CD4, EID and VL, with the goal of shortening the turnaround time from test to result so that patients get their results the same day.

Experiences with CD4 thus far indicate that POC testing can substantially improve access and service delivery. With same-day test results, POC testing reduced the number of times patients needed to come to health facilities before starting treatment (based on previous WHO guidelines), reducing the burden on patients and opportunities for patients to drop out. Same-day test results also empowered clinicians to provide more comprehensive clinical assessment when patients came for routine visits.

## BOX 3

### Child-friendly medicines

Of the 1.8 million children under the age of 15 who are living with HIV, only half are on ART.<sup>58</sup> One persistent problem is that many children remain undiagnosed. Another challenge is that far fewer ART options are safe, tolerable and acceptable for children.

For example, only 10 of the 29 antiretroviral medicines approved for use in adults have also been approved for use in children under 2 years old.<sup>59</sup> This may be one reason why about 40 per cent of the children on ART globally are on a regimen that is 'suboptimal', or low quality in terms of effectiveness, pill burden (number of pills in a regimen) and side effects.<sup>60</sup>

Finding solutions has been hampered by a lack of research on dosing levels for children.<sup>61</sup> Additionally, few generic versions of child-friendly ARVs have been developed, making some existing regimens expensive and often unaffordable.<sup>62</sup>

Treatment parity with adults is likely to be a long way off. However, recent developments offer hope for the future. In its latest treatment guidelines, released in 2015, WHO added new alternative regimens for children, thereby expanding options in countries that rely on the agency's guidance.<sup>63</sup>

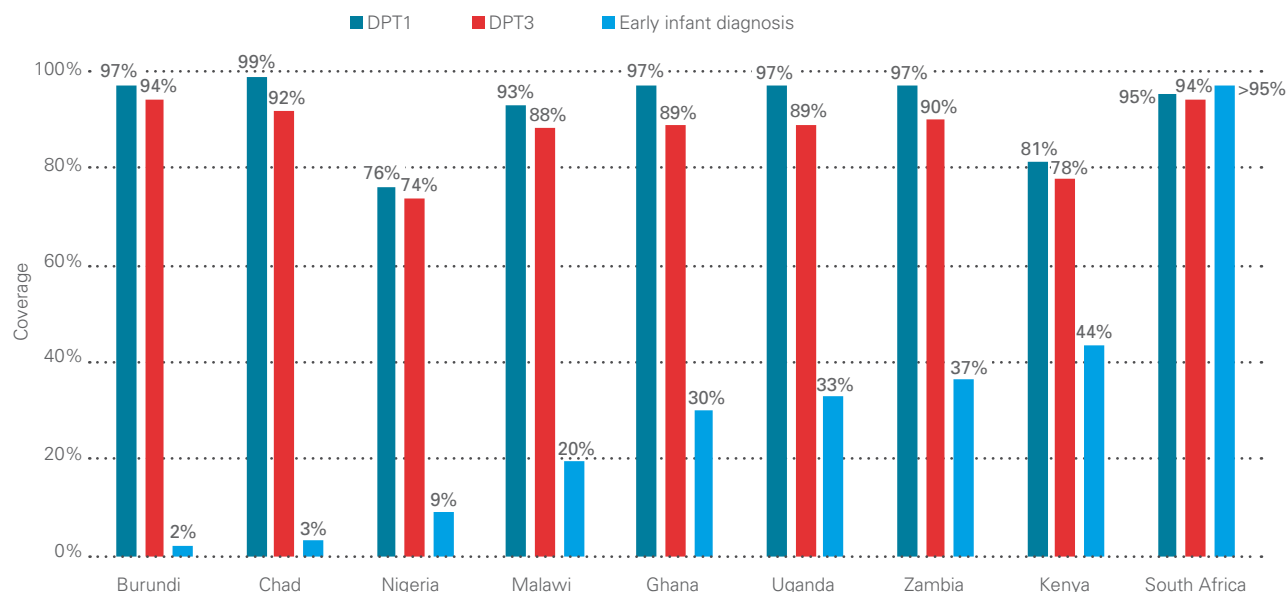
Also in 2015, the United States Food and Drug Administration approved a new paediatric formulation of the ARV ritonavir-boosted lopinavir (LPV/r) that can be mixed into a young child's food; the drug is available as a generic formulation affordable for most countries.

Efforts are also underway to provide more, and better, fixed-dose ART combinations for children. One, the Pediatric HIV Treatment Initiative, is a collaborative partnership that works to improve access.<sup>64</sup> Another, the Medicines Patent Pool (MPP), negotiates to reduce the cost of patented drugs. For example, in February 2015, MPP reached an agreement with the manufacturer to license the firm's paediatric formulation of the ARV raltegravir in combination HIV treatment regimens.<sup>65</sup>

FIGURE 2.10

### Routine immunizations provide entry points for early HIV detection

Percentage of infants receiving DPT1 and DPT3 immunizations and HIV testing within two months of birth in selected countries, 2015



Source: DPT1 and DPT3 data are from WHO-UNICEF 2015 Vaccine-preventable Diseases Estimates (June 2016); EID data are based on UNAIDS/UNICEF/WHO Global AIDS Response Reporting and UNAIDS 2016 estimates.

#### 4. Address the unique challenges of keeping children in treatment programmes and supporting their transitioning to adult treatment

Although historically there have been few paediatric ART options, there have been promising developments in this area in recent years. For example, the Pediatric HIV Treatment Initiative has convened stakeholders in an effort to develop better-adapted paediatric ARVs and formulations and to increase access.<sup>66</sup> A new paediatric formulation of the ARV drug ritonavir-boosted lopinavir, in the form of heat-stable oral pellets that can be mixed into a young child's food, was recently approved by the United States Food and Drug Administration. Feasibility studies are being conducted to assess the practicality of the pellets in different contexts, and the Interagency Task Team (IATT) on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children recently issued operational guidance for national programmes, procurement agencies, funders and manufacturers to select products, including pellets, that closely align with the criteria describing optimal paediatric dosage.<sup>67</sup>



**Adolescents living with HIV have the highest rates of treatment failure and lowest rate of adherence to ART.**

Today, an increasing number of children living with HIV who were vertically infected are entering adolescence, thanks to scale-up of ART for children. Keeping these children in treatment during adolescence poses great challenges. Adolescents living with HIV have the highest rates of poor adherence to ART and treatment failure.<sup>68</sup> Ensuring quality care and support for adolescents is critical during this period of transition from paediatric to adult care.

#### 5. Harness the power of community-led solutions

Communities are often best situated to define and respond to the evolving, holistic needs of women and children throughout their lives. Establishing community support structures requires sufficient human and financial resources. Yet equally useful

are strengthened community-facility linkages, which can help support women and families to stay in care. A review of community engagement for PMTCT identified 11 promising practices that have been associated with increased service uptake, adherence and retention along the PMTCT and broader HIV and maternal, newborn and child health continua of care. (Figure 2.11).<sup>69</sup>



**Faith-based organizations have long and successful histories of providing social and economic support for people living with HIV.**

In many countries, faith-based organizations have long and successful histories of providing social and economic support for people living with HIV. A wide range of community outreach and adequately resourced peer-support initiatives, including mentor mother groups such as mothers2mothers, show positive impacts on reducing both prenatal and post-natal mother-to-child transmission.<sup>70</sup> Community-based interventions that boost the involvement of male partners have been promising in many settings,<sup>71</sup> such as community ART groups in Mozambique.<sup>72</sup> Community engagement through these and other such interventions is one of the most effective ways to monitor, track and support those who miss appointments, have difficulties with adherence, or drop out of care entirely. Indeed, community-led treatment education will be an integral part of many countries' treatment scale-up efforts as they put in place new guidelines based on the WHO recommendation to offer ART to all who test positive for HIV.



**Community-based interventions that boost the involvement of male partners have been promising in many settings.**

#### 6. Protect children orphaned and affected by AIDS

Since 2002, at least 10 million children under the age of 18 have lost one or both parents to AIDS. This number peaked in 2009, when there were an estimated 15 million children who had lost one or both parents to AIDS.<sup>73</sup> Although this number has gradually fallen, there were

**FIGURE 2.11**

**Conceptual model for promising practices to increase service uptake, adherence and retention in PMTCT**

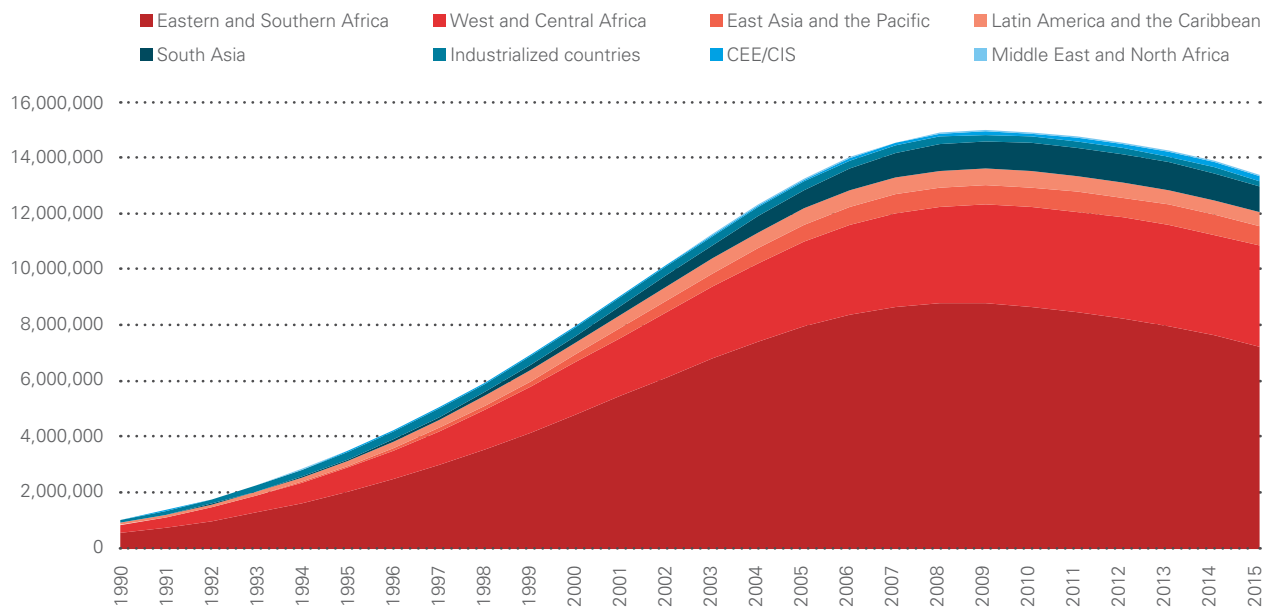


Source: UNICEF, *Community-Facility Linkages to Support the Scale Up of Lifelong Treatment for Pregnant and Breastfeeding Women Living with HIV*, June 2015.

**FIGURE 2.12**

**More than 13 million children have been orphaned by AIDS globally**

Estimated number of children (aged 0–17) who have lost one or both parents to an AIDS-related cause, by UNICEF regions, 1990–2015



Source: UNAIDS 2016 estimates.



A group of leaders in Malawi meet at the district level to discuss data and indicators and to brainstorm solutions.

still more than 13 million children in 2015 who had lost one or both parents to AIDS (Figure 2.12).<sup>74</sup> Remarkable gains have been achieved in mitigating the economic and social impact of HIV and AIDS on children and families over the past decade. Still, children orphaned by AIDS, or who are living with sick caregivers, continue to face an increased risk of physical and emotional abuse as compared with other children in sub-Saharan Africa, including other orphans.<sup>75</sup>

Investments for economic and psychosocial support, therefore, remain critical, as do strengthened linkages to testing children (and their families) who have lost one or both parents to AIDS; HIV treatment for those who need it; and community and health facility linkages to ensure that the most vulnerable are reached. Stronger linkages between HIV programming and broader national social protection efforts and community-based services are also needed to ensure that more children and families receive the support they need.

Evaluations of national social protection programmes have established that social protection (in particular, cash transfers) contributes to a broad range of impacts across multiple

sectors, improving access to health, education and nutrition, strengthening social networks, increasing access to treatment and prevention and reducing adolescent vulnerability and risk-taking. In addition, much more is known about which approaches effectively protect, care for and support children and families affected by AIDS and about the pathways between multiple childhood deprivations and subsequent HIV outcomes.

Investing in social protection, care and support systems will improve the access, reach and utilization of proven high-impact biomedical interventions to achieve reductions in HIV-related morbidity and mortality as well as reduce new infections. These investments will also enhance the quality of life for children and adolescents who are infected and affected and mitigate the impacts of HIV that drive new HIV infections.

A comprehensive policy framework to address HIV and child protection outcomes can stimulate multi-sectoral collaboration. Integrating child protection interventions and interventions for orphans and vulnerable children (for example, through a national orphans and vulnerable children plan) can maximize investment in comprehensive child protection services. To this end, UNICEF and World Vision have provided a comprehensive framework that holds all actors accountable and enables different sectors to report within one framework and work towards both HIV and child protection goals.<sup>76</sup>

### 7. Scale up HIV prevention for girls, pregnant women and mothers concurrently with medical interventions

The Global Plan aspired to reduce new HIV infections among women of reproductive age by 50 per cent. The actual decline achieved by 2015 among women aged 15 years and older was just 5 per cent – well below the target.<sup>77</sup> This suggests that women and girls, including young women, continue to be left behind, not being reached



Women and girls continue to be left behind and are not being reached with HIV prevention services.

with HIV prevention services. Demographic trends also suggest a need to redouble efforts and make more resources available. As the number of women and girls of reproductive age increases, the potential number of women and girls living with HIV will also increase. Further scaling up and sustaining comprehensive PMTCT services that include primary prevention of HIV among women of reproductive age is essential to prevent new HIV infections.

HIV prevention efforts should be further integrated into PMTCT delivery platforms and elsewhere (including in family planning clinics), emphasizing couple testing and counselling, treatment of partners found to be HIV-positive, condom promotion and early and repeat testing of pregnant and breastfeeding women.

Other HIV prevention interventions are based on the realities of families and communities in areas where women and girls of reproductive age are highly vulnerable to HIV. Testing that reaches both partners in a relationship can result in knowledge and access to prevention support for women and girls and their partners. Similarly, the unique challenges and needs of discordant couples can only be addressed when the HIV status of both partners is known; for example, PrEP may be provided to the HIV-negative partner in a discordant relationship.<sup>78</sup>

#### **8. Continue efforts for the dual elimination of mother-to-child transmission of HIV and congenital syphilis and offer interventions for other sexually transmitted infections**

Public health opportunities have emerged for the dual prevention of sexually transmitted infections (STI) and HIV through platforms administering new vaccines, medicines and diagnostics. Major biomedical interventions

include efficacious vaccines against the human papillomavirus (HPV) and hepatitis B virus, PrEP for HIV prevention with antiretroviral drugs, and the first dual HIV and syphilis POC test prequalified by WHO in November of 2015.

HPV vaccine programmes have been entry points for more comprehensive sexual and reproductive health programmes for adolescent girls and, in some settings, boys. Concerns that the vaccine may encourage young people to have sex are unfounded; in fact, adolescent girls and young women who receive HPV vaccines are significantly more likely to have protected sex and no more likely to have an early sexual debut.<sup>79</sup> Global 2006–2014 coverage estimates by region reveal that only 1 per cent of an estimated 118 million girls who received the HPV vaccine were from low- or middle-income countries.<sup>80</sup> Hence, strengthening programmes in low- or middle-income countries remains an important focus in the protection of adolescent girls and young women at high risk.<sup>81</sup>

WHO calls for the dual elimination of mother-to-child transmission of HIV and congenital syphilis. Data on the prevalence of syphilis in adolescents are not readily available in lower-income countries. However, among women of reproductive age (15–49 years), an estimated 930,000 maternal syphilis infections resulted in 350,000 adverse pregnancy outcomes, including 143,000 early fetal deaths and stillbirths, 62,000 neonatal deaths, 44,000 preterm or low-weight births and 102,000 infected infants globally in 2012.<sup>82</sup>

Success in the efforts towards the dual elimination of mother-to-child transmission of HIV and congenital syphilis has the potential for a cascade of positive effects. The use of dual elimination tools, such as dual rapid tests for HIV and syphilis, can significantly reduce maternal and neonatal morbidity and mortality in developing countries.



# CHAPTER 3 ADOLESCENTS







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*Young people play an 'HIV knowledge' game at an event to promote sexual and reproductive health among adolescents in China.*  
.....

©UNICEF/China/2016/Xia Yong

The global HIV epidemic among adolescents has not received adequate focus where it matters most – in the lives of adolescents themselves. However, new global public health commitments provide hope. With a focus on prevention of new HIV infections, testing and treatment, no adolescent should die an AIDS-related death, and those who are free of HIV should remain that way.

## PROGRESS AND CHALLENGES

In recent years, a heightened global recognition of the long-standing failure to address the epidemic among adolescents has led to increased collaboration and understanding of how to move forward. There are now clearer guidelines from WHO for strengthening programmes focused on adolescents living with and at-risk of HIV infection. From the perspective of direct impact, several targeted high-level initiatives funded by the United States President’s Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, the private sector and others now highlight the specific challenges and needs among adolescents, thus driving attention, resources and the introduction of innovative interventions aimed to reach those in need and the most vulnerable among them. The UNICEF/UNAIDS-led platform, All In to #EndAdolescentAIDS, seeks to bring all these initiatives together and align investments based on the evidence, while fostering innovations where new thinking is needed to scale up interventions that work.

An estimated 1.8 million adolescents between the ages of 10 and 19 years were living with HIV in 2015, a total that is 28 per cent higher than the comparable estimate of 1.4 million in 2005 (*Figure 3.1*).<sup>83</sup> Nearly half of those adolescents living with HIV in 2015 were in just five countries – India, Kenya, Nigeria, South Africa and the United Republic of Tanzania – with more than 60 per cent (1.1 million) living in Eastern and Southern Africa alone (*Figure 3.2*). The increase in adolescents living with HIV is related in large part to the fact

that today the majority of adolescents living with HIV were infected through vertical transmission.<sup>84</sup> This is of concern as programmes have rarely focused on improving strategies for identifying older children and adolescents growing up with HIV and linking them to treatment and care.

Some 250,000 adolescents (aged 15–19 years) around the world were newly infected with HIV in 2015. There were nearly 29 new infections every hour worldwide among the older adolescent population (those aged 15–19 years).<sup>85</sup> Two out of three new infections occurred in sub-Saharan Africa (*Figure 3.3*). Progress in preventing new infections among adolescents remains unacceptably slow, with new infections declining by only 8 per cent since 2009 (*Figure 3.4*).

**FIGURE 3.1**

### Global summary of the HIV epidemic among adolescents (aged 10–19), 2015

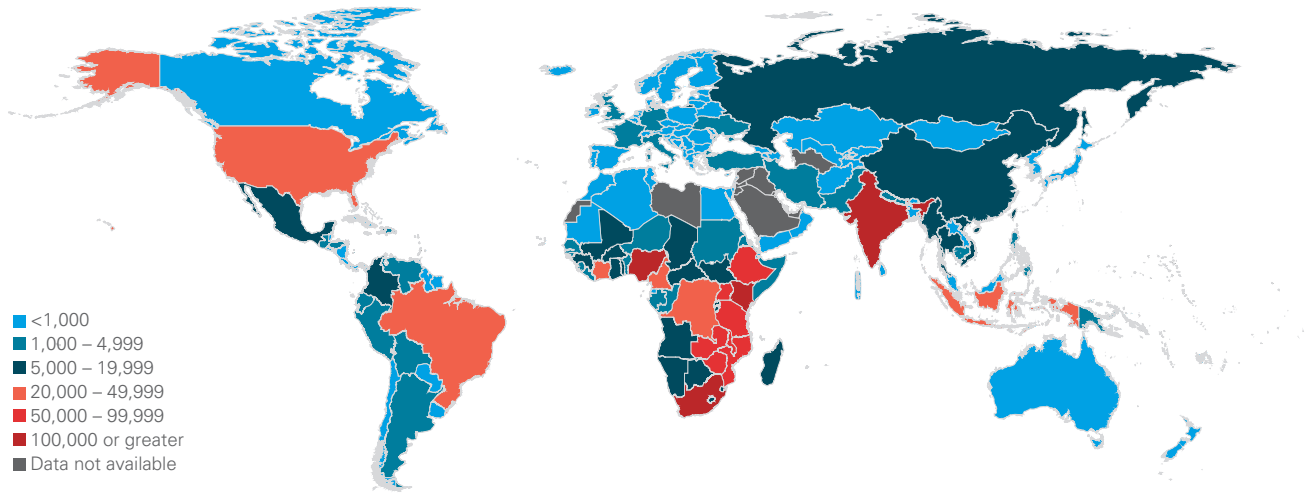
	Total	Global		sub-Saharan Africa
		Female	Male	(% of global)
<b>Estimated number of adolescents (10–19 yrs.) living with HIV</b>	1,800,000	990,000	780,000	80
<b>Estimated number of adolescents (15–19 yrs.) newly infected with HIV</b>	250,000	160,000	87,000	68
<b>Estimated number of adolescents (10–19 yrs.) dying of AIDS-related causes</b>	41,000	20,000	21,000	87

Note: Values may not sum to total due to rounding.  
Source: UNAIDS 2016 estimates.

**FIGURE 3.2**

**HIV among adolescents is a global issue**

Estimated number of adolescents (aged 10–19) living with HIV, 2015

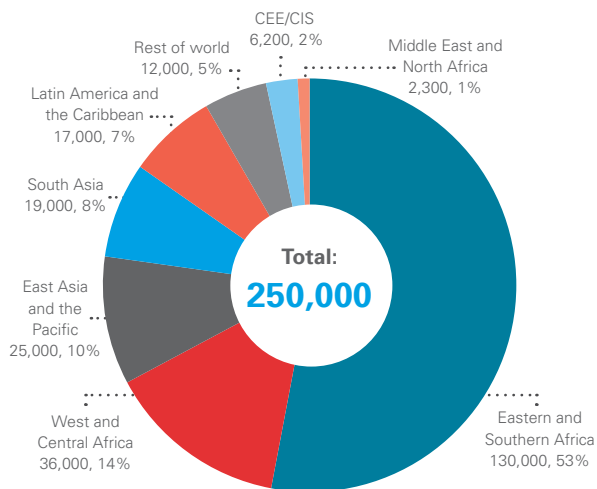


Note: The boundaries and the names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.  
Source: UNAIDS 2016 estimates.

**FIGURE 3.3**

**Two out of three new infections among adolescents (aged 15–19) occurred in sub-Saharan Africa**

Estimated number and percentage of new HIV infections among adolescents (aged 15–19), by UNICEF regions, 2015

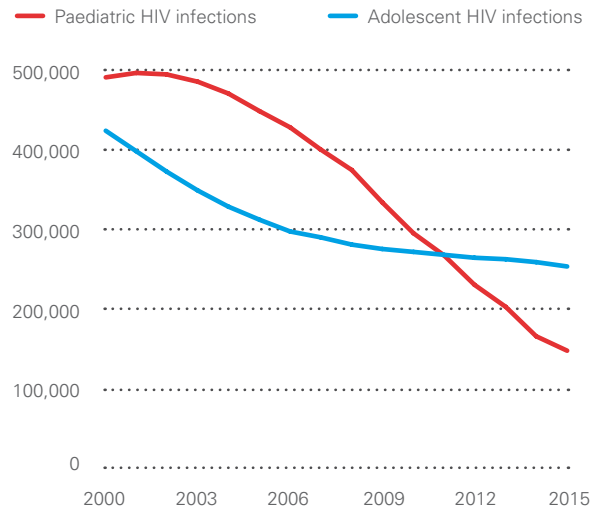


Source: UNAIDS 2016 estimates.

**FIGURE 3.4**

**New infections among adolescents (aged 15–19) have declined at a much slower pace than new infections among children (aged 0–14)**

New HIV infections among children (aged 0–14) and adolescents (aged 15–19), global, 2000–2015



Source: UNAIDS 2016 estimates.



**More than 100 adolescents died of AIDS every day in 2015.**

Between 2000 and 2015, annual AIDS-related deaths declined for all age groups except adolescents (aged 10–19 years), where mortality more than doubled from 18,000 to 41,000,<sup>86</sup> due to increasing numbers of adolescents with vertically acquired infection who remain unidentified or unsupported, even when on treatment (*Figure 3.5*).

### THE NUMBER OF YOUTH IN AFRICA WILL NEARLY DOUBLE BY 2050

Demographic realities further undermine recent hopeful trends. In 2000, there were 420,000 newly infected adolescents (aged 15–19 years) globally. This number has remained around 250,000 in recent years, and projections show that if current efforts are maintained, this number will not decrease, but start to rise again (*Figure 3.6*).

The youth population of sub-Saharan Africa, the region most affected by HIV, has begun to explode in size and will continue to do so. The youth population (aged 15–24) grew by more

than an estimated 40 million in sub-Saharan Africa between 2000 and 2010 and continues to grow steeply in this region. In 2010, there were about 210 million Africans between 15 and 24 years of age; that number could rise to more than 450 million by 2050.<sup>87</sup> In 2015 in many countries, such as Chad, Nigeria, Uganda and Zambia, more than 40 per cent of all people were under the age of 15 years.<sup>88</sup>

The massive youth population overall means that redoubled efforts will be necessary to forestall an expected annual rise in the estimated number of people aged 10–19 years who are newly infected with HIV. That is because even if the progress in reducing the HIV incidence rate among adolescents is maintained, the estimated number of new HIV infections is projected to stall at 250,000 from 2015–2021, before climbing to 270,000 annually by 2025 and 300,000 annually by 2030.<sup>89</sup> If progress in reducing the HIV incidence rate were to slow, these numbers could climb even higher.

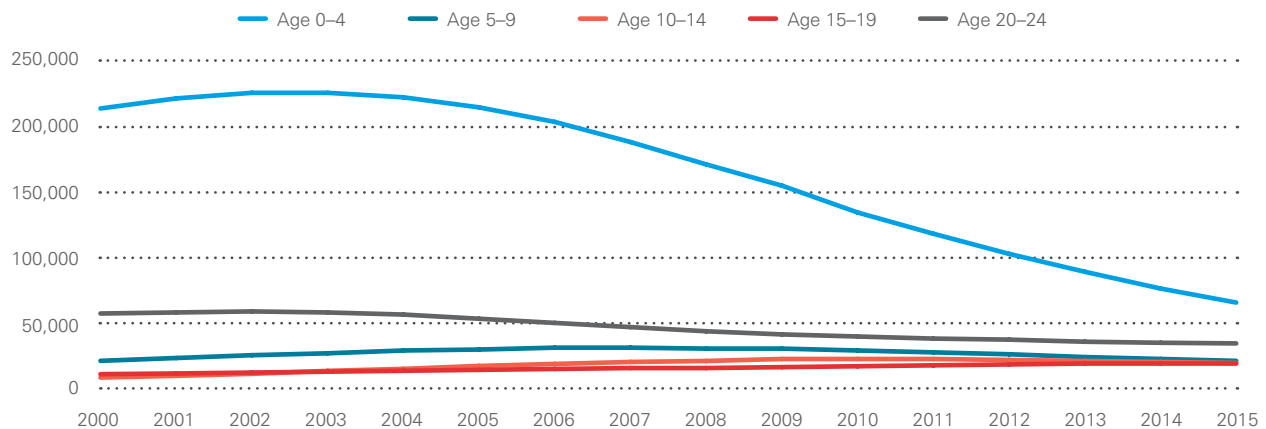


**The massive youth population overall means that redoubled efforts will be necessary to forestall a rise in new HIV infections in adolescents.**

**FIGURE 3.5**

### AIDS-related deaths have decreased significantly among all age groups except adolescents (aged 10–19)

Estimated number of AIDS-related deaths, by 5-year age groups, 2000–2015



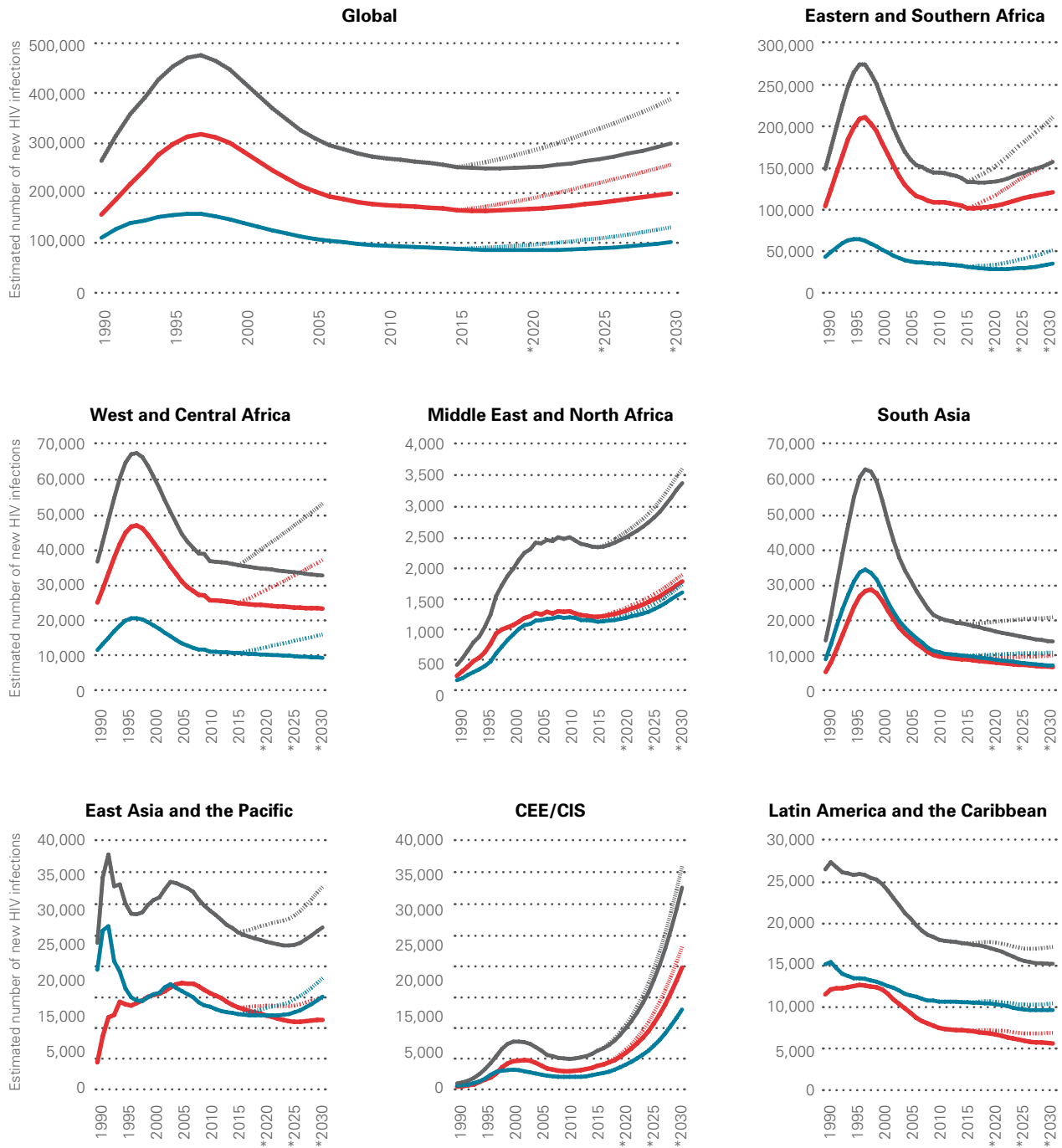
Source: UNAIDS/UNICEF/WHO Global AIDS Response Progress Reporting and UNAIDS 2016 estimates.

**FIGURE 3.6**

**New adolescent (aged 15–19) infections are projected to increase globally**

Global trends 1990–2015, with 2016–2030 projections accounting for demographic shift

— Girls (aged 15–19) continued progress    
 — Boys (aged 15–19) continued progress    
 — All adolescents (aged 15–19) continued progress  
- - - Girls (aged 15–19) stalled progress    
 - - - Boys (aged 15–19) stalled progress    
 - - - All adolescents (aged 15–19) stalled progress



\*Note: Projections for 2016–2030 are based on the 2009–2015 average annual rate of change in incidence rates (new HIV infections out of the non-HIV-infected population). Two scenarios are presented: (1) 'Continued progress' shows the continuation of the average annual rate of change in incidence rates; (2) 'Stalled progress' shows only the latest incidence rate (2015) continued through 2030. In countries where the incidence rate was increasing between 2009–2015, the average annual rate of change is employed in both scenarios. Only ages 15–19 were analysed because current models do not account for behavioural transmission prior to age 15.  
 Source: UNICEF analysis of UNAIDS 2016 estimates, July 2016.



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Sabina, 18, was the oldest boy in her family and now lives as a woman. "I use condoms and only have sex with someone I want to have sex with," she said.

## ADOLESCENT GIRLS AND YOUNG WOMEN CONTINUE TO BE DISPROPORTIONATELY AFFECTED

Globally, nearly two thirds (65 per cent) of new HIV infections among adolescents aged 15–19 years were among girls, a level little changed from the 67 per cent estimate in 2000.<sup>90</sup> The situation is even starker in the highest-burden parts of the world. In sub-Saharan Africa in 2015, three out of four newly infected adolescents aged 15–19 years were girls.<sup>91</sup>

An estimated 1,100 young women (aged 15–24 years) around the world are infected with HIV every day.<sup>92</sup> In South Africa alone, some 2,000 young women between the ages of 15 and 24 years are infected with HIV each week.<sup>93</sup> Despite the availability of antiretroviral medicines, AIDS-related illnesses remain one of the leading causes of death among girls and women of reproductive age in Africa.<sup>94</sup>

Examining prevalence statistics in the 10–24-year-old age group as a whole masks important gender disparities. With increasing age (10–14 years, 15–19 years and 20–24 years), gender disparities in HIV prevalence emerge. For example, the ratio of girl-to-boy HIV infections in Eastern and Southern Africa is 1:0, 1:6 and 1:9 for the three age groups.<sup>95</sup> These data illustrate the need for a nuanced analysis of the situation of adolescent girls and boys in every context when designing and delivering HIV programmes.

## ADOLESCENT KEY POPULATIONS ARE AT RISK IN NEARLY EVERY CONTEXT

Globally, adolescent key populations, including gay and bisexual adolescent boys, transgender adolescents, adolescents who are sexually exploited and sell sex<sup>96</sup> and adolescents who inject drugs have been found to have higher risk for HIV infection than the general adolescent population.<sup>97</sup> Adolescent key populations also experience substantial barriers in access to care, mostly because of stigma and discrimination reinforced through punitive laws and policies, negative attitudes encountered during contact with health services, social isolation, violence and self-stigmatization.<sup>98</sup>

The magnitude of the problem can be seen in a secondary analysis from biological and behavioural surveys among key populations, aimed to extrapolate estimated HIV prevalence among younger (under the age of 25 years) members of higher-risk populations in capital cities over the 2011–2015 period. Among people who inject drugs, for example, findings included 23 per cent HIV prevalence in Greece; 17 per cent in Myanmar; 34 per cent in Pakistan; and 25 per cent in Thailand. Among sex workers, prevalence was 28 per cent in Cameroon; 42 per cent in Rwanda; 15 per cent in Senegal; and 33 per cent in Zimbabwe. Among males under the age of 25 who have sex with men, prevalence was 60 per cent in Guinea; 24 per cent in Indonesia; and 24 per cent in Jamaica.<sup>99</sup> Behavioural surveillance in 2014 in Thailand indicated that Bangkok had an HIV prevalence of 23.5 per cent among young men aged 15–22 years who have sex with males.<sup>100</sup>

## STRATEGIES TO ACCELERATE PROGRESS FOR ADOLESCENTS

### 1. Strengthen data collection and analysis to drive decision-making

Data on HIV among adolescents have not been easy to identify or present with much confidence or precision. That situation is changing due to more and better disaggregation of global data on adolescents, but much remains to be done.

Global reporting of the numbers of adolescents on ART by 5-year age groups began in 2014 and not all countries are yet able to report those numbers disaggregated to this level of age specificity. As a result, just 67 countries were able to report adolescent ART data for 2015 (either full-year or first six months). These 67 countries accounted for 16 per cent of all adolescents (aged 10–19 years) living with HIV globally in 2015.<sup>101</sup> Continued efforts are especially needed to understand HIV incidence among adolescents to better target interventions.

The All In rapid assessment process has shed light on how HIV affects adolescents of different ages, which has prompted countries to recognize that adolescent data are weak and lacking in specificity. This recognition has become a catalyst for national programmes to acknowledge that they could be doing more for adolescents.<sup>102</sup>

### 2. Invest in a combination of high-impact interventions to reach adolescents most at risk of HIV infection, illness and death

Regardless of the context, the complexities of HIV vulnerabilities among adolescents require a focus on combination prevention as the overall approach of any potentially successful effort to significantly reduce infection rates.<sup>103</sup> Combination prevention among adolescents should include biomedical, structural and behavioural threads. The challenge is how to implement high-impact interventions with adolescents who rarely interact with health

or other social services. In addition, adolescents at risk of HIV infection often suffer from multiple health risks or deprivations, especially adolescents who are members of key populations.<sup>104</sup>

A study in South Africa found that financial support combined with social support from parents or teachers increased HIV prevention benefits more than providing cash alone. Benefits included reductions in incidence of multiple and concurrent partners and other HIV-risk behaviours for both boys and girls.<sup>105</sup> A follow-up study found that combining cash transfers with free education and psychosocial support interventions led to cumulative reductions in HIV-risk behaviours among adolescents (Cash Plus Care).<sup>106</sup> An evaluation of MTV Shuga's efforts to combine entertainment and HIV services demonstrated that viewers' knowledge about HIV testing increased and their belief in myths related to transmission decreased. Viewers were almost twice as likely to get tested after six months of watching the show.<sup>107</sup>

### 3. Prioritize efforts to address forced sex, sexual exploitation and loss of sexual agency among adolescent girls



Women and girls are empowered when they have the ability to make choices and to transform those choices into desired actions and outcomes.

Women and girls are empowered when they have the ability to make choices and to transform those choices into desired actions and outcomes. Yet women and girls often have limited agency and therefore do not have full control to choose whom to marry, when to have sex, when to have children, how to protect themselves against HIV and how to access health services. In sub-Saharan Africa, one in four women (15–24 years old) reported being able to make the final decision about her own health.<sup>108</sup>



When the human rights of LGBT people are abused, all of us are diminished. Every human life is precious – none is worth more than another.

Ban Ki-moon, Secretary-General of the United Nations



In some countries, adolescent girls and young women are uniquely vulnerable due to a trend called 'intergenerational churning', or ongoing intergenerational sex, which has persisted for decades, and a recent HIV phylogenetic study in South Africa reinforces this theory.<sup>109</sup> Intergenerational churning creates a cycle of infection. Older men are the primary sources of HIV transmission to younger women, often because they exploit the younger women's economic situation by offering cash and gifts in exchange for sex (often unprotected). The cycle branches out when the young girls who have become infected mature and transmit HIV to their sexual partners, more likely at this point to be their peers.

Adolescent girls and young women also have the highest prevalence of intimate partner violence. As an example, in Gabon, prevalence of intimate partner violence among young women is 42 per cent, compared with 28 per cent for older women.<sup>110</sup> Forced sex puts girls at risk, too – in some settings nearly half of adolescent girls report their first sexual experience was forced.<sup>111</sup>

There is evidence that investments in social protection, especially in the form of cash transfers, also called 'cash plus care', can offer solutions to causes of risky sexual behaviour and can, in turn, reduce the risk of HIV infection.<sup>112</sup> Cash transfers are estimated to have reached more than 1 billion people in low- and middle-income countries worldwide.<sup>113</sup> This social protection approach has been used across sub-Saharan Africa, including in Kenya, Malawi, South Africa, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe.<sup>114</sup>

#### 4. Analyse and respond to the needs of adolescent key populations

Understanding the situation of adolescent key populations is critical to ensure that programmes reach these adolescents at the right times in the right places and with the right combination of interventions that meet their needs within their life context. Interventions must address structural, socio-economic and gender inequalities, including gaps in child protection and social protection systems.

In Asia and the Pacific, a review of programmatic interventions determined that individual

## ADOLESCENT GIRLS (15–19)

### IN SUB-SAHARAN AFRICA:

**3 in 4**

new infections in 15–19 year olds are among girls.



Only **32%** of girls with multiple sexual partners reported having protected sex.

Just **26%** of girls have comprehensive HIV knowledge.



**13%** of adolescent girls have been tested for HIV and received their results in the past 12 months.







Adolescent boys of Zamboanga City are protecting themselves from HIV by sharing correct knowledge and skills with their peers.

decisions regarding safe behaviour and testing uptake among transgendered adolescents and adolescent boys who have sex with other males are mediated by structural-level factors. Condom use and testing uptake are low among young key populations in this region, often due to low perceptions of risk. Services must be designed and delivered with these adolescents in mind.



**Condom use and testing uptake are low among young key populations often due to low perceptions of risk.**

In 2016, the United Nations General Assembly Special Session on Drugs provided an opportunity to understand how to address HIV among the key population of adolescent drug users. HIV prevalence among young people under 25 years of age who inject drugs was reported to be 5.2 per cent.<sup>115</sup> Although a global estimate of prevalence of injecting among those under 18 years of age is unavailable, indications of the seriousness of the situation are reflected in the following:

- A 2012 survey among injecting drug users in Myanmar reported HIV prevalence of 7 per cent among 15–19-year-olds who injected drugs and 15 per cent among 20–24-year-olds.<sup>116</sup>

- A 2011 study among injecting drug users in Dar es Salaam, United Republic of Tanzania, reported that 25.6 per cent of young people aged 17–25 years who injected heroin were living with HIV.<sup>117</sup>
- In countries with high HIV incidence among injecting drug users in Central and Eastern Europe and the Commonwealth of Independent States, the average age of initiation of injecting is young and becoming younger in several countries.<sup>118</sup>
- An East European multi-country study of injecting drug users (aged 15–24 years) found that up to 30 per cent reported their age at first injection as less than 15 years. In Albania, the mean age of initiation was found to be 15.6 years, while in the Republic of Moldova, Romania and Serbia it was 17.5 years, 16 years and 18.7 years, respectively.<sup>119</sup>
- Research has also indicated that a significant proportion of people who inject drugs become infected with HIV within the first 12 months of initiation.<sup>120</sup>

The HIV crisis among young key populations cannot be overemphasized. Addressing their diverse realities and ensuring that they grow

up protected from violence and discrimination and have access to key services, such as HIV testing, evidence-based HIV prevention and treatment programmes as well as sexual and reproductive health services, is essential. Moreover, while international human rights law is clear on the need to provide harm reduction, HIV prevention and drug dependence treatment programmes (such as opioid substitution therapy or methadone maintenance) are weak. In practice, young people’s access is impeded by significant legal and policy constraints, in particular those relating to parental permission and age of consent to treatment.<sup>121</sup>

### 5. Educate adolescents about HIV

Regardless of where they live or their social and economic circumstances, adolescents need to know about HIV, including the main risk behaviours (for example, unprotected sex) or how they might be able to keep themselves and others safe. Although knowledge is not sufficient,

it is necessary not only to prevent HIV infection but also to reduce stigma and discrimination towards people affected by HIV. A high-profile United Nations General Assembly report recently concluded that young people’s accurate and comprehensive knowledge about HIV has stagnated (*Figure 3.7*).<sup>122</sup> In sub-Saharan Africa, just 26 per cent of adolescent girls and 33 per cent of adolescent boys aged 15–19 years have comprehensive HIV knowledge. Levels of condom use also remain very low, with only 32 per cent of sub-Saharan adolescent girls with multiple partners reporting condom use at last sex.<sup>123</sup>

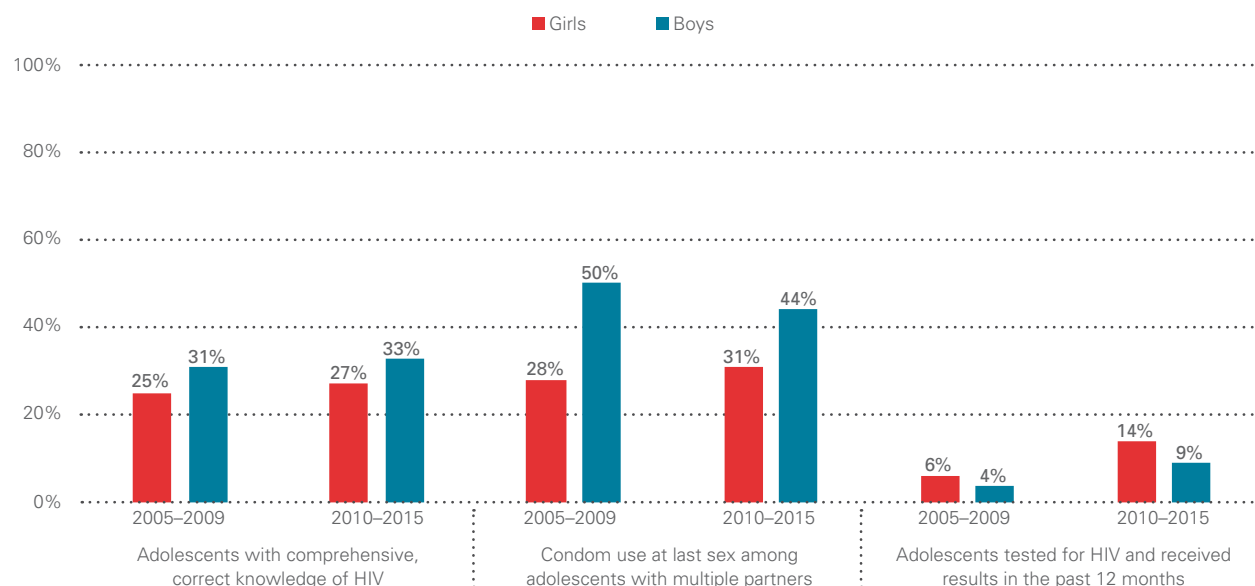
### 6. Support children transitioning to adolescent/adult care

The consequences of limited treatment options and poor or inconsistent treatment access can be seen in the significant number of adolescents who were vertically infected, survived into adolescence and then died.<sup>124</sup> According to recent estimates, 41,000 adolescents aged 10–19 years

**FIGURE 3.7**

#### Key prevention indicators show limited progress for adolescents

Selected indicator coverage among adolescent boys and girls (aged 15–19), sub-Saharan Africa, 2005–2009 and 2010–2015



Note: Regional figures reflect country subsets with survey data for both the 2005–2009 and 2010–2015 time periods.  
Source: UNICEF analysis of DHS, MICS and other national household surveys, 2005–2015.

## BOX 4

### Age of consent and discretionary authority and barriers to access to services

In many countries, national guidelines empower service providers with the discretionary authority to serve children and adolescents who are under the legal age of consent if the service provider believes that an underage individual can understand the service, its related conditions and its consequences, and is capable of giving consent. But, in practice, many service providers do not use their authority – and instead demand parental consent – no matter if the individuals might be in clear and immediate need of health, protection and support services. Such actions effectively turn away some of the most vulnerable from crucial access points to the services they need.

A recent UNICEF-supported legal review of consent laws and policies in 22 countries<sup>125</sup> and of ethical, social and cultural barriers in 11<sup>126</sup> countries revealed that:

- Most countries have set the age of consent to sex at 16 years with some exceptions, for example, if the underage person and the sexual partner are married.
- Most countries do not stipulate specific ages of consent for individual HIV and sexual and reproductive health services including antiretroviral therapy, post-exposure prophylaxis and contraception. In the absence of specific guidance, in most cases, the age of consent to these services is taken to be the same as the age of consent to medical treatment, ranging from 12 to 18 years, with 16 years being the most common age.
- The age of consent to HIV testing varies across countries; in most countries, the age is between 16 and 18 years.

Current global guidance<sup>127</sup> recommends that countries examine current laws and policies and address any age-related barriers to access and uptake of services created through these provisions.

(the majority of whom were vertically infected) died in 2015.<sup>128</sup> The persistence of adolescent deaths in a period of overall declining AIDS mortality rates also highlights difficulties in case finding among both children and adolescents.

Adolescents and young adults who are HIV-positive are especially likely to experience the virological failure of their antiretroviral treatment when they move from paediatric to adult HIV care. In a recent study, the risk of virological failure increased more than fourfold at the time of care transition (18–19 years of age). Risk factors associated with viral breakthrough were low educational attainment, poor knowledge of HIV and lack of independence regarding HIV treatment adherence.<sup>129</sup>

Supporting adolescents in the process of becoming autonomous in their medication adherence should begin during paediatric care and continue through transition, and health systems should be strengthened to accommodate the needs of young clients. As education and employment are associated with better treatment adherence and success, addressing these topics

during transition, and providing additional support where necessary and possible, may further improve virological outcomes in this population.<sup>130</sup>

### 7. Learn by doing: Apply implementation science to investigate effective operational approaches to bring innovations to scale

HIV science moves quickly, and policymakers and implementers must also adapt by examining how innovations – technological and social – can support HIV prevention, treatment and care in their contexts and be brought to scale.

- **HIV self-testing** offers users autonomy and confidentiality, which might be advantageous for reaching people who do not routinely (if at all) access health services.<sup>131</sup> If made available in a convenient and careful manner, self-testing could be a vital high-impact, low-cost intervention that drives down diagnosis gaps in older adolescents.<sup>132</sup>

The promise can be seen in results from a cluster-randomized trial in Malawi. The trial recorded an 84 per cent population-level uptake



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Peer health educators gather at a World Aids Day ceremony at American University in Dubai.

of community-based HIV self-testing – of which 44 per cent were first-time testers, the majority were adolescents, and 11.8 per cent of those who self-tested were diagnosed HIV-positive.<sup>133</sup>

Self-testing is not currently available in many parts of the world. Among the obstacles are varying legal policies. For example, self-testing for HIV is legal and promoted in Kenya but is illegal in Botswana.<sup>134</sup>

- **Home-based or mobile HIV testing and counselling** can make testing easier for adolescents, as long as informed consent, confidentiality concerns and adolescent-specific counselling are incorporated. Linkages to care and treatment should be immediately available as part of any and all HIV testing interventions.

Several projects show optimistic results in boosting case finding among adolescents overall and key populations in particular. In Fortaleza, Brazil, for example, the Youth Aware project focuses on mobile outreach to expand HIV testing and improve linkage to care. Of 1,410 people tested by the mobile unit during

an 18-month period ending in June 2015, 609 (43 per cent) were adolescents aged 13–19 years (356 male and 253 female), 102 were adolescent men (13–19 years) who have sex with men, and 264 were adolescent boys and girls (13–19 years) in conflict with the law.”<sup>135</sup>

- **A combination of interventions** is required to improve **HIV service uptake, retention and ART adherence**. Retention and adherence have particular challenges for adolescents in terms of prevention, treatment and care. Once ART has been initiated, retention<sup>136</sup> and adherence to treatment are poor, with a recent systematic review showing that, although studies used different measurement approaches, on average, only 62 per cent of 12–24-year-olds achieved 95 per cent or greater adherence.<sup>137</sup>

A recent nine-country review cites customized adolescent-friendly services, individual and group education and counselling, financial incentives and increased clinic accessibility as interventions that warrant more attention and research.<sup>138</sup> Data from Uganda, which provide a more context-specific analysis, found that peer

support groups, counselling, supportive health-care workers, short waiting time and provision of food and transport helped adherence.<sup>139</sup>



**Social media and associated technologies are already substantially integrated into the lives of young people in much of the world, including in low- and middle-income countries.**

Social media and associated technologies are already substantially integrated into the lives of young people in much of the world, including in low- and middle-income countries. Useful and promising initiatives have been introduced to take advantage of this growing connectedness and provide HIV awareness messaging and reminders to take ARVs, among other interventions.<sup>140</sup> Studies have shown that sending short message service (SMS) reminders via mobile phones has contributed to improved uptake of services, particularly improvements in ART adherence.<sup>141</sup>

Many other existing and future tools offer inexpensive and efficient ways for people to get access to HIV and sexual health information confidentially and safely.<sup>142</sup> The type and scope of such opportunities – using social media, smartphones and other communication tools as entry points – will only increase. Exploiting the trend effectively is an HIV programming priority in certain contexts and specific target populations.<sup>143</sup>

- **PrEP as a combination prevention intervention** may have unique value among adolescent girls, young women and adolescent boys who have sex with males because it does not need to be taken at the time of sex and can be used discreetly.

Oral PrEP, in the form of a two-drug ARV combination, is increasingly available in lower-income, high-burden countries – most notably, Kenya and South Africa, where national regulators announced approval in December 2015. Oral PrEP availability

in low- and middle-income countries is expected to increase since WHO, in October 2015, issued implementation guidelines for ART that for the first time supported pre-exposure prophylactic interventions for all individuals at high risk of HIV infection.<sup>145</sup>

The potentially broader impacts of oral PrEP were seen by participants at a UNICEF-convened technical consultation in 2015, which included researchers, community development partners and youth advocates.<sup>146</sup> Participants agreed that delivering PrEP in a safe space to adolescents who are at substantial risk of HIV infection and are willing to take PrEP will deliver significant cost savings and benefits to national HIV responses. As such, this new biomedical tool for HIV prevention in sexually active older adolescents at substantially higher risk of HIV infection could contribute significantly to ending AIDS as a public health issue by 2030.



**PrEP as a combination prevention intervention may have unique value among adolescent girls, young women and adolescent boys who have sex with males because it does not need to be taken at the time of sex and can be used discreetly.**

The Plus Pills study examined the use of oral PrEP among HIV-negative adolescents (aged 15–19 years).<sup>147</sup> The relatively small study had 148 participants, whose median age was 18 years. Results showed that early adherence was reasonable among a high-risk adolescent population, despite fairly high levels of reported infrequent condom use, multiple sexual partners and testing positive for sexually transmitted infections.<sup>148</sup>

With ever-increasing global commitment to deliver results for adolescents, and the knowledge that this population will soon become the largest the world has seen, the global community is well equipped to take interventions that work to scale and provide this population with the tools they need to live healthy lives.



## CONCLUSION





.....  
*Tecla, 6 months, is weighed at a routine health-care visit. Her mother is living with HIV but was able to prevent transmission of the virus to her daughter.*  
.....

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Energized and encouraged by success, yet sobered by the knowledge that hundreds of thousands of children are still slipping through the cracks, the global community has arrived at a critical moment in its drive to end AIDS for every child. The progress – especially the acceleration achieved in recent years to reduce the number of new paediatric HIV infections – shows that tremendous advances are possible, even in places with scarce resources. However, the remaining burden of HIV and AIDS among children and adolescents is not evenly shared from region to region, country to country, or city to city. Today, our efforts must focus on driving faster progress within the countries, regions and populations where serious inequities persist.

The current state of the AIDS response calls for innovation in implementation, dissemination and optimization, using what is known as a foundation to help focus new action. The work must extend across development sectors, and must also engage with non-traditional actors who meet children, adolescents and their families where they are, throughout their lives. We stand together

in an exciting and challenging new landscape that demands creative ways to address both age-old barriers like stigma and lack of knowledge, and emerging issues such as prevention of new infections in the booming adolescent population.

Ending AIDS will also require us to address the social and economic factors that continue to fuel the AIDS epidemic. Poverty, food insecurity, drug and alcohol use, social marginalization, exclusion, stigma, inequity, gender inequality, violence and sexual exploitation all increase risk and decrease resilience in vulnerable populations. Social protection and the protection, care and support of children must underpin multi-sectoral efforts to scale up high-impact interventions through the first two decades of life.

Ending AIDS in children and adolescents is within sight. With strong political commitment and adequate resources, we can continue to achieve dramatic change. By elevating those at greatest risk – women, children and adolescents – to the forefront of the AIDS response, we can achieve our historic goal.



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*Martha, 19, was born with HIV in Malawi. At the time, an HIV diagnosis was practically a death sentence, especially for children in low-income countries. Now a mother herself, Martha has defied the odds and her son is part of a growing AIDS-free generation.*



# ACRONYMS

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ARVs	antiretroviral drugs
CEE/CIS	Central and Eastern Europe and the Commonwealth of Independent States
CD4	cluster of differentiation or designation 4: white blood count measure of eligibility for ART treatment
DHS	Demographic and Health Surveys
EID	early infant diagnosis (of HIV)
HIV	human immunodeficiency virus
HPV	human papillomavirus
IATT	Interagency Task Team
MICS	Multiple Indicator Cluster Surveys
PEPFAR	United States President's Emergency Plan for AIDS Relief
PMTCT	prevention of mother-to-child transmission
POC	point-of-care
PrEP	pre-exposure prophylaxis
SMS	short message service
STI	sexually transmitted infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
VL	viral load
WHO	World Health Organization

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# ANNEX: STATISTICAL TABLES

## NOTES ON THE DATA

### Data sources and compilation

The data and analyses presented in this Seventh Stocktaking Report are derived from information in UNICEF global databases that are compiled from various sources. These include nationally representative data collected from household surveys – e.g., Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and Reproductive Health Surveys; national programme service statistics collected annually by UNAIDS, UNICEF and WHO through the Global AIDS Response Progress Reporting (GARPR) process; country estimates of HIV care and treatment needs modelled by UNAIDS and WHO in collaboration with countries; and the United Nations Population Division demographic estimates.

In 2016, UNAIDS, UNICEF and WHO collected HIV coverage data from national programmes worldwide through the 2016 GARPR process, a reporting tool used to monitor and report on programmes' national progress towards HIV and AIDS goals and targets. The tool typically comprises indicators to track progress towards universal access to HIV prevention, treatment and care, including HIV interventions for women and children, such as preventing mother-to-child transmission (PMTCT) and paediatric HIV care. The tool also collated updated household survey data on HIV knowledge and sexual behaviour. The GARPR replaces the Joint Reporting Tool on the health-sector response to HIV and AIDS and collected HIV programme data for the 12-month period of January–December 2015.

### Estimates on HIV care and treatment needs of children and pregnant women

In 2016, UNAIDS and WHO refined the HIV and AIDS estimation methodology to reflect more reliable data available from population-based surveys, expanded national sentinel surveillance systems and programme service statistics. As a result, UNAIDS has retrospectively generated new epidemiological estimates for past years based on the refined methodology.

To achieve consistency and establish a comparative measurement of progress, trend analyses were recalculated using only the newly generated estimates. These estimates included the most recent country-reported data from 2015. The methods and assumptions of the UNAIDS and WHO estimation model continue to evolve and are regularly updated as new data become available. Changes in the estimation methodology may result in changes to the coverage of key HIV and AIDS programme interventions since these estimates often represent the denominator of the coverage indicators. In light of these changes, 2015 coverage rates should not be compared with coverage figures published in previous versions of progress reports. For this reason, all estimates of antiretroviral therapy and antiretrovirals for PMTCT for previous years have been back-calculated for this year's report.

Overall, the newly generated estimates and previously published estimates are not related to trends over time and are therefore not comparable; nor are other revised estimates comparable to estimates published in previous years. Trends over time may be assessed using new UNAIDS methodological revisions applied retrospectively to earlier HIV and AIDS data.

[More details about the data, reporting by specific countries and the methodology for HIV estimates can be found at <www.unaids.org>.](http://www.unaids.org)

TABLE 1

## Elimination of new HIV infections among children by 2015 and keeping their mothers alive in low- and middle-income countries

Countries and areas	Estimated HIV prevalence (%) among adults (aged 15–49), 2015	Antenatal care coverage – at least one visit (%), 2010–2015*	Antenatal care coverage – at least four visits (%), 2010–2015*	Annual number of births (thousands), 2015	Estimated number of pregnant women living with HIV, 2015			Reported number of pregnant women living with HIV who received ARVs for PMTCT, 2015	Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT, 2015		
					Estimate	Low	High		Estimate	Low	High
Afghanistan	<0.1	63	23	1,081	<200	<200	<500	7	4	2	8
Albania	–	97 x	67 x	40	–	–	–	–	–	–	–
Algeria	<0.1	93	67	936	<500	<500	<500	112	34	28	38
Andorra	–	–	–	–	–	–	–	–	–	–	–
Angola	2.2	80 x	–	1,128	21,000	15,000	29,000	8,398	40	29	57
Antigua and Barbuda	–	100 x	100	1	–	–	–	–	–	–	–
Argentina	0.4	98	90	753	1,600	1,500	1,800	1,481	93	85	>95
Armenia	0.2	99	93	39	–	–	–	29	–	–	–
Australia	0.2	98 x	92 x	318	<200	<200	<200	119	>95	95	>95
Austria	–	–	–	82	–	–	–	–	–	–	–
Azerbaijan	0.2	92	66	193	<200	<100	<200	56	49	32	71
Bahamas	3.2	98 x	85	6	<200	<100	<200	52	50	46	54
Bahrain	–	100 x	100	20	–	–	–	–	–	–	–
Bangladesh	<0.1	64	31	3,134	<200	<200	<200	20	14	11	16
Barbados	1.6	93	88	3	–	–	–	15	–	–	–
Belarus	0.6	100	100	112	<1,000	<500	<1,000	270	48	37	62
Belgium	–	–	–	130	–	–	–	–	–	–	–
Belize	1.5	96	83	8	<100	<100	<100	54	63	54	72
Benin	1.1	83	59	388	–	–	–	–	–	–	–
Bhutan	–	98	85	13	–	–	–	–	–	–	–
Bolivia (Plurinational State of)	0.3	90	75	253	<500	<500	<1,000	284	76	47	>95
Bosnia and Herzegovina	–	87	84	34	–	–	–	–	–	–	–
Botswana	22.2	94 x	73 x	55	13,000	12,000	14,000	11,899	92	86	>95
Brazil	0.6	98 x	89	3,016	8,500	6,300	11,000	10,541	>95	91	>95
Brunei Darussalam	–	99 x	93	7	–	–	–	–	–	–	–
Bulgaria	–	–	–	68	–	–	–	–	–	–	–
Burkina Faso	0.8	94	34	717	5,300	4,500	6,300	4,731	89	75	>95
Burundi	1.0	99	33	488	4,400	3,300	5,300	3,885	89	67	>95
Cabo Verde	1.0	98 x	72 x	11	<100	<100	<100	73	>95	79	>95
Cambodia	0.6	95	76	371	–	–	–	–	–	–	–
Cameroon	4.5	83	59	847	33,000	29,000	36,000	26,678	82	73	91
Canada	–	100 x	99 x	387	–	–	–	–	–	–	–
Central African Republic	3.7	68	38	164	4,800	4,200	5,500	2,721	56	49	64
Chad	2.0	53	31	630	10,000	8,000	13,000	4,671	46	36	60
Chile	0.3	–	–	234	–	–	–	232	–	–	–
China	–	96	–	16,601	–	–	–	–	–	–	–
Colombia	0.5	97	89	747	1,600	1,500	1,800	805	49	45	54
Comoros	–	92	49	26	–	–	–	–	–	–	–
Congo	–	93	79	167	–	–	–	–	–	–	–
Cook Islands	–	100 x	–	–	–	–	–	–	–	–	–
Costa Rica	0.3	98	90	70	<200	<100	<200	41	41	36	46
Côte d'Ivoire	3.2	91	44	838	22,000	19,000	26,000	17,711	79	67	91
Croatia	–	–	93	40	–	–	–	–	–	–	–
Cuba	0.3	99	98	115	<200	<200	<200	157	>95	>95	>95
Cyprus	–	99 x	–	13	–	–	–	–	–	–	–
Czech Republic	–	–	97 x	107	–	–	–	–	–	–	–
Democratic People's Republic of Korea	–	100 x	94 x	360	–	–	–	–	–	–	–
Democratic Republic of the Congo	0.8	88	48	3,217	22,000	17,000	27,000	14,476	67	53	82
Denmark	–	–	–	59	–	–	–	–	–	–	–
Djibouti	1.6	88	23	22	<500	<500	<500	114	37	26	53
Dominica	–	100 x	–	–	–	–	–	–	–	–	–
Dominican Republic	1.0	98	93	216	1,200	<1,000	1,700	894	72	57	>95
Ecuador	0.3	84 x	58 x	331	<500	<500	<1,000	285	60	48	71
Egypt	<0.1	90	83	2,488	<500	<200	<500	27	10	6	16
El Salvador	0.5	96	90	105	<500	<500	<500	158	55	51	60
Equatorial Guinea	4.9	91	67	29	1,300	1,200	1,500	1,010	75	68	84
Eritrea	0.6	89	57	175	<1,000	<1,000	<1,000	300	45	35	59
Estonia	–	–	97	14	–	–	–	–	–	–	–
Ethiopia	–	41	32	3,176	–	–	–	–	–	–	–



	Reported number of pregnant women living with HIV who received antiretroviral therapy (ART), 2015	Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART), 2015			Estimated number of children (aged 0–14) newly infected with HIV, 2015			Estimated mother-to-child transmission rate (%), 2015	Countries and areas
		Estimate	Low	High	Estimate	Low	High		
	7	4	2	8	<100	<100	<200	32	Afghanistan
	–	–	–	–	–	–	–	–	Albania
	112	34	28	38	<100	<100	<100	13	Algeria
	–	–	–	–	–	–	–	–	Andorra
	8,398	40	29	57	4,300	2,300	7,100	21	Angola
	–	–	–	–	–	–	–	–	Antigua and Barbuda
	1,481	93	85	>95	<100	<100	<100	3	Argentina
	–	–	–	–	–	–	–	–	Armenia
	119	>95	95	>95	<100	<100	<100	<1	Australia
	–	–	–	–	–	–	–	–	Austria
	56	49	32	71	<100	<100	<100	18	Azerbaijan
	37	36	33	39	<100	<100	<100	10	Bahamas
	–	–	–	–	–	–	–	–	Bahrain
	20	14	11	16	<100	<100	<100	38	Bangladesh
	–	–	–	–	–	–	–	–	Barbados
	54	10	7	12	<100	<100	<200	17	Belarus
	–	–	–	–	–	–	–	–	Belgium
	54	63	54	72	<100	<100	<100	9	Belize
	–	–	–	–	<1,000	<500	<1,000	–	Benin
	–	–	–	–	–	–	–	–	Bhutan
	284	76	47	102	<100	<100	<100	5	Bolivia (Plurinational State of)
	–	–	–	–	–	–	–	–	Bosnia and Herzegovina
	8,748	68	63	73	<500	<200	<1,000	3	Botswana
	6,416	75	56	>95	<500	<500	<1,000	5	Brazil
	–	–	–	–	–	–	–	–	Brunei Darussalam
	–	–	–	–	–	–	–	–	Bulgaria
	4,731	89	75	>95	<500	<100	<1,000	6	Burkina Faso
	3,885	89	67	>95	<500	<100	<1,000	7	Burundi
	73	>95	79	>95	<100	<100	<100	5	Cabo Verde
	–	–	–	–	–	–	–	–	Cambodia
	19,920	61	55	68	4,100	2,800	5,600	13	Cameroon
	–	–	–	–	–	–	–	–	Canada
	897	19	16	21	<1,000	<1,000	1,200	20	Central African Republic
	4,671	46	36	60	2,000	1,300	3,000	19	Chad
	–	–	–	–	–	–	–	–	Chile
	–	–	–	–	–	–	–	–	China
	805	49	45	54	<200	<200	<500	11	Colombia
	–	–	–	–	–	–	–	–	Comoros
	–	–	–	–	–	–	–	–	Congo
	–	–	–	–	–	–	–	–	Cook Islands
	41	41	36	46	<100	<100	<100	16	Costa Rica
	5,448	24	20	28	3,600	2,600	4,600	16	Côte d'Ivoire
	–	–	–	–	–	–	–	–	Croatia
	157	>95	>95	>95	<100	<100	<100	1	Cuba
	–	–	–	–	–	–	–	–	Cyprus
	–	–	–	–	–	–	–	–	Czech Republic
	–	–	–	–	–	–	–	–	Democratic People's Republic of Korea
	11,199	52	41	63	3,300	1,900	4,800	15	Democratic Republic of the Congo
	–	–	–	–	–	–	–	–	Denmark
	114	37	26	53	<100	<100	<200	29	Djibouti
	–	–	–	–	–	–	–	–	Dominica
	894	72	57	>95	<100	<100	<500	7	Dominican Republic
	0	<1	<1	<1	<100	<100	<100	12	Ecuador
	27	10	6	16	<100	<100	<200	28	Egypt
	158	55	51	60	<100	<100	<100	10	El Salvador
	665	50	45	55	<200	<200	<500	14	Equatorial Guinea
	300	45	35	59	<200	<100	<500	19	Eritrea
	–	–	–	–	–	–	–	–	Estonia
	–	–	–	–	–	–	–	–	Ethiopia

TABLE 1

## ◀ Elimination of new HIV infections among children by 2015 and keeping their mothers alive in low- and middle-income countries

Countries and areas	Estimated HIV prevalence (%) among adults (aged 15–49), 2015	Antenatal care coverage – at least one visit (%), 2010–2015*	Antenatal care coverage – at least four visits (%), 2010–2015*	Annual number of births (thousands), 2015	Estimated number of pregnant women living with HIV, 2015			Reported number of pregnant women living with HIV who received ARVs for PMTCT, 2015	Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT, 2015		
					Estimate	Low	High		Estimate	Low	High
Fiji	–	100 x	94	18	–	–	–	–	–	–	–
Finland	–	100 x	–	59	–	–	–	–	–	–	–
France	–	100 x	99	782	–	–	–	–	–	–	–
Gabon	3.8	95	78	51	2,100	1,800	2,500	1,665	78	66	91
Gambia	1.8	86	78	83	1,400	1,100	1,600	874	64	52	76
Georgia	0.4	98	87	54	<100	<100	<100	57	>95	81	>95
Germany	–	100 x	99	685	–	–	–	–	–	–	–
Ghana	1.6	91	87	884	12,000	10,000	15,000	7,813	63	53	74
Greece	0.3	–	–	92	<100	<100	<100	72	>95	92	>95
Grenada	–	100 x	–	2	–	–	–	–	–	–	–
Guatemala	0.6	91	86	438	1,600	1,100	2,400	214	13	9	21
Guinea	1.6	85	57	460	6,400	5,400	7,500	5,437	85	72	>95
Guinea-Bissau	–	92	65	68	–	–	–	–	–	–	–
Guyana	1.5	91	87	15	<500	<200	<500	167	76	67	86
Haiti	1.7	90	67	263	4,800	3,900	5,700	4,568	>95	79	>95
Holy See	–	–	–	–	–	–	–	–	–	–	–
Honduras	0.4	97	89	169	<500	<500	<500	175	53	45	63
Hungary	–	–	–	92	–	–	–	–	–	–	–
Iceland	–	–	–	4	–	–	–	–	–	–	–
India	–	74 x	45	25,794	35,000	29,000	44,000	13,511	38	31	47
Indonesia	0.5	95	84	5,037	16,000	13,000	18,000	1,466	9	8	11
Iran (Islamic Republic of)	0.1	97	94 x	1,350	<1,000	<1,000	1,600	186	20	14	34
Iraq	–	78	50	1,244	–	–	–	–	–	–	–
Ireland	–	100 x	–	68	–	–	–	–	–	–	–
Israel	–	–	–	167	–	–	–	–	–	–	–
Italy	0.4	99 x	68 x	501	1,200	1,100	1,300	382	31	29	34
Jamaica	1.6	98	86	48	<500	<500	<1,000	414	>95	82	>95
Japan	–	–	–	1,033	–	–	–	–	–	–	–
Jordan	–	99	95	199	–	–	–	–	–	–	–
Kazakhstan	0.2	99	87	377	<500	<500	<1,000	354	89	67	>95
Kenya	5.9	96	58	1,571	79,000	67,000	92,000	59,024	74	63	86
Kiribati	–	88 x	71 x	3	–	–	–	–	–	–	–
Kuwait	–	100 x	–	75	–	–	–	–	–	–	–
Kyrgyzstan	0.2	98	95	154	<100	<100	<200	87	89	74	>95
Lao People's Democratic Republic	–	54	37	179	–	–	–	–	–	–	–
Latvia	0.7	92 x	–	20	<100	<100	<100	64	>95	86	>95
Lebanon	<0.1	96 x	–	86	–	–	–	3	–	–	–
Lesotho	22.7	95	74	61	12,000	10,000	13,000	8,061	70	64	77
Liberia	1.1	96	78	156	2,000	1,600	2,300	1,358	70	57	84
Libya	–	93 x	–	129	–	–	–	–	–	–	–
Liechtenstein	–	–	–	–	–	–	–	–	–	–	–
Lithuania	–	100 x	–	30	–	–	–	–	–	–	–
Luxembourg	–	–	97	6	–	–	–	–	–	–	–
Madagascar	0.4	82	51	831	1,800	1,500	2,200	54	3	2	4
Malawi	9.1	96	45	665	55,000	50,000	61,000	44,023	80	73	89
Malaysia	0.4	97	–	509	<500	<500	<500	320	80	75	87
Maldives	–	99 x	85 x	8	–	–	–	–	–	–	–
Mali	1.3	70 x	35 x	758	7,900	6,700	9,500	2,628	33	28	40
Malta	–	100 x	–	4	–	–	–	–	–	–	–
Marshall Islands	–	81 x	77 x	–	–	–	–	–	–	–	–
Mauritania	0.6	84	48	134	<1,000	<500	1,000	80	12	7	18
Mauritius	0.9	–	–	14	–	–	–	90	–	–	–
Mexico	0.2	97	91	2,346	1,800	1,700	2,000	1,395	76	70	82
Micronesia (Federated States of)	–	80 x	–	2	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–	–	–	–
Mongolia	<0.1	99	90	69	<100	<100	<100	2	>95	50	>95
Montenegro	–	92	87	7	–	–	–	–	–	–	–
Morocco	0.1	77	55	699	<500	<500	<500	171	46	39	53
Mozambique	10.5	91	51	1,087	110,000	82,000	130,000	99,823	95	74	>95
Myanmar	0.8	83	73 x	944	5,100	4,500	5,700	3,923	77	68	88

	Reported number of pregnant women living with HIV who received antiretroviral therapy (ART), 2015	Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART), 2015			Estimated number of children (aged 0–14) newly infected with HIV, 2015			Estimated mother-to-child transmission rate (%), 2015	Countries and areas
		Estimate	Low	High	Estimate	Low	High		
	–	–	–	–	–	–	–	–	Fiji
	–	–	–	–	–	–	–	–	Finland
	–	–	–	–	–	–	–	–	France
	1,665	78	66	91	<200	<100	<500	8	Gabon
	131	10	8	11	<500	<500	<500	21	Gambia
	43	75	61	94	<100	<100	<100	4	Georgia
	–	–	–	–	–	–	–	–	Germany
	4,136	33	28	39	2,200	1,600	2,900	18	Ghana
	72	>95	92	>95	<100	<100	<100	<1	Greece
	–	–	–	–	–	–	–	–	Grenada
	214	13	9	21	<500	<500	<1,000	25	Guatemala
	5,437	85	72	>95	<500	<500	<500	6	Guinea
	–	–	–	–	–	–	–	–	Guinea-Bissau
	167	76	67	86	<100	<100	<100	4	Guyana
	4,534	95	78	>95	<500	<200	<500	–	Haiti
	–	–	–	–	–	–	–	–	Holy See
	175	53	45	63	<100	<100	<100	12	Honduras
	–	–	–	–	–	–	–	–	Hungary
	–	–	–	–	–	–	–	–	Iceland
	13,511	38	31	47	–	–	–	–	India
	1,466	9	8	11	5,000	3,900	6,100	31	Indonesia
	186	20	14	34	<500	<200	<1,000	32	Iran (Islamic Republic of)
	–	–	–	–	–	–	–	–	Iraq
	–	–	–	–	–	–	–	–	Ireland
	–	–	–	–	–	–	–	–	Israel
	382	31	29	34	<200	<200	<200	12	Italy
	0	<1	<1	<1	<100	<100	<100	3	Jamaica
	–	–	–	–	–	–	–	–	Japan
	–	–	–	–	–	–	–	–	Jordan
	79	20	15	25	<100	<100	<200	18	Kazakhstan
	58,828	74	63	86	6,600	4,100	9,800	8	Kenya
	–	–	–	–	–	–	–	–	Kiribati
	–	–	–	–	–	–	–	–	Kuwait
	71	72	61	89	<100	<100	<100	4	Kyrgyzstan
	–	–	–	–	–	–	–	–	Lao People's Democratic Republic
	0	<1	<1	<1	<100	<100	<100	4	Latvia
	–	–	–	–	–	–	–	–	Lebanon
	8,061	70	64	77	1,300	<1,000	1,600	11	Lesotho
	243	12	10	15	<500	<500	<1,000	20	Liberia
	–	–	–	–	–	–	–	–	Libya
	–	–	–	–	–	–	–	–	Liechtenstein
	–	–	–	–	–	–	–	–	Lithuania
	–	–	–	–	–	–	–	–	Luxembourg
	0	<1	<1	<1	<1,000	<1,000	<1,000	36	Madagascar
	44,023	80	73	89	4,800	3,400	6,500	9	Malawi
	320	80	75	87	<100	<100	<100	5	Malaysia
	–	–	–	–	–	–	–	–	Maldives
	2,628	33	28	40	2,100	1,600	2,700	26	Mali
	–	–	–	–	–	–	–	–	Malta
	–	–	–	–	–	–	–	–	Marshall Islands
	80	12	7	18	<200	<200	<500	28	Mauritania
	–	–	–	–	–	–	–	–	Mauritius
	1,395	76	70	82	<200	<100	<200	5	Mexico
	–	–	–	–	–	–	–	–	Micronesia (Federated States of)
	–	–	–	–	–	–	–	–	Monaco
	2	>95	50	>95	<100	<100	<100	<1	Mongolia
	–	–	–	–	–	–	–	–	Montenegro
	171	46	39	53	<100	<100	<100	13	Morocco
	91,317	87	67	>95	6,600	2,700	15,000	6	Mozambique
	1,523	30	26	34	<1,000	<1,000	<1,000	15	Myanmar

TABLE 1

## ◀ Elimination of new HIV infections among children by 2015 and keeping their mothers alive in low- and middle-income countries

Countries and areas	Estimated HIV prevalence (%) among adults (aged 15–49), 2015	Antenatal care coverage – at least one visit (%), 2010–2015*	Antenatal care coverage – at least four visits (%), 2010–2015*	Annual number of births (thousands), 2015	Estimated number of pregnant women living with HIV, 2015			Reported number of pregnant women living with HIV who received ARVs for PMTCT, 2015	Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT, 2015		
					Estimate	Low	High		Estimate	Low	High
Namibia	13.3	97	63	72	9,100	8,300	10,000	8,641	>95	87	>95
Nauru	–	95 x	40 x	–	–	–	–	–	–	–	–
Nepal	0.2	68	60	577	<500	<500	<500	145	35	30	41
Netherlands	–	–	–	177	–	–	–	–	–	–	–
New Zealand	–	–	–	60	–	–	–	–	–	–	–
Nicaragua	0.3	95	88	121	<200	<100	<200	117	>95	89	>95
Niger	0.5	83	38	983	3,500	3,200	4,000	981	28	25	31
Nigeria	–	61	51	7,133	–	–	–	52,711	–	–	–
Niue	–	100 x	–	–	–	–	–	–	–	–	–
Norway	–	–	–	61	–	–	–	–	–	–	–
Oman	–	99	94	81	–	–	–	–	–	–	–
Pakistan	<0.1	73	37	5,451	2,400	1,800	3,700	103	4	3	7
Palau	–	90	81	–	–	–	–	–	–	–	–
Palestine, State of	–	99	96	151	–	–	–	–	–	–	–
Panama	0.7	93	88	75	<500	<500	<500	180	78	71	85
Papua New Guinea	0.8	79 x	55 x	215	1,500	1,400	1,700	497	33	29	36
Paraguay	0.4	96 x	91 x	141	<500	<500	<500	175	56	41	87
Peru	0.3	97	95	615	1,000	<1,000	1,200	790	79	66	>95
Philippines	<0.1	95	84	2,349	<500	<500	<1,000	32	10	7	22
Poland	–	–	–	387	–	–	–	–	–	–	–
Portugal	–	100 x	–	83	–	–	–	–	–	–	–
Qatar	–	91	85	26	–	–	–	–	–	–	–
Republic of Korea	–	–	97	457	–	–	–	–	–	–	–
Republic of Moldova	0.6	99	95	43	<500	<200	<500	175	76	62	94
Romania	–	94 x	76 x	179	–	–	–	–	–	–	–
Russian Federation	–	–	–	1,823	–	–	–	–	–	–	–
Rwanda	2.9	99	44	363	10,000	9,200	11,000	9,604	93	82	>95
Saint Kitts and Nevis	–	100 x	–	–	–	–	–	–	–	–	–
Saint Lucia	–	97	90	3	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	100 x	100 x	2	–	–	–	–	–	–	–
Samoa	–	93	73	5	–	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	98	84	6	–	–	–	–	–	–	–
Saudi Arabia	–	97 x	–	619	–	–	–	–	–	–	–
Senegal	0.5	96	48	567	3,200	2,700	3,800	1,143	36	31	43
Serbia	–	98	94	90	–	–	–	–	–	–	–
Seychelles	–	–	–	2	–	–	–	–	–	–	–
Sierra Leone	1.3	97	76	229	3,900	3,300	4,500	3,212	83	70	>95
Singapore	–	–	–	50	–	–	–	–	–	–	–
Slovakia	–	97 x	–	57	–	–	–	–	–	–	–
Slovenia	–	100 x	–	22	–	–	–	–	–	–	–
Solomon Islands	–	74 x	65 x	17	–	–	–	–	–	–	–
Somalia	0.5	26 x	6 x	471	1,800	1,200	2,400	74	4	3	6
South Africa	19.2	97 x	87 x	1,111	250,000	230,000	270,000	257,456	>95	94	>95
South Sudan	2.5	62	17	446	9,500	6,100	13,000	3,879	41	26	57
Spain	0.4	–	–	413	<1,000	<500	<1,000	544	>95	77	>95
Sri Lanka	<0.1	99 x	93 x	323	<100	<100	<200	16	24	17	36
Sudan	0.3	79	51	1,319	2,600	1,400	4,000	114	4	2	7
Suriname	1.1	91	67	10	<100	<100	<200	122	>95	>95	>95
Swaziland	28.8	99	76	38	11,000	11,000	12,000	10,830	95	87	>95
Sweden	–	100 x	–	119	–	–	–	–	–	–	–
Switzerland	–	–	–	86	–	–	–	–	–	–	–
Syrian Arab Republic	–	88 x	64 x	438	–	–	–	–	–	–	–
Tajikistan	0.3	79	53	256	<500	<500	<500	168	58	48	71
Thailand	1.1	98	93	715	4,500	3,800	5,200	4,280	>95	81	>95
The former Yugoslav Republic of Macedonia	–	99	94	23	–	–	–	–	–	–	–
Timor-Leste	–	84	55	44	–	–	–	–	–	–	–
Togo	2.4	73	57	256	4,900	4,200	5,600	4,642	>95	82	>95
Tonga	–	99	70	3	–	–	–	–	–	–	–

	Reported number of pregnant women living with HIV who received antiretroviral therapy (ART), 2015	Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART), 2015			Estimated number of children (aged 0–14) newly infected with HIV, 2015			Estimated mother-to-child transmission rate (%), 2015	Countries and areas
		Estimate	Low	High	Estimate	Low	High		
	8,637	95	87	>95	<500	<500	<1,000	4	Namibia
	–	–	–	–	–	–	–	–	Nauru
	145	35	30	41	<200	<100	<200	26	Nepal
	–	–	–	–	–	–	–	–	Netherlands
	–	–	–	–	–	–	–	–	New Zealand
	30	28	23	41	<100	<100	<100	2	Nicaragua
	252	7	6	8	<1,000	<1,000	1,000	25	Niger
	23,930	–	–	–	–	–	–	–	Nigeria
	–	–	–	–	–	–	–	–	Niue
	–	–	–	–	–	–	–	–	Norway
	–	–	–	–	–	–	–	–	Oman
	0	<1	<1	<1	<1,000	<1,000	1,400	35	Pakistan
	–	–	–	–	–	–	–	–	Palau
	–	–	–	–	–	–	–	–	Palestine, State of
	180	78	71	85	<100	<100	<100	6	Panama
	497	33	29	36	<500	<500	<1,000	28	Papua New Guinea
	175	56	41	87	<100	<100	<100	10	Paraguay
	790	79	66	>95	<100	<100	<200	5	Peru
	32	10	7	22	<100	<100	<500	27	Philippines
	–	–	–	–	–	–	–	–	Poland
	–	–	–	–	–	–	–	–	Portugal
	–	–	–	–	–	–	–	–	Qatar
	–	–	–	–	–	–	–	–	Republic of Korea
	175	76	62	94	<100	<100	<100	–	Republic of Moldova
	–	–	–	–	–	–	–	–	Romania
	–	–	–	–	–	–	–	–	Russian Federation
	9,604	93	84	>95	<500	<200	<1,000	3	Rwanda
	–	–	–	–	–	–	–	–	Saint Kitts and Nevis
	–	–	–	–	–	–	–	–	Saint Lucia
	–	–	–	–	–	–	–	–	Saint Vincent and the Grenadines
	–	–	–	–	–	–	–	–	Samoa
	–	–	–	–	–	–	–	–	San Marino
	–	–	–	–	–	–	–	–	Sao Tome and Principe
	–	–	–	–	–	–	–	–	Saudi Arabia
	1,143	36	31	43	<1,000	<500	<1,000	22	Senegal
	–	–	–	–	–	–	–	–	Serbia
	–	–	–	–	–	–	–	–	Seychelles
	3,212	83	70	>95	<500	<200	<1,000	8	Sierra Leone
	–	–	–	–	–	–	–	–	Singapore
	–	–	–	–	–	–	–	–	Slovakia
	–	–	–	–	–	–	–	–	Slovenia
	–	–	–	–	–	–	–	–	Solomon Islands
	74	4	3	6	<1,000	<500	<1,000	35	Somalia
	257,456	>95	94	>95	5,100	4,500	7,900	2	South Africa
	3,879	41	26	57	2,000	<1,000	3,200	21	South Sudan
	544	>95	77	>95	<100	<100	<100	<1	Spain
	16	24	17	36	<100	<100	<100	28	Sri Lanka
	114	4	2	7	<1,000	<500	1,300	31	Sudan
	73	85	73	>95	<100	<100	<100	1	Suriname
	10,830	95	87	>95	<500	<500	<1,000	3	Swaziland
	–	–	–	–	–	–	–	–	Sweden
	–	–	–	–	–	–	–	–	Switzerland
	–	–	–	–	–	–	–	–	Syrian Arab Republic
	40	14	11	17	<100	<100	<100	18	Tajikistan
	4,068	90	77	>95	<100	<100	<200	2	Thailand
	–	–	–	–	–	–	–	–	The former Yugoslav Republic of Macedonia
	–	–	–	–	–	–	–	–	Timor-Leste
	4,642	95	82	>95	<500	<200	<1,000	6	Togo
	–	–	–	–	–	–	–	–	Tonga

TABLE 1

## Elimination of new HIV infections among children by 2015 and keeping their mothers alive in low- and middle-income countries

Countries and areas	Estimated HIV prevalence (%) among adults (aged 15–49), 2015	Antenatal care coverage – at least one visit (%), 2010–2015*	Antenatal care coverage – at least four visits (%), 2010–2015*	Annual number of births (thousands), 2015	Estimated number of pregnant women living with HIV, 2015			Reported number of pregnant women living with HIV who received ARVs for PMTCT, 2015	Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT, 2015		
					Estimate	Low	High		Estimate	Low	High
Trinidad and Tobago	1.2	96 x	100	19	<200	<200	<200	113	63	57	68
Tunisia	<0.1	98	85	202	–	–	–	18	–	–	–
Turkey	–	97	89	1,289	–	–	–	–	–	–	–
Turkmenistan	–	99 x	83 x	112	–	–	–	–	–	–	–
Tuvalu	–	97 x	67 x	–	–	–	–	–	–	–	–
Uganda	7.1	93	48	1,665	120,000	110,000	130,000	117,887	>95	88	>95
Ukraine	0.9	99	87	484	2,800	2,200	3,400	2,698	>95	78	>95
United Arab Emirates	–	100 x	–	98	–	–	–	–	–	–	–
United Kingdom	–	–	–	813	–	–	–	–	–	–	–
United Republic of Tanzania	4.7	88	43	2,064	86,000	77,000	96,000	74,190	86	77	>95
United States	–	–	97	4,025	–	–	–	–	–	–	–
Uruguay	0.5	97	77	49	<200	<100	<200	155	>95	>95	>95
Uzbekistan	0.2	99 x	79 x	667	<500	<500	<500	543	>95	>95	>95
Vanuatu	–	76	52	7	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	0.5	94 x	61	599	1,800	1,600	2,000	761	43	39	47
Viet Nam	0.5	96	74	1,582	2,900	2,500	3,300	1,692	58	49	65
Yemen	<0.1	60	25	856	<500	<500	<1,000	31	9	5	15
Zambia	12.9	96	56	645	81,000	75,000	88,000	70,991	87	81	94
Zimbabwe	14.7	94	70	539	68,000	62,000	75,000	57,378	84	77	92

### SUMMARY INDICATORS

Sub-Saharan Africa <sup>a/</sup>	4.4	78	49	36,812	1,300,000	1,200,000	1,500,000	1,024,780	79	70	88
Eastern and Southern Africa	6.8	80	45	16,694	970,000	880,000	1,100,000	865,583	89	81	>95
West and Central Africa	2.2	76	52	18,778	330,000	270,000	400,000	158,971	48	39	58
Middle East and North Africa	<0.1	85	63	11,039	5,200	3,500	7,800	801	15	10	23
South Asia	0.2	69 ***	42	36,381	39,000	32,000	47,000	13,827	36	29	43
East Asia and the Pacific	0.2	95	82 **	29,541	38,000	33,000	44,000	15,463	41	35	48
Latin America and the Caribbean	0.5	96	87	10,772	28,000	24,000	32,000	24,345	88	77	>95
CEE/CIS	0.6	96	85	6,084	–	–	–	–	–	–	–
22 Global Plan priority countries	–	–	–	53,708	1,300,000	1,100,000	1,500,000	989,153	79	68	91
21 African Global Plan priority countries	5.4	–	–	27,914	1,200,000	1,100,000	1,400,000	975,642	80	71	90
Least developed countries	1.8	77	42	30,969	630,000	570,000	700,000	521,674	82	74	91
Low- and middle-income countries	0.9	–	–	125,742	1,400,000	1,200,000	1,700,000	1,093,293	77	66	90
World	0.8	85 ***	58 **	140,244	1,400,000	1,300,000	1,600,000	1,110,070	77	69	86

### DEFINITIONS OF THE INDICATORS

**Estimated HIV prevalence (%) among adults (aged 15–49):** Percentage of adults (aged 15–49) living with HIV, as of 2015.

**Antenatal care coverage – at least one visit (%):** Percentage of women (aged 15–49) attended at least once during pregnancy by skilled health personnel (doctor, nurse, midwife), 2010–2015.

**Antenatal care coverage – at least four visits (%):** Percentage of women (aged 15–49) attended at least four times during pregnancy by skilled health personnel (doctor, nurse, midwife), 2010–2015.

**Annual number of births (thousands):** Estimated number of live births in 2015 (in thousands).

**Estimated number of pregnant women living with HIV:** Estimated number of pregnant women living with HIV, as of 2015.

**Reported number of pregnant women living with HIV who received ARVs for PMTCT:** Number of women testing HIV-positive during visits to antenatal clinics who were provided with most effective antiretrovirals (ARVs) to prevent mother-to-child transmission of HIV, as of 2015. Excludes single-dose nevirapine.

**Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT:** Calculated by dividing the reported number of HIV-positive pregnant women who received most effective ARVs (excluding single-dose nevirapine) for prevention of mother-to-child transmission (PMTCT) of HIV by the estimated unrounded number of pregnant women living with HIV in 2015. Ranges in coverage estimates are based on plausibility (uncertainty) bounds in the denominator (i.e., low and high estimated number of pregnant women living with HIV).

**Reported number of pregnant women living with HIV who received antiretroviral therapy (ART):** Number of women testing HIV-positive during visits to antenatal clinics who were initiated on or were already on antiretroviral therapy (ART), as of 2015.

**Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART):** Calculated by dividing the reported number of HIV-positive pregnant women receiving antiretroviral therapy (ART) by the estimated unrounded number of pregnant women living with HIV in 2015. Ranges in coverage estimates are based on plausibility (uncertainty) bounds in the denominator (i.e., low and high estimated number of pregnant women living with HIV).

**Estimated number of children (aged 0–14) newly infected with HIV:** Estimated number of children (aged 0–14) newly infected with HIV, as of 2015.

**Estimated mother-to-child transmission rate (%):** Estimated percentage of infants born to pregnant women living with HIV who were vertically infected with HIV, as of 2015.

### MAIN DATA SOURCES

**Estimated HIV prevalence (%) among adults (aged 15–49):** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Antenatal care coverage at least one visit (%):** Statistical data provided by UNICEF Data and Analytics Section, September 2016.

**Antenatal care coverage at least four visits (%):** Statistical data provided by UNICEF Data and Analytics Section, September 2016.

**Annual number of births (thousands):** United Nations Population Division, 2015.

**Estimated number of pregnant women living with HIV:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Reported number of pregnant women living with HIV who received ARVs for PMTCT:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016.

**Estimated percentage of pregnant women living with HIV who received ARVs for PMTCT:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Reported number of pregnant women living with HIV who received antiretroviral therapy (ART):** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016.

**Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART):** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Estimated number of children (aged 0–14) newly infected with HIV:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Estimated mother-to-child transmission rate (%):** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

	Reported number of pregnant women living with HIV who received antiretroviral therapy (ART), 2015	Estimated percentage of pregnant women living with HIV who received antiretroviral therapy (ART), 2015			Estimated number of children (aged 0–14) newly infected with HIV, 2015			Estimated mother-to-child transmission rate (%), 2015	Countries and areas
		Estimate	Low	High	Estimate	Low	High		
	113	63	57	68	<100	<100	<100	8	Trinidad and Tobago
	–	–	–	–	–	–	–	–	Tunisia
	–	–	–	–	–	–	–	–	Turkey
	–	–	–	–	–	–	–	–	Turkmenistan
	–	–	–	–	–	–	–	–	Tuvalu
	117,887	>95	88	>95	3,500	1,600	6,500	3	Uganda
	1,255	45	36	55	<500	<500	<1,000	15	Ukraine
	–	–	–	–	–	–	–	–	United Arab Emirates
	–	–	–	–	–	–	–	–	United Kingdom
	74,190	86	77	>95	6,500	3,800	9,500	8	United Republic of Tanzania
	–	–	–	–	–	–	–	–	United States
	16	16	13	18	<100	<100	<100	2	Uruguay
	131	44	31	66	<100	<100	<100	1	Uzbekistan
	–	–	–	–	–	–	–	–	Vanuatu
	761	43	39	47	<500	<500	<500	15	Venezuela (Bolivarian Republic of)
	1,692	58	49	65	<500	<500	<500	11	Viet Nam
	31	9	5	15	<200	<100	<200	29	Yemen
	70,223	86	80	93	4,700	3,400	6,100	6	Zambia
	57,378	84	77	92	4,900	3,700	6,300	7	Zimbabwe
									<b>SUMMARY INDICATORS</b>
	951,093	73	65	82	120,000	89,000	170,000	9	Sub-Saharan Africa <sup>a/</sup>
	852,904	88	80	>95	57,000	41,000	78,000	6	Eastern and Southern Africa
	97,961	29	24	36	65,000	47,000	87,000	20	West and Central Africa
	801	15	10	23	1,500	<1,000	2,400	28	Middle East and North Africa
	13,699	35	29	43	11,000	8,700	13,000	30	South Asia
	10,631	28	24	33	7,600	6,200	9,300	20	East Asia and the Pacific
	19,186	70	60	80	2,100	1,600	2,900	8	Latin America and the Caribbean
	–	–	–	–	–	–	–	–	CEE/CIS
	921,772	73	63	85	120,000	80,000	180,000	9	22 Global Plan priority countries
	908,261	74	66	83	110,000	78,000	150,000	9	21 African Global Plan priority countries
	500,356	79	71	88	55,000	40,000	74,000	9	Least developed countries
	1,006,936	71	61	82	150,000	97,000	210,000	10	Low- and middle-income countries
	1,014,313	70	63	78	150,000	110,000	190,000	10	World

## NOTES

– Data not available.

\* Data refer to the most recent year available during the period specified in the column heading.

\*\* Excludes China.

\*\*\* Excludes India.

† Regional averages are calculated only when the population represents 50 per cent or more of the region's total population of interest.

x Data refer to years or periods other than those specified in the column heading. Such data are not included in the calculation of regional and global averages. Estimates from years prior to 2006 are not displayed.

a/ Sub-Saharan Africa includes the Sudan and Djibouti.

Due to the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-cession.

Some estimates do not add up to the totals because of rounding. Low- and middle-income countries are classified as such by the World Bank.

TABLE 2

## Providing paediatric HIV care and treatment in low- and middle-income countries

Countries and areas	Estimated number of pregnant women living with HIV, 2015			# of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015	% of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015			# of infants born to HIV+ women started on antiretroviral prophylaxis (ART), 2015	% of infants born to HIV+ women started on ART, 2015			# of infants born to HIV+ women receiving virological test for HIV within 2 months of birth, 2015
	Estimate	Low	High		Estimate	Low	High		Estimate	Low	High	
Afghanistan	<200	<200	<500	2	1	1	2	12	6	3	14	5
Albania	–	–	–	–	–	–	–	–	–	–	–	–
Algeria	<500	<500	<500	23	7	6	8	89	27	22	30	89
Andorra	–	–	–	–	–	–	–	–	–	–	–	–
Angola	21,000	15,000	29,000	4,547	22	16	31	5,776	28	20	39	2,725
Antigua and Barbuda	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1,600	1,500	1,800	2,843	>95	>95	>95	2,843	>95	>95	>95	875
Armenia	–	–	–	–	–	–	–	–	–	–	–	–
Australia	<200	<200	<200	–	–	–	–	–	–	–	–	74
Austria	–	–	–	–	–	–	–	–	–	–	–	–
Azerbaijan	<200	<100	<200	62	54	35	79	55	48	31	70	62
Bahamas	<200	<100	<200	60	58	53	63	64	62	57	67	64
Bahrain	–	–	–	–	–	–	–	–	–	–	–	–
Bangladesh	<200	<200	<200	14	9	8	11	19	13	11	15	14
Barbados	–	–	–	–	–	–	–	–	–	–	–	–
Belarus	<1,000	<500	<1,000	280	50	38	64	286	51	39	66	176
Belgium	–	–	–	–	–	–	–	–	–	–	–	–
Belize	<100	<100	<100	54	63	54	72	53	62	53	70	57
Benin	–	–	–	–	–	–	–	–	–	–	–	1,313
Bhutan	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia (Plurinational State of)	<500	<500	<1,000	22	6	4	8	107	28	18	38	151
Bosnia and Herzegovina	–	–	–	–	–	–	–	–	–	–	–	–
Botswana	13,000	12,000	14,000	8,968	69	65	74	11,692	91	85	>95	5,854
Brazil	8,500	6,300	11,000	–	–	–	–	8,513	>95	74	>95	4,095
Brunei Darussalam	–	–	–	–	–	–	–	–	–	–	–	–
Bulgaria	–	–	–	–	–	–	–	–	–	–	–	–
Burkina Faso	5,300	4,500	6,300	2,076	39	33	47	2,228	42	35	50	1,601
Burundi	4,400	3,300	5,300	1,074	25	18	30	2,488	57	43	69	88
Cabo Verde	<100	<100	<100	–	76	59	>95	–	76	59	>95	–
Cambodia	–	–	–	–	–	–	–	–	–	–	–	–
Cameroon	33,000	29,000	36,000	9,514	29	26	33	12,811	39	35	44	9,756
Canada	–	–	–	–	–	–	–	–	–	–	–	–
Central African Republic	4,800	4,200	5,500	1,556	32	28	37	2,065	43	37	49	616
Chad	10,000	8,000	13,000	705	7	5	9	1,328	13	10	17	341
Chile	–	–	–	–	–	–	–	–	–	–	–	–
China	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	1,600	1,500	1,800	50	3	3	3	813	50	46	54	624
Comoros	–	–	–	–	–	–	–	–	–	–	–	–
Congo	–	–	–	–	–	–	–	–	–	–	–	–
Cook Islands	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	<200	<100	<200	50	50	44	56	50	50	44	56	50
Côte d'Ivoire	22,000	19,000	26,000	7,506	33	28	39	10,282	46	39	53	7,412
Croatia	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	<200	<200	<200	1	1	1	1	157	>95	>95	>95	157
Cyprus	–	–	–	–	–	–	–	–	–	–	–	–
Czech Republic	–	–	–	–	–	–	–	–	–	–	–	–
Democratic People's Republic of Korea	–	–	–	–	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	22,000	17,000	27,000	2,703	12	10	15	4,658	21	17	26	3,795
Denmark	–	–	–	–	–	–	–	–	–	–	–	–
Djibouti	<500	<500	<500	18	6	4	8	62	20	14	29	20
Dominica	–	–	–	–	–	–	–	–	–	–	–	–
Dominican Republic	1,200	<1,000	1,700	734	59	46	80	1,032	83	65	>95	1,063
Ecuador	<500	<500	<1,000	49	10	8	12	653	>95	>95	>95	559
Egypt	<500	<200	<500	0	<1	<1	<1	19	7	4	11	19
El Salvador	<500	<500	<500	4	1	1	2	54	19	17	21	158
Equatorial Guinea	1,300	1,200	1,500	197	15	13	16	647	48	44	54	–
Eritrea	<1,000	<1,000	<1,000	232	35	27	45	278	42	32	54	225
Estonia	–	–	–	–	–	–	–	–	–	–	–	–
Ethiopia	–	–	–	–	–	–	–	–	–	–	–	–



	Estimated early infant diagnosis coverage (%), 2015			Estimated number of children living with HIV, 2015			# of children receiving ART, 2015	Estimated coverage of children receiving ART (%), 2015			Estimated number of children (aged 0–14) who died of AIDS, 2015			Countries and areas
	Estimate	Low	High	Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
	3	1	6	<500	<200	<500	26	11	6	21	<100	<100	<100	Afghanistan
	–	–	–	–	–	–	16	–	–	–	–	–	–	Albania
	27	22	30	<500	<200	<500	582	>95	>95	>95	<100	<100	<100	Algeria
	–	–	–	–	–	–	–	–	–	–	–	–	–	Andorra
	13	9	18	25,000	17,000	37,000	6,032	24	16	34	2,400	1,500	3,800	Angola
	–	–	–	–	–	–	–	–	–	–	–	–	–	Antigua and Barbuda
	55	50	61	<1,000	<1,000	<1,000	1,597	>95	>95	>95	<100	<100	<100	Argentina
	–	–	–	–	–	–	24	–	–	–	–	–	–	Armenia
	62	59	66	<100	<100	<100	19	90	73	>95	<100	<100	<100	Australia
	–	–	–	–	–	–	–	–	–	–	–	–	–	Austria
	54	35	79	<100	<100	<200	73	83	52	>95	<100	<100	<100	Azerbaijan
	62	57	67	<100	<100	<100	49	89	78	>95	<100	<100	<100	Bahamas
	–	–	–	–	–	–	–	–	–	–	–	–	–	Bahrain
	9	8	11	<500	<500	<500	90	31	26	35	<100	<100	<100	Bangladesh
	–	–	–	–	–	–	8	–	–	–	–	–	–	Barbados
	31	24	40	<500	<100	<500	218	94	34	>95	<100	<100	<100	Belarus
	–	–	–	–	–	–	–	–	–	–	–	–	–	Belgium
	66	57	76	<200	<100	<200	90	80	62	>95	<100	<100	<100	Belize
	37	29	49	4,800	3,500	6,400	1,845	39	29	52	<500	<500	<1,000	Benin
	–	–	–	–	–	–	–	–	–	–	–	–	–	Bhutan
	40	25	54	<500	<500	<1,000	173	48	29	72	<100	<100	<100	Bolivia (Plurinational State of)
	–	–	–	–	–	–	1	–	–	–	–	–	–	Bosnia and Herzegovina
	45	42	49	8,500	7,300	10,000	8,490	>95	85	>95	<500	<200	<500	Botswana
	48	36	64	7,500	6,000	11,000	5,657	76	61	>95	<500	<500	<1,000	Brazil
	–	–	–	–	–	–	–	–	–	–	–	–	–	Brunei Darussalam
	–	–	–	–	–	–	5	–	–	–	–	–	–	Bulgaria
	30	25	36	7,700	6,000	9,600	2,349	31	24	38	<500	<500	<1,000	Burkina Faso
	2	2	2	9,100	7,400	11,000	2,654	29	24	34	<500	<500	<1,000	Burundi
	51	40	67	<200	<200	<200	65	47	38	62	<100	<100	<100	Cabo Verde
	–	–	–	–	–	–	–	–	–	–	–	–	–	Cambodia
	30	27	33	39,000	34,000	44,000	7,096	18	16	21	3,000	2,400	3,600	Cameroon
	–	–	–	–	–	–	–	–	–	–	–	–	–	Canada
	13	11	15	9,400	8,500	10,000	2,403	25	23	28	<1,000	<1,000	<1,000	Central African Republic
	3	3	4	18,000	14,000	22,000	3,838	22	17	27	1,500	1,100	2,100	Chad
	–	–	–	–	–	–	144	–	–	–	–	–	–	Chile
	–	–	–	–	–	–	–	–	–	–	–	–	–	China
	38	35	41	1,400	1,300	1,600	–	–	–	–	<200	<200	<200	Colombia
	–	–	–	–	–	–	–	–	–	–	–	–	–	Comoros
	–	–	–	–	–	–	–	–	–	–	–	–	–	Congo
	–	–	–	–	–	–	–	–	–	–	–	–	–	Cook Islands
	50	44	56	<200	<200	<200	65	53	48	59	<100	<100	<100	Costa Rica
	33	28	38	29,000	24,000	34,000	6,945	24	20	28	2,200	1,700	2,700	Côte d'Ivoire
	–	–	–	–	–	–	3	–	–	–	–	–	–	Croatia
	>95	>95	>95	<100	<100	<100	29	>95	83	>95	<100	<100	<100	Cuba
	–	–	–	–	–	–	–	–	–	–	–	–	–	Cyprus
	–	–	–	–	–	–	–	–	–	–	–	–	–	Czech Republic
	–	–	–	–	–	–	–	–	–	–	–	–	–	Democratic People's Republic of Korea
	17	14	21	42,000	34,000	51,000	9,185	22	18	27	2,700	2,000	3,500	Democratic Republic of the Congo
	–	–	–	–	–	–	–	–	–	–	–	–	–	Denmark
	6	5	9	<1,000	<1,000	1,300	74	8	6	12	<100	<100	<100	Djibouti
	–	–	–	–	–	–	–	–	–	–	–	–	–	Dominica
	85	67	>95	2,100	1,400	3,300	809	39	27	61	<200	<100	<500	Dominican Republic
	>95	95	>95	<500	<500	<1,000	670	>95	>95	>95	<100	<100	<100	Ecuador
	7	4	11	<500	<200	<500	73	27	18	43	<100	<100	<100	Egypt
	55	51	60	<500	<500	<500	273	78	70	84	<100	<100	<100	El Salvador
	–	–	–	2,400	2,200	2,600	245	10	9	11	<200	<200	<200	Equatorial Guinea
	34	26	44	1,400	<1,000	1,800	470	35	25	47	<100	<100	<200	Eritrea
	–	–	–	–	–	–	–	–	–	–	–	–	–	Estonia
	–	–	–	–	–	–	22,009	–	–	–	–	–	–	Ethiopia

TABLE 2

## ◀ Providing paediatric HIV care and treatment in low- and middle-income countries

Countries and areas	Estimated number of pregnant women living with HIV, 2015			# of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015	% of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015			# of infants born to HIV+ women started on antiretroviral prophylaxis (ART), 2015	% of infants born to HIV+ women started on ART, 2015			# of infants born to HIV+ women receiving virological test for HIV within 2 months of birth, 2015
	Estimate	Low	High		Estimate	Low	High		Estimate	Low	High	
Fiji	–	–	–	–	–	–	–	–	–	–	–	–
Finland	–	–	–	–	–	–	–	–	–	–	–	–
France	–	–	–	–	–	–	–	–	–	–	–	–
Gabon	2,100	1,800	2,500	673	32	27	37	599	28	24	33	673
Gambia	1,400	1,100	1,600	464	34	28	40	406	30	24	35	130
Georgia	<100	<100	<100	39	68	55	85	39	68	55	85	40
Germany	–	–	–	–	–	–	–	–	–	–	–	–
Ghana	12,000	10,000	15,000	3,043	24	20	29	3,622	29	24	34	3,733
Greece	<100	<100	<100	3	4	4	5	28	39	36	43	26
Grenada	–	–	–	–	–	–	–	–	–	–	–	–
Guatemala	1,600	1,100	2,400	157	10	7	15	281	18	12	27	178
Guinea	6,400	5,400	7,500	–	–	–	–	1,226	19	16	23	238
Guinea-Bissau	–	–	–	–	–	–	–	–	–	–	–	–
Guyana	<500	<200	<500	134	61	54	69	151	69	61	78	106
Haiti	4,800	3,900	5,700	940	20	16	24	2,639	56	45	67	2,007
Holy See	–	–	–	–	–	–	–	–	–	–	–	–
Honduras	<500	<500	<500	–	–	–	–	181	55	47	65	145
Hungary	–	–	–	–	–	–	–	–	–	–	–	–
Iceland	–	–	–	–	–	–	–	–	–	–	–	–
India	35,000	29,000	44,000	9,526	27	22	33	9,287	26	21	33	5,811
Indonesia	16,000	13,000	18,000	863	5	5	6	1,214	8	6	9	731
Iran (Islamic Republic of)	<1,000	<1,000	1,600	84	9	6	16	136	15	10	25	94
Iraq	–	–	–	–	–	–	–	–	–	–	–	–
Ireland	–	–	–	–	–	–	–	–	–	–	–	–
Israel	–	–	–	–	–	–	–	–	–	–	–	–
Italy	1,200	1,100	1,300	–	–	–	–	–	–	–	–	–
Jamaica	<500	<500	<1,000	229	53	45	63	447	>95	88	>95	–
Japan	–	–	–	–	–	–	–	–	–	–	–	–
Jordan	–	–	–	–	–	–	–	–	–	–	–	–
Kazakhstan	<500	<500	<1,000	189	47	36	61	361	90	68	>95	313
Kenya	79,000	67,000	92,000	47,545	60	51	70	56,870	72	61	83	34,707
Kiribati	–	–	–	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–	–	–
Kyrgyzstan	<100	<100	<200	21	21	18	26	90	92	77	>95	50
Lao People's Democratic Republic	–	–	–	–	–	–	–	–	–	–	–	–
Latvia	<100	<100	<100	26	39	35	45	–	–	–	–	56
Lebanon	–	–	–	–	–	–	–	–	–	–	–	–
Lesotho	12,000	10,000	13,000	10,668	93	84	>95	9,742	85	77	93	10,668
Liberia	2,000	1,600	2,300	559	29	24	35	314	16	13	19	0
Libya	–	–	–	–	–	–	–	–	–	–	–	–
Liechtenstein	–	–	–	–	–	–	–	–	–	–	–	–
Lithuania	–	–	–	–	–	–	–	–	–	–	–	–
Luxembourg	–	–	–	–	–	–	–	–	–	–	–	–
Madagascar	1,800	1,500	2,200	2	<1	<1	<1	1	<1	<1	<1	0
Malawi	55,000	50,000	61,000	30,099	55	50	61	31,929	58	53	64	10,931
Malaysia	<500	<500	<500	199	50	46	54	251	63	59	69	259
Maldives	–	–	–	–	–	–	–	–	–	–	–	–
Mali	7,900	6,700	9,500	1,574	20	17	24	1,395	18	15	21	213
Malta	–	–	–	–	–	–	–	–	–	–	–	–
Marshall Islands	–	–	–	–	–	–	–	–	–	–	–	–
Mauritania	<1,000	<500	1,000	30	4	3	7	30	4	3	7	–
Mauritius	–	–	–	–	–	–	–	–	–	–	–	–
Mexico	1,800	1,700	2,000	–	–	–	–	58	3	3	3	–
Micronesia (Federated States of)	–	–	–	–	–	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–	–	–	–	–
Mongolia	<100	<100	<100	0	<1	<1	<1	1	50	25	75	1
Montenegro	–	–	–	–	–	–	–	–	–	–	–	–
Morocco	<500	<500	<500	190	51	44	58	190	51	44	58	190
Mozambique	110,000	82,000	130,000	74,157	70	55	89	72,756	69	54	88	49,303

	Estimated early infant diagnosis coverage (%), 2015			Estimated number of children living with HIV, 2015			# of children receiving ART, 2015	Estimated coverage of children receiving ART (%), 2015			Estimated number of children (aged 0-14) who died of AIDS, 2015			Countries and areas
	Estimate	Low	High	Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
	-	-	-	-	-	-	4	-	-	-	-	-	-	Fiji
	-	-	-	-	-	-	-	-	-	-	-	-	-	Finland
	-	-	-	-	-	-	-	-	-	-	-	-	-	France
	32	27	37	2,600	2,200	3,100	1,375	52	44	60	<200	<200	<500	Gabon
	9	8	11	1,800	1,500	2,300	438	24	19	30	<200	<200	<500	Gambia
	70	57	87	<100	<100	<100	53	>95	>95	>95	<100	<100	<100	Georgia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Germany
	30	25	36	19,000	15,000	22,000	4,934	27	22	32	1,400	1,100	1,800	Ghana
	36	33	40	<100	<100	<100	-	-	-	-	<100	<100	<100	Greece
	-	-	-	-	-	-	2	-	-	-	-	-	-	Grenada
	11	8	17	2,000	1,400	2,900	856	44	32	64	<200	<100	<500	Guatemala
	4	3	4	7,000	6,000	8,000	1,532	22	19	25	<500	<500	<500	Guinea
	-	-	-	-	-	-	-	-	-	-	-	-	-	Guinea-Bissau
	48	42	55	<200	<200	<500	157	>95	85	>95	<100	<100	<100	Guyana
	42	35	51	9,500	7,600	12,000	2,865	30	24	37	<1,000	<500	<1,000	Haiti
	-	-	-	-	-	-	-	-	-	-	-	-	-	Holy See
	44	38	52	<1,000	<1,000	<1,000	573	74	59	91	<100	<100	<100	Honduras
	-	-	-	-	-	-	-	-	-	-	-	-	-	Hungary
	-	-	-	-	-	-	-	-	-	-	-	-	-	Iceland
	16	13	20	-	-	-	50,976	-	-	-	-	-	-	India
	5	4	5	17,000	14,000	20,000	2,708	16	13	18	2,200	1,800	2,700	Indonesia
	10	7	17	1,900	1,400	2,800	233	12	9	18	<200	<200	<500	Iran (Islamic Republic of)
	-	-	-	-	-	-	-	-	-	-	-	-	-	Iraq
	-	-	-	-	-	-	-	-	-	-	-	-	-	Ireland
	-	-	-	-	-	-	-	-	-	-	-	-	-	Israel
	-	-	-	1,400	1,100	1,600	-	-	-	-	<100	<100	<200	Italy
	-	-	-	<500	<500	<500	666	>95	>95	>95	<100	<100	<100	Jamaica
	-	-	-	-	-	-	-	-	-	-	-	-	-	Japan
	-	-	-	-	-	-	2	-	-	-	-	-	-	Jordan
	78	59	>95	<500	<200	<500	379	>95	>95	>95	<100	<100	<100	Kazakhstan
	44	37	51	98,000	81,000	120,000	71,547	73	60	88	5,000	3,500	6,600	Kenya
	-	-	-	-	-	-	2	-	-	-	-	-	-	Kiribati
	-	-	-	-	-	-	-	-	-	-	-	-	-	Kuwait
	51	43	63	<200	<200	<200	387	>95	>95	>95	<100	<100	<100	Kyrgyzstan
	-	-	-	-	-	-	222	-	-	-	-	-	-	Lao People's Democratic Republic
	84	75	>95	<100	<100	<100	36	>95	>95	>95	<100	<100	<100	Latvia
	-	-	-	-	-	-	5	-	-	-	-	-	-	Lebanon
	93	84	>95	13,000	12,000	14,000	7,466	56	51	61	<1,000	<1,000	<1,000	Lesotho
	<1	<1	<1	3,900	3,400	4,400	389	10	9	11	<500	<500	<500	Liberia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Libya
	-	-	-	-	-	-	-	-	-	-	-	-	-	Liechtenstein
	-	-	-	-	-	-	5	-	-	-	-	-	-	Lithuania
	-	-	-	-	-	-	2	-	-	-	-	-	-	Luxembourg
	<1	<1	<1	3,800	3,300	4,400	16	<1	<1	<1	<500	<500	<500	Madagascar
	20	18	22	84,000	75,000	92,000	51,487	61	55	68	3,500	2,800	4,400	Malawi
	65	60	71	<500	<500	<1,000	487	>95	91	>95	<100	<100	<100	Malaysia
	-	-	-	-	-	-	0	-	-	-	-	-	-	Maldives
	3	2	3	12,000	9,900	14,000	2,665	23	19	27	<1,000	<1,000	1,200	Mali
	-	-	-	-	-	-	-	-	-	-	-	-	-	Malta
	-	-	-	-	-	-	-	-	-	-	-	-	-	Marshall Islands
	-	-	-	1,300	<1,000	1,600	157	13	10	16	<200	<100	<200	Mauritania
	-	-	-	-	-	-	23	-	-	-	-	-	-	Mauritius
	-	-	-	1,800	1,600	2,100	1,960	>95	95	>95	<100	<100	<200	Mexico
	-	-	-	-	-	-	-	-	-	-	-	-	-	Micronesia (Federated States of)
	-	-	-	-	-	-	-	-	-	-	-	-	-	Monaco
	50	25	75	<100	<100	<100	0	<1	<1	<1	<100	<100	<100	Mongolia
	-	-	-	-	-	-	2	-	-	-	-	-	-	Montenegro
	51	44	58	<500	<500	<1,000	489	>95	82	>95	<100	<100	<100	Morocco
	47	36	59	110,000	81,000	160,000	64,273	57	41	80	4,900	2,700	8,700	Mozambique

TABLE 2

## ◀ Providing paediatric HIV care and treatment in low- and middle-income countries

Countries and areas	Estimated number of pregnant women living with HIV, 2015			# of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015	% of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015			# of infants born to HIV+ women started on antiretroviral prophylaxis (ART), 2015	% of infants born to HIV+ women started on ART, 2015			# of infants born to HIV+ women receiving virological test for HIV within 2 months of birth, 2015
	Estimate	Low	High		Estimate	Low	High		Estimate	Low	High	
Myanmar	5,100	4,500	5,700	1,470	29	25	33	2,169	43	38	48	801
Namibia	9,100	8,300	10,000	–	–	–	–	9,823	>95	>95	>95	–
Nauru	–	–	–	–	–	–	–	–	–	–	–	–
Nepal	<500	<500	<500	101	24	21	29	114	28	23	32	76
Netherlands	–	–	–	–	–	–	–	–	–	–	–	–
New Zealand	–	–	–	–	–	–	–	–	–	–	–	–
Nicaragua	<200	<100	<200	84	79	64	>95	105	>95	79	>95	85
Niger	3,500	3,200	4,000	384	11	10	12	179	5	5	6	286
Nigeria	–	–	–	18,263	10	8	13	27,486	16	12	20	15,879
Niue	–	–	–	–	–	–	–	–	–	–	–	–
Norway	–	–	–	–	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–	–	–
Pakistan	2,400	1,800	3,700	0	<1	<1	<1	24	1	1	2	12
Palau	–	–	–	–	–	–	–	–	–	–	–	–
Palestine, State of	–	–	–	–	–	–	–	–	–	–	–	–
Panama	<500	<500	<500	132	57	52	62	204	88	81	>95	185
Papua New Guinea	1,500	1,400	1,700	19	1	1	1	478	31	28	35	607
Paraguay	<500	<500	<500	90	29	21	45	147	47	34	73	159
Peru	1,000	<1,000	1,200	–	–	–	–	611	61	51	74	594
Philippines	<500	<500	<1,000	4	1	1	3	36	11	8	25	11
Poland	–	–	–	–	–	–	–	–	–	–	–	–
Portugal	–	–	–	–	–	–	–	–	–	–	–	–
Qatar	–	–	–	–	–	–	–	–	–	–	–	–
Republic of Korea	–	–	–	–	–	–	–	–	–	–	–	–
Republic of Moldova	<500	<200	<500	52	23	18	28	185	81	66	>95	185
Romania	–	–	–	–	–	–	–	–	–	–	–	–
Russian Federation	–	–	–	–	–	–	–	–	–	–	–	–
Rwanda	10,000	9,200	11,000	8,502	83	74	90	5,999	58	52	64	7,849
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	–	–	–	–	–	–	–	–	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	–	–
Senegal	3,200	2,700	3,800	351	11	9	13	512	16	14	19	400
Serbia	–	–	–	–	–	–	–	–	–	–	–	–
Seychelles	–	–	–	–	–	–	–	–	–	–	–	–
Sierra Leone	3,900	3,300	4,500	358	9	8	11	884	23	19	27	152
Singapore	–	–	–	–	–	–	–	–	–	–	–	–
Slovakia	–	–	–	–	–	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–	–	–	–	–
Solomon Islands	–	–	–	–	–	–	–	–	–	–	–	–
Somalia	1,800	1,200	2,400	0	<1	<1	<1	48	3	2	4	0
South Africa	250,000	230,000	270,000	172,882	69	63	74	243,208	>95	89	>95	299,142
South Sudan	9,500	6,100	13,000	280	3	2	4	304	3	2	4	112
Spain	<1,000	<500	<1,000	–	–	–	–	100	18	14	24	27
Sri Lanka	<100	<100	<200	0	<1	<1	<1	10	15	10	22	10
Sudan	2,600	1,400	4,000	–	1	1	2	125	5	3	8	–
Suriname	<100	<100	<200	–	–	–	–	127	>95	>95	>95	109
Swaziland	11,000	11,000	12,000	8,963	78	72	84	7,429	65	60	70	9,272
Sweden	–	–	–	–	–	–	–	–	–	–	–	–
Switzerland	–	–	–	–	–	–	–	–	–	–	–	–
Syrian Arab Republic	–	–	–	–	–	–	–	–	–	–	–	–
Tajikistan	<500	<500	<500	140	48	40	60	142	49	40	60	60
Thailand	4,500	3,800	5,200	2,485	55	47	63	4,404	>95	83	>95	4,173
The former Yugoslav Republic of Macedonia	–	–	–	–	–	–	–	–	–	–	–	–
Timor-Leste	–	–	–	–	–	–	–	–	–	–	–	–
Togo	4,900	4,200	5,600	2,570	53	46	61	2,843	58	50	67	1,098

	Estimated early infant diagnosis coverage (%), 2015			Estimated number of children living with HIV, 2015			# of children receiving ART, 2015	Estimated coverage of children receiving ART (%), 2015			Estimated number of children (aged 0-14) who died of AIDS, 2015			Countries and areas
	Estimate	Low	High	Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
	16	14	18	9,500	8,000	11,000	7,086	75	63	86	<500	<500	<1,000	Myanmar
	-	-	-	10,000	9,400	11,000	10,010	>95	86	>95	<500	<200	<500	Namibia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Nauru
	18	15	22	1,600	1,300	1,800	893	58	49	67	<100	<100	<100	Nepal
	-	-	-	-	-	-	-	-	-	-	-	-	-	Netherlands
	-	-	-	-	-	-	-	-	-	-	-	-	-	New Zealand
	80	64	>95	<200	<200	<500	122	69	47	>95	<100	<100	<100	Nicaragua
	8	7	9	5,900	5,100	6,800	922	16	13	18	<1,000	<500	<1,000	Niger
	9	7	12	-	-	-	43,655	-	-	-	-	-	-	Nigeria
	-	-	-	-	-	-	-	-	-	-	-	-	-	Niue
	-	-	-	-	-	-	-	-	-	-	-	-	-	Norway
	-	-	-	-	-	-	31	-	-	-	-	-	-	Oman
	1	<1	1	2,500	1,900	3,900	131	5	4	8	<500	<500	<1,000	Pakistan
	-	-	-	-	-	-	-	-	-	-	-	-	-	Palau
	-	-	-	-	-	-	-	-	-	-	-	-	-	Palestine, State of
	80	73	87	<200	<200	<500	162	92	75	>95	<100	<100	<100	Panama
	40	36	44	3,300	3,000	3,600	1,170	36	33	39	<500	<200	<500	Papua New Guinea
	51	37	79	<500	<200	<1,000	175	58	35	>95	<100	<100	<100	Paraguay
	59	49	72	1,100	<1,000	1,400	888	84	62	>95	<100	<100	<100	Peru
	3	2	8	<500	<500	<1,000	41	10	8	16	<100	<100	<100	Philippines
	-	-	-	-	-	-	-	-	-	-	-	-	-	Poland
	-	-	-	-	-	-	-	-	-	-	-	-	-	Portugal
	-	-	-	-	-	-	-	-	-	-	-	-	-	Qatar
	-	-	-	-	-	-	-	-	-	-	-	-	-	Republic of Korea
	81	66	>95	<200	<100	<500	106	75	52	>95	<100	<100	<100	Republic of Moldova
	-	-	-	-	-	-	243	-	-	-	-	-	-	Romania
	-	-	-	-	-	-	-	-	-	-	-	-	-	Russian Federation
	76	68	83	11,000	9,200	13,000	8,266	74	61	86	<500	<500	<500	Rwanda
	-	-	-	-	-	-	-	-	-	-	-	-	-	Saint Kitts and Nevis
	-	-	-	-	-	-	-	-	-	-	-	-	-	Saint Lucia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Saint Vincent and the Grenadines
	-	-	-	-	-	-	-	-	-	-	-	-	-	Samoa
	-	-	-	-	-	-	-	-	-	-	-	-	-	San Marino
	-	-	-	-	-	-	-	-	-	-	-	-	-	Sao Tome and Principe
	-	-	-	-	-	-	92	-	-	-	-	-	-	Saudi Arabia
	13	11	15	4,800	4,000	5,700	1,183	25	21	30	<500	<500	<1,000	Senegal
	-	-	-	-	-	-	11	-	-	-	-	-	-	Serbia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Seychelles
	4	3	5	4,400	3,800	5,000	575	13	11	15	<500	<500	<500	Sierra Leone
	-	-	-	-	-	-	0	-	-	-	-	-	-	Singapore
	-	-	-	-	-	-	-	-	-	-	-	-	-	Slovakia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Slovenia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Solomon Islands
	<1	<1	<1	3,100	2,400	4,000	112	4	3	5	<500	<500	<500	Somalia
	>95	>95	>95	240,000	210,000	260,000	174,891	74	68	82	7,800	6,900	9,500	South Africa
	1	1	2	14,000	9,200	19,000	728	5	3	7	1,400	<1,000	2,100	South Sudan
	5	4	6	<100	<100	<100	400	>95	>95	>95	<100	<100	<100	Spain
	15	10	22	<100	<100	<200	36	46	32	66	<100	<100	<100	Sri Lanka
	<1	<1	<1	3,500	2,800	4,500	394	11	9	15	<500	<500	<1,000	Sudan
	>95	>95	>95	<100	<100	<100	74	>95	89	>95	<100	<100	<100	Suriname
	81	75	87	10,000	9,700	11,000	8,063	78	74	84	<500	<500	<500	Swaziland
	-	-	-	-	-	-	-	-	-	-	-	-	-	Sweden
	-	-	-	-	-	-	-	-	-	-	-	-	-	Switzerland
	-	-	-	-	-	-	-	-	-	-	-	-	-	Syrian Arab Republic
	21	17	26	<500	<500	<500	501	>95	>95	>95	<100	<100	<100	Tajikistan
	93	79	>95	4,100	3,500	4,800	3,813	>95	89	>95	<100	<100	<100	Thailand
	-	-	-	-	-	-	-	-	-	-	-	-	-	The former Yugoslav Republic of Macedonia
	-	-	-	-	-	-	-	-	-	-	-	-	-	Timor-Leste
	23	19	26	9,000	7,600	11,000	3,058	34	29	41	<500	<500	<1,000	Togo

TABLE 2

## ◀ Providing paediatric HIV care and treatment in low- and middle-income countries

Countries and areas	Estimated number of pregnant women living with HIV, 2015			# of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015	% of infants born to HIV+ women started on cotrimoxazole prophylaxis, 2015			# of infants born to HIV+ women started on antiretroviral prophylaxis (ART), 2015	% of infants born to HIV+ women started on ART, 2015			# of infants born to HIV+ women receiving virological test for HIV within 2 months of birth, 2015
	Estimate	Low	High		Estimate	Low	High		Estimate	Low	High	
Tonga	–	–	–	–	–	–	–	–	–	–	–	–
Trinidad and Tobago	<200	<200	<200	91	51	46	55	137	76	69	82	134
Tunisia	–	–	–	–	–	–	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–	–	–	–	–
Turkmenistan	–	–	–	–	–	–	–	–	–	–	–	–
Tuvalu	–	–	–	–	–	–	–	–	–	–	–	–
Uganda	120,000	110,000	130,000	45,992	38	34	42	45,934	38	34	42	40,099
Ukraine	2,800	2,200	3,400	2,359	85	68	>95	2,893	>95	83	>95	1,396
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	–	–
United Kingdom	–	–	–	–	–	–	–	–	–	–	–	–
United Republic of Tanzania	86,000	77,000	96,000	44,872	52	47	58	40,408	47	42	52	36,209
United States	–	–	–	–	–	–	–	–	–	–	–	–
Uruguay	<200	<100	<200	124	>95	>95	>95	136	>95	>95	>95	136
Uzbekistan	<500	<500	<500	–	–	–	–	528	>95	>95	>95	443
Vanuatu	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	1,800	1,600	2,000	–	–	–	–	274	15	14	17	125
Viet Nam	2,900	2,500	3,300	1,015	35	30	39	1,796	61	52	69	1,461
Yemen	<500	<500	<1,000	15	4	3	7	19	5	3	9	5
Zambia	81,000	75,000	88,000	34,793	43	40	46	30,327	37	35	40	29,755
Zimbabwe	68,000	62,000	75,000	40,729	60	54	65	50,902	75	68	82	36,982

## SUMMARY INDICATORS

Sub-Saharan Africa <sup>a/</sup>	1,300,000	1,200,000	1,500,000	596,734	46	40	53	710,095	55	47	63	632,586
Eastern and Southern Africa	970,000	880,000	1,100,000	543,935	57	50	64	635,325	66	58	74	584,094
West and Central Africa	330,000	270,000	400,000	52,756	17	14	21	74,583	23	18	28	48,472
Middle East and North Africa	5,200	3,500	7,800	390	7	5	12	733	13	8	20	514
South Asia	39,000	32,000	47,000	9,651	25	20	31	9,480	25	20	31	5,929
East Asia and the Pacific	38,000	33,000	44,000	6,883	18	15	23	15,038	40	33	51	10,555
Latin America and Caribbean	28,000	24,000	32,000	5,900	42	34	51	20,086	73	59	90	12,098
CEE/CIS	–	–	–	–	–	–	–	–	–	–	–	–
22 Global Plan priority countries	1,300,000	1,100,000	1,500,000	586,086	47	41	55	698,075	56	48	64	622,589
21 African Global Plan priority countries	1,200,000	1,100,000	1,400,000	576,560	48	41	55	688,788	56	49	65	616,778
Least developed countries	630,000	570,000	700,000	281,461	45	39	52	280,666	45	38	52	211,005
Low- and middle-income countries	1,400,000	1,200,000	1,700,000	622,314	44	38	51	774,270	54	47	63	671,843
World	1,400,000	1,300,000	1,600,000	622,720	45	38	52	776,779	54	47	64	673,019

## DEFINITIONS OF THE INDICATORS

**Estimated number of pregnant women living with HIV:**

Estimated number of pregnant women living with HIV, as of 2015.

**Number of infants born to HIV+ women started on cotrimoxazole prophylaxis:**

Reported number of HIV-exposed infants (those born to HIV-positive mothers) started on cotrimoxazole prophylaxis within two months of birth, as of 2015.

**Percentage of infants born to HIV+ women started on cotrimoxazole prophylaxis:**

Calculated by dividing the number of HIV-exposed infants started on cotrimoxazole prophylaxis by the estimated number of children born of women living with HIV, as of 2015. The denominator is the estimated unrounded number of pregnant women living with HIV.

**Number of infants born to HIV+ women started on antiretroviral prophylaxis (ART) to prevent mother-to-child transmission:**

Reported number of HIV-exposed infants given antiretroviral prophylaxis for the prevention of mother-to-child transmission of HIV, as of 2015.

**Percentage of infants born to HIV+ women started on ART to prevent mother-to-child transmission:**

Calculated by dividing the number of HIV-exposed infants given ART by the estimated number of children born of women living with HIV, as of 2015. The denominator is the estimated unrounded number of pregnant women living with HIV.

**Number of infants born to HIV+ women receiving virological test for HIV within two months of birth:**

Reported number of HIV-exposed infants receiving a virological HIV test within two months of birth, as of 2015.

**Estimated early infant diagnosis (EID) coverage:**

Calculated by dividing the number of HIV-exposed infants receiving a virological HIV test within two months of birth by the estimated number of children born of women living with HIV, as of 2015. The denominator is the estimated unrounded number of pregnant women living with HIV.

**Estimated number of children living with HIV:**

Estimated number of children (aged 0–14) living with HIV, as of 2015.

**Number of children receiving antiretroviral therapy:**

Reported number of children (aged 0–14) living with HIV receiving ART, as of 2015.

**Estimated coverage of children receiving ART (%):**

Calculated by dividing the reported number of children (aged 0–14) receiving ART by the estimated number of children (aged 0–14) living with HIV, as of 2015.

**Estimated number of children (aged 0–14) who died of AIDS:**

Estimated number of children (aged 0–14) who died of an AIDS-related cause, as of 2015.

## MAIN DATA SOURCES

**Estimated number of pregnant women living with HIV:**

UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of infants born to HIV+ women started on cotrimoxazole prophylaxis:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016.

**Percentage of infants born to HIV+ women started on cotrimoxazole prophylaxis:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of infants born to HIV+ women started on antiretroviral prophylaxis (ART) to prevent mother-to-child transmission:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016.

**Percentage of infants born to HIV+ women started on ART to prevent mother-to-child transmission:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of infants born to HIV+ women receiving virological test for HIV within two months of birth:** UNAIDS, UNICEF, WHO, 2015 *Global AIDS Response Progress Reporting*, 2016.

	Estimated early infant diagnosis coverage (%), 2015			Estimated number of children living with HIV, 2015			# of children receiving ART, 2015	Estimated coverage of children receiving ART (%), 2015			Estimated number of children (aged 0–14) who died of AIDS, 2015			Countries and areas
	Estimate	Low	High	Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
	–	–	–	–	–	–	–	–	–	–	–	–	–	Tonga
	74	67	81	<100	<100	<100	131	>95	>95	>95	<100	<100	<100	Trinidad and Tobago
	–	–	–	–	–	–	20	–	–	–	–	–	–	Tunisia
	–	–	–	–	–	–	–	–	–	–	–	–	–	Turkey
	–	–	–	–	–	–	–	–	–	–	–	–	–	Turkmenistan
	–	–	–	–	–	–	–	–	–	–	–	–	–	Tuvalu
	33	30	37	96,000	84,000	110,000	60,029	63	55	71	4,700	3,600	6,100	Uganda
	50	40	61	3,200	2,600	4,000	2,415	75	61	93	<100	<100	<200	Ukraine
	–	–	–	–	–	–	–	–	–	–	–	–	–	United Arab Emirates
	–	–	–	–	–	–	–	–	–	–	–	–	–	United Kingdom
	42	38	47	91,000	77,000	110,000	51,474	56	47	65	5,100	3,600	6,600	United Republic of Tanzania
	–	–	–	–	–	–	–	–	–	–	–	–	–	United States
	>95	>95	>95	<100	<100	<100	113	>95	>95	>95	<100	<100	<100	Uruguay
	>95	>95	>95	<1,000	<500	1,000	4,575	>95	>95	>95	<100	<100	<100	Uzbekistan
	–	–	–	–	–	–	–	–	–	–	–	–	–	Vanuatu
	7	6	8	2,100	1,900	2,300	1,145	55	50	61	<500	<200	<500	Venezuela (Bolivarian Republic of)
	50	43	56	4,900	3,900	6,100	4,865	>95	80	>95	<200	<200	<200	Viet Nam
	1	1	2	<500	<500	<1,000	140	32	21	50	<100	<100	<100	Yemen
	37	34	39	85,000	77,000	94,000	51,903	61	55	67	3,600	2,900	4,400	Zambia
	54	49	59	77,000	68,000	86,000	61,064	80	70	89	3,300	2,600	4,000	Zimbabwe
	49	42	56	1,600,000	1,300,000	1,800,000	758,131	49	42	57	91,000	71,000	120,000	Sub-Saharan Africa <sup>a/</sup>
	60	53	68	1,100,000	940,000	1,200,000	661,007	63	56	71	48,000	39,000	59,000	Eastern and Southern Africa
	15	12	18	490,000	390,000	620,000	96,656	20	16	25	43,000	31,000	57,000	West and Central Africa
	9	6	14	7,800	6,100	10,000	2,041	26	20	35	<1,000	<1,000	1,100	Middle East and North Africa
	15	12	19	140,000	93,000	190,000	52,156	36	24	49	8,000	6,500	9,800	South Asia
	28	23	35	49,000	43,000	56,000	26,495	54	47	61	3,500	2,900	4,400	East Asia and the Pacific
	48	38	60	32,000	27,000	38,000	20,369	64	54	76	1,800	1,400	2,500	Latin America and Caribbean
	–	–	–	–	–	–	–	–	–	–	–	–	–	CEE/CIS
	50	43	57	1,600,000	1,300,000	1,900,000	778,021	50	41	59	89,000	66,000	120,000	22 Global Plan priority countries
	51	44	58	1,400,000	1,200,000	1,700,000	727,045	51	44	59	82,000	64,000	110,000	21 African Global Plan priority countries
	33	29	39	790,000	690,000	890,000	418,782	48	42	54	43,000	34,000	53,000	Least developed countries
	47	40	55	1,800,000	1,500,000	2,200,000	867,637	49	40	58	105,000	78,000	142,000	Low- and middle-income countries
	47	40	55	1,800,000	1,500,000	2,000,000	872,524	49	42	55	110,000	84,000	130,000	World

**Estimated early infant diagnosis (EID) coverage:** UNAIDS, UNICEF, WHO, *2015 Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Estimated number of children living with HIV:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of children receiving ART:** UNAIDS, UNICEF, WHO, *2015 Global AIDS Response Progress Reporting*, 2016.

**Estimated coverage of children receiving ART (%):** UNAIDS, UNICEF, WHO, *2015 Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Estimated number of children (aged 0–14) who died of AIDS:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

## NOTES

– Data not available.

a/ Sub-Saharan Africa includes the Sudan and Djibouti.

Due to the secession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-secession.

Some estimates do not add up to the totals because of rounding. Low- and middle-income countries are classified as such by the World Bank.

TABLE 3

## Demography and epidemiology of HIV among adolescents in low- and middle-income countries

Countries and areas	Demographics			Epidemiology									
	Population (thousands), 2015		Adolescents as a % of total population, 2015	Estimated number of adolescents (aged 10–19) living with HIV, 2015			Adolescents living with HIV as a % of total HIV population, 2015	Number of new HIV infections among adolescents (aged 15–19), 2015 <sup>a</sup>			Number of AIDS deaths among adolescents (aged 10–19), 2015		
	Total	Aged 10–19		Estimate	Low	High		Estimate	Low	High	Estimate	Low	High
Afghanistan	32,527	8,305	26	<200	<100	<1,000	3	<100	<100	<500	<100	<100	<100
Albania	2,897	454	16	–	–	–	–	–	–	–	–	–	–
Algeria	39,667	5,924	15	<500	<200	<500	3	<100	<100	<200	<100	<100	<100
Andorra	70	–	–	–	–	–	–	–	–	–	–	–	–
Angola	25,022	5,954	24	15,000	9,800	23,000	5	2,500	1,300	4,600	<500	<500	<1,000
Antigua and Barbuda	92	16	17	–	–	–	–	–	–	–	–	–	–
Argentina	43,417	7,020	16	3,300	2,100	4,800	3	<1,000	<500	1,400	<100	<100	<100
Armenia	3,018	338	11	–	–	–	–	–	–	–	–	–	–
Australia	23,969	2,900	12	<500	<500	<1,000	2	<200	<200	<500	<100	<100	<100
Austria	8,545	874	10	–	–	–	–	–	–	–	–	–	–
Azerbaijan	9,754	1,295	13	<100	<100	<200	1	<100	<100	<100	<100	<100	<100
Bahamas	388	55	14	<500	<500	<500	3	<100	<100	<200	<100	<100	<100
Bahrain	1,377	177	13	–	–	–	–	–	–	–	–	–	–
Bangladesh	160,996	32,530	20	<200	<200	<500	2	<100	<100	<100	<100	<100	<100
Barbados	284	37	13	–	–	–	–	–	–	–	–	–	–
Belarus	9,496	879	9	<500	<500	<1,000	1	<200	<200	<500	<100	<100	<100
Belgium	11,299	1,231	11	–	–	–	–	–	–	–	–	–	–
Belize	359	78	22	<200	<200	<500	5	<100	<100	<100	<100	<100	<100
Benin	10,880	2,528	23	3,500	2,500	5,000	5	<500	<500	<1,000	<200	<100	<200
Bhutan	775	144	19	–	–	–	–	–	–	–	–	–	–
Bolivia (Plurinational State of)	10,725	2,216	21	1,000	<1,000	1,800	6	<500	<200	<1,000	<100	<100	<100
Bosnia and Herzegovina	3,810	386	10	–	–	–	–	–	–	–	–	–	–
Botswana	2,262	441	19	13,000	12,000	15,000	4	1,600	<1,000	2,300	<200	<200	<500
Brazil	207,848	34,887	17	28,000	19,000	46,000	3	7,600	3,500	15,000	<500	<200	<500
Brunei Darussalam	423	69	16	–	–	–	–	–	–	–	–	–	–
Bulgaria	7,150	635	9	–	–	–	–	–	–	–	–	–	–
Burkina Faso	18,106	4,319	24	7,900	6,500	9,500	8	<500	<500	<1,000	<500	<500	<500
Burundi	11,179	2,403	21	7,000	6,100	7,900	9	<100	<100	<500	<500	<200	<500
Cabo Verde	521	104	20	<200	<200	<500	6	<100	<100	<100	<100	<100	<100
Cambodia	15,578	3,064	20	–	–	–	–	–	–	–	–	–	–
Cameroon	23,344	5,405	23	29,000	24,000	35,000	5	4,100	2,400	6,100	<1,000	<1,000	1,300
Canada	35,940	3,966	11	–	–	–	–	–	–	–	–	–	–
Central African Republic	4,900	1,120	23	7,900	6,900	9,200	7	<1,000	<500	<1,000	<500	<500	<500
Chad	14,037	3,428	24	10,000	8,700	13,000	6	<1,000	<500	1,300	<500	<500	<1,000
Chile	17,948	2,568	14	–	–	–	–	–	–	–	–	–	–
China	1,376,049	154,222	11	–	–	–	–	–	–	–	–	–	–
Colombia	48,229	8,139	17	5,600	3,000	9,200	4	1,700	<1,000	3,100	<100	<100	<100
Comoros	788	175	22	–	–	–	–	–	–	–	–	–	–
Congo	4,620	1,020	22	–	–	–	–	–	–	–	–	–	–
Cook Islands	–	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	4,808	759	16	<500	<500	<1,000	3	<200	<100	<200	<100	<100	<100
Côte d'Ivoire	22,702	5,329	23	22,000	17,000	28,000	5	2,000	1,200	3,400	<1,000	<1,000	1,200
Croatia	4,240	448	11	–	–	–	–	–	–	–	–	–	–
Cuba	11,390	1,348	12	<200	<100	<500	1	<100	<100	<200	<100	<100	<100
Cyprus	1,165	139	12	–	–	–	–	–	–	–	–	–	–
Czech Republic	10,543	932	9	–	–	–	–	–	–	–	–	–	–
Democratic People's Republic of Korea	25,155	3,820	15	–	–	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	77,267	18,121	23	27,000	22,000	33,000	7	1,200	<1,000	2,100	1,100	<1,000	1,400
Denmark	5,669	688	12	–	–	–	–	–	–	–	–	–	–
Djibouti	888	181	20	<1,000	<500	<1,000	7	<100	<100	<100	<100	<100	<100
Dominica	73	–	–	–	–	–	–	–	–	–	–	–	–
Dominican Republic	10,528	2,007	19	3,100	2,200	4,400	5	<500	<200	<1,000	<100	<100	<200
Ecuador	16,144	3,005	19	1,100	<1,000	1,600	4	<500	<200	<500	<100	<100	<100
Egypt	91,508	16,511	18	<1,000	<500	1,700	6	<500	<200	<1,000	<100	<100	<100
El Salvador	6,127	1,230	20	<1,000	<500	<1,000	3	<200	<100	<200	<100	<100	<100
Equatorial Guinea	845	178	21	<1,000	<1,000	1,000	3	<100	<100	<100	<100	<100	<100
Eritrea	5,228	1,178	23	1,100	<1,000	1,300	8	<100	<100	<100	<100	<100	<100
Estonia	1,313	118	9	–	–	–	–	–	–	–	–	–	–



## Demography and epidemiology of HIV among adolescents in low- and middle-income countries

Countries and areas	Demographics			Epidemiology										
	Population (thousands), 2015		Adolescents as a % of total population, 2015	Estimated number of adolescents (aged 10–19) living with HIV, 2015			Adolescents living with HIV as a % of total HIV population, 2015	Number of new HIV infections among adolescents (aged 15–19), 2015 <sup>3</sup>			Number of AIDS deaths among adolescents (aged 10–19), 2015			
	Total	Aged 10–19		Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
Ethiopia	99,391	24,725	25	–	–	–	–	–	–	–	–	–	–	–
Fiji	892	157	18	–	–	–	–	–	–	–	–	–	–	–
Finland	5,503	592	11	–	–	–	–	–	–	–	–	–	–	–
France	64,395	7,792	12	–	–	–	–	–	–	–	–	–	–	–
Gabon	1,725	366	21	1,800	1,500	2,200	4	<200	<100	<500	<100	<100	<100	<100
Gambia	1,991	464	23	<1,000	<1,000	1,200	5	<200	<100	<200	<100	<100	<100	<100
Georgia	4,000	434	11	<100	<100	<200	1	<100	<100	<100	<100	<100	<100	<100
Germany	80,689	7,644	9	–	–	–	–	–	–	–	–	–	–	–
Ghana	27,410	5,860	21	14,000	11,000	17,000	5	<1,000	<1,000	1,500	<1,000	<500	<1,000	<1,000
Greece	10,955	1,040	9	<500	<500	<500	2	<200	<200	<200	<100	<100	<100	<100
Grenada	107	19	17	–	–	–	–	–	–	–	–	–	–	–
Guatemala	16,343	3,721	23	2,800	1,800	4,900	5	<1,000	<500	1,800	<100	<100	<100	<100
Guinea	12,609	2,899	23	5,800	4,700	7,300	5	<1,000	<500	1,200	<200	<200	<500	<500
Guinea-Bissau	1,844	410	22	–	–	–	–	–	–	–	–	–	–	–
Guyana	767	185	24	<500	<500	<1,000	5	<200	<100	<200	<100	<100	<100	<100
Haiti	10,711	2,285	21	8,400	6,800	10,000	6	<200	<100	<500	<500	<500	<500	<500
Holy See	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Honduras	8,075	1,793	22	1,400	1,200	1,700	7	<200	<100	<200	<100	<100	<100	<100
Hungary	9,855	979	10	–	–	–	–	–	–	–	–	–	–	–
Iceland	329	43	13	–	–	–	–	–	–	–	–	–	–	–
India	1,311,051	250,098	19	–	–	–	–	–	–	–	–	–	–	–
Indonesia	257,564	46,476	18	41,000	21,000	65,000	6	15,000	7,500	24,000	<500	<500	<1,000	<1,000
Iran (Islamic Republic of)	79,109	10,905	14	1,200	<1,000	2,200	2	<500	<200	<1,000	<100	<100	<100	<100
Iraq	36,423	8,040	22	–	–	–	–	–	–	–	–	–	–	–
Ireland	4,688	582	12	–	–	–	–	–	–	–	–	–	–	–
Israel	8,064	1,296	16	–	–	–	–	–	–	–	–	–	–	–
Italy	59,798	5,611	9	1,800	1,600	2,400	1	<1,000	<1,000	<1,000	<100	<100	<100	<100
Jamaica	2,793	510	18	1,200	<1,000	1,900	4	<500	<200	<1,000	<100	<100	<100	<100
Japan	126,573	11,564	9	–	–	–	–	–	–	–	–	–	–	–
Jordan	7,595	1,577	21	–	–	–	–	–	–	–	–	–	–	–
Kazakhstan	17,625	2,274	13	<500	<200	<500	1	<200	<100	<200	<100	<100	<100	<100
Kenya	46,050	10,392	23	130,000	110,000	170,000	9	18,000	11,000	30,000	2,800	2,100	3,700	3,700
Kiribati	112	23	20	–	–	–	–	–	–	–	–	–	–	–
Kuwait	3,892	445	11	–	–	–	–	–	–	–	–	–	–	–
Kyrgyzstan	5,940	1,003	17	<200	<100	<500	2	<100	<100	<100	<100	<100	<100	<100
Lao People's Democratic Republic	6,802	1,484	22	–	–	–	–	–	–	–	–	–	–	–
Latvia	1,971	172	9	<200	<200	<500	2	<100	<100	<100	<100	<100	<100	<100
Lebanon	5,851	1,061	18	–	–	–	–	–	–	–	–	–	–	–
Lesotho	2,135	493	23	12,000	10,000	15,000	4	2,000	1,200	2,800	<500	<200	<500	<500
Liberia	4,503	1,044	23	2,800	2,400	3,400	9	<500	<200	<500	<200	<100	<200	<200
Libya	6,278	1,089	17	–	–	–	–	–	–	–	–	–	–	–
Liechtenstein	38	–	–	–	–	–	–	–	–	–	–	–	–	–
Lithuania	2,878	292	10	–	–	–	–	–	–	–	–	–	–	–
Luxembourg	567	65	12	–	–	–	–	–	–	–	–	–	–	–
Madagascar	24,235	5,714	24	5,400	3,800	7,700	11	1,400	<1,000	2,600	<200	<100	<200	<200
Malawi	17,215	4,111	24	62,000	55,000	69,000	6	3,000	1,700	4,800	1,800	1,500	2,400	2,400
Malaysia	30,331	5,400	18	<1,000	<1,000	1,100	1	<500	<500	<500	<100	<100	<100	<100
Maldives	364	62	17	–	–	–	–	–	–	–	–	–	–	–
Mali	17,600	4,151	24	7,900	6,600	9,800	6	<1,000	<500	1,500	<500	<200	<500	<500
Malta	419	48	12	–	–	–	–	–	–	–	–	–	–	–
Marshall Islands	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mauritania	4,068	909	22	<1,000	<1,000	1,200	7	<200	<100	<500	<100	<100	<100	<100
Mauritius	1,273	193	15	–	–	–	–	–	–	–	–	–	–	–
Mexico	127,017	23,754	19	6,600	3,700	11,000	3	2,000	<1,000	3,700	<100	<100	<200	<200
Micronesia (Federated States of)	104	25	24	–	–	–	–	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mongolia	2,959	448	15	<100	<100	<100	5	<100	<100	<100	<100	<100	<100	<100
Montenegro	626	83	13	–	–	–	–	–	–	–	–	–	–	–
Morocco	34,378	5,827	17	<1,000	<1,000	1,300	3	<500	<100	<500	<100	<100	<100	<100

TABLE 3

## ◀ Demography and epidemiology of HIV among adolescents in low- and middle-income countries

Countries and areas	Demographics			Epidemiology									
	Population (thousands), 2015		Adolescents as a % of total population, 2015	Estimated number of adolescents (aged 10–19) living with HIV, 2015			Adolescents living with HIV as a % of total HIV population, 2015	Number of new HIV infections among adolescents (aged 15–19), 2015 <sup>a</sup>			Number of AIDS deaths among adolescents (aged 10–19), 2015		
	Total	Aged 10–19		Estimate	Low	High		Estimate	Low	High	Estimate	Low	High
Mozambique	27,978	6,731	24	68,000	48,000	99,000	4	9,400	5,200	16,000	1,500	<1,000	2,100
Myanmar	53,897	10,278	19	11,000	9,000	15,000	5	2,500	1,200	4,200	<200	<200	<500
Namibia	2,459	538	22	8,500	7,500	10,000	4	<1,000	<500	1,200	<100	<100	<200
Nauru	–	–	–	–	–	–	–	–	–	–	–	–	–
Nepal	28,514	6,623	23	1,200	<1,000	1,400	3	<100	<100	<200	<100	<100	<100
Netherlands	16,925	1,985	12	–	–	–	–	–	–	–	–	–	–
New Zealand	4,529	604	13	–	–	–	–	–	–	–	–	–	–
Nicaragua	6,082	1,207	20	<1,000	<500	<1,000	6	<200	<100	<500	<100	<100	<100
Niger	19,899	4,654	23	4,400	3,800	5,100	9	<500	<500	<1,000	<200	<200	<500
Nigeria	182,202	41,386	23	–	–	–	–	–	–	–	–	–	–
Niue	–	–	–	–	–	–	–	–	–	–	–	–	–
Norway	5,211	632	12	–	–	–	–	–	–	–	–	–	–
Oman	4,491	476	11	–	–	–	–	–	–	–	–	–	–
Pakistan	188,925	38,797	21	2,200	<1,000	5,000	2	<1,000	<500	2,000	<100	<100	<100
Palau	–	–	–	–	–	–	–	–	–	–	–	–	–
Palestine, State of	4,668	1,086	23	–	–	–	–	–	–	–	–	–	–
Panama	3,929	686	17	<1,000	<500	<1,000	4	<200	<100	<500	<100	<100	<100
Papua New Guinea	7,619	1,698	22	2,200	1,900	2,600	6	<500	<200	<500	<100	<100	<100
Paraguay	6,639	1,342	20	<1,000	<500	1,400	5	<500	<100	<500	<100	<100	<100
Peru	31,377	5,606	18	2,400	1,800	3,500	4	<1,000	<500	1,100	<100	<100	<100
Philippines	100,699	20,389	20	3,300	<1,000	15,000	8	1,200	<500	6,900	<100	<100	<100
Poland	38,612	3,751	10	–	–	–	–	–	–	–	–	–	–
Portugal	10,350	1,072	10	–	–	–	–	–	–	–	–	–	–
Qatar	2,235	213	10	–	–	–	–	–	–	–	–	–	–
Republic of Korea	50,293	5,740	11	–	–	–	–	–	–	–	–	–	–
Republic of Moldova	4,069	444	11	<500	<500	<500	1	<100	<100	<100	<100	<100	<100
Romania	19,511	2,108	11	–	–	–	–	–	–	–	–	–	–
Russian Federation	143,457	13,252	9	–	–	–	–	–	–	–	–	–	–
Rwanda	11,610	2,654	23	13,000	11,000	14,000	6	<1,000	<500	1,000	<500	<200	<500
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–	–	–	–	–
Saint Lucia	185	31	17	–	–	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	109	19	17	–	–	–	–	–	–	–	–	–	–
Samoa	193	43	22	–	–	–	–	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	190	45	24	–	–	–	–	–	–	–	–	–	–
Saudi Arabia	31,540	5,285	17	–	–	–	–	–	–	–	–	–	–
Senegal	15,129	3,430	23	2,700	2,300	3,300	6	<500	<200	<500	<100	<100	<200
Serbia	8,851	1,078	12	–	–	–	–	–	–	–	–	–	–
Seychelles	96	13	14	–	–	–	–	–	–	–	–	–	–
Sierra Leone	6,453	1,507	23	2,600	2,100	3,200	5	<500	<500	<1,000	<100	<100	<100
Singapore	5,604	674	12	–	–	–	–	–	–	–	–	–	–
Slovakia	5,426	543	10	–	–	–	–	–	–	–	–	–	–
Slovenia	2,068	185	9	–	–	–	–	–	–	–	–	–	–
Solomon Islands	584	133	23	–	–	–	–	–	–	–	–	–	–
Somalia	10,787	2,599	24	1,700	1,200	2,400	6	<500	<200	<500	<100	<100	<100
South Africa	54,490	10,328	19	350,000	300,000	420,000	5	59,000	38,000	84,000	6,300	5,200	8,100
South Sudan	12,340	2,874	23	8,600	5,500	13,000	5	1,400	<1,000	2,500	<500	<200	<1,000
Spain	46,122	4,373	9	<1,000	<1,000	1,500	1	<500	<500	<1,000	<100	<100	<100
Sri Lanka	20,715	3,284	16	<500	<200	<1,000	6	<100	<100	<500	<100	<100	<100
Sudan	40,235	9,240	23	4,100	2,500	8,100	7	1,200	<500	3,100	<100	<100	<200
Suriname	543	96	18	<200	<200	<500	5	<100	<100	<100	<100	<100	<100
Swaziland	1,287	295	23	11,000	9,200	14,000	5	1,900	1,200	2,800	<200	<200	<200
Sweden	9,779	1,025	10	–	–	–	–	–	–	–	–	–	–
Switzerland	8,299	833	10	–	–	–	–	–	–	–	–	–	–
Syrian Arab Republic	18,502	4,469	24	–	–	–	–	–	–	–	–	–	–
Tajikistan	8,482	1,707	20	<500	<500	<500	2	<100	<100	<200	<100	<100	<100
Thailand	67,959	8,604	13	12,000	10,000	14,000	3	1,300	<1,000	2,200	<100	<100	<200
The former Yugoslav Republic of Macedonia	2,078	261	13	–	–	–	–	–	–	–	–	–	–

## Demography and epidemiology of HIV among adolescents in low- and middle-income countries

Countries and areas	Demographics			Epidemiology										
	Population (thousands), 2015		Adolescents as a % of total population, 2015	Estimated number of adolescents (aged 10–19) living with HIV, 2015			Adolescents living with HIV as a % of total HIV population, 2015	Number of new HIV infections among adolescents (aged 15–19), 2015 <sup>a</sup>			Number of AIDS deaths among adolescents (aged 10–19), 2015			
	Total	Aged 10–19		Estimate	Low	High		Estimate	Low	High	Estimate	Low	High	
Timor-Leste	1,185	277	23	–	–	–	–	–	–	–	–	–	–	–
Togo	7,305	1,650	23	7,200	6,200	8,600	7	<500	<500	<1,000	<500	<500	<500	<500
Tonga	106	24	23	–	–	–	–	–	–	–	–	–	–	–
Trinidad and Tobago	1,360	177	13	<500	<200	<500	2	<100	<100	<100	<100	<100	<100	<100
Tunisia	11,254	1,618	14	–	–	–	–	–	–	–	–	–	–	–
Turkey	78,666	13,397	17	–	–	–	–	–	–	–	–	–	–	–
Turkmenistan	5,374	959	18	–	–	–	–	–	–	–	–	–	–	–
Tuvalu	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Uganda	39,032	9,603	25	79,000	67,000	96,000	5	9,600	5,800	15,000	1,900	1,600	2,400	2,400
Ukraine	44,824	3,954	9	4,300	3,100	5,900	2	1,100	<1,000	1,600	<100	<100	<100	<100
United Arab Emirates	9,157	781	9	–	–	–	–	–	–	–	–	–	–	–
United Kingdom	64,716	7,252	11	–	–	–	–	–	–	–	–	–	–	–
United Republic of Tanzania	53,470	12,291	23	81,000	71,000	93,000	6	5,500	3,400	7,900	2,300	1,900	3,000	3,000
United States	321,774	41,364	13	–	–	–	–	–	–	–	–	–	–	–
Uruguay	3,432	508	15	<500	<200	<1,000	3	<100	<100	<200	<100	<100	<100	<100
Uzbekistan	29,893	5,148	17	<500	<500	<1,000	1	<100	<100	<100	<100	<100	<100	<100
Vanuatu	265	54	21	–	–	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	31,108	5,640	18	3,800	2,600	5,100	4	1,000	<1,000	1,500	<100	<100	<100	<100
Viet Nam	93,448	13,588	15	8,300	5,200	13,000	3	2,500	1,100	4,300	<100	<100	<200	<200
Yemen	26,832	6,283	23	<1,000	<500	1,400	8	<500	<100	<1,000	<100	<100	<100	<100
Zambia	16,212	3,863	24	68,000	60,000	80,000	6	6,800	4,300	9,500	1,500	1,200	1,800	1,800
Zimbabwe	15,603	3,504	22	74,000	64,000	87,000	5	6,400	4,000	9,600	1,700	1,400	2,200	2,200

### SUMMARY INDICATORS

Sub-Saharan Africa <sup>a/</sup>	1,001,417	230,815	23	1,400,000	1,200,000	1,700,000	6	170,000	120,000	230,000	36,000	28,000	46,000	46,000
Eastern and Southern Africa	480,144	111,070	23	1,100,000	960,000	1,200,000	6	130,000	96,000	180,000	24,000	19,000	30,000	30,000
West and Central Africa	480,150	110,324	23	330,000	260,000	420,000	5	36,000	26,000	48,000	12,000	8,800	16,000	16,000
Middle East and North Africa	455,880	81,187	18	8,700	6,800	12,000	4	2,300	1,400	3,800	<200	<200	<500	<500
South Asia	1,743,865	339,843	19	130,000	85,000	180,000	6	19,000	14,000	22,000	3,100	2,600	3,800	3,800
East Asia and the Pacific	2,097,940	276,692	13	90,000	79,000	100,000	3	25,000	21,000	31,000	<1,000	<1,000	1,100	1,100
Latin America and the Caribbean	628,992	110,944	18	74,000	62,000	88,000	4	17,000	13,000	24,000	1,000	<1,000	1,400	1,400
CEE/CIS	413,760	50,538	12	–	–	–	–	–	–	–	–	–	–	–
Least developed countries	954,148	217,127	23	620,000	550,000	710,000	6	57,000	42,000	77,000	17,000	14,000	21,000	21,000
Low- and middle-income countries	6,029,282	1,050,479	17	1,700,000	1,400,000	2,100,000	5	240,000	160,000	350,000	41,000	30,000	56,000	56,000
World	7,309,846	1,192,785	16	1,800,000	1,500,000	2,100,000	5	250,000	180,000	340,000	41,000	33,000	52,000	52,000

### DEFINITIONS OF THE INDICATORS

**Population (thousands):** Estimated total population as of 2015 (in thousands).

**Adolescents as a % of total population:** Percentage of the total population who are adolescents (aged 10–19), as of 2015.

**Estimated number of adolescents living with HIV:** Estimated number of adolescents (aged 10–19) living with HIV, as of 2015.

**Adolescents living with HIV as a % of the total HIV population:** Percentage of the estimated number of people (all ages) living with HIV who are adolescents (aged 10–19) living with HIV, as of 2015.

**Number of new HIV infections among adolescents (aged 15–19):** Estimated number of new HIV infections among adolescents (aged 15–19), as of 2015.

**Number of AIDS deaths among adolescents (aged 10–19):** Estimated number of AIDS-attributed deaths among adolescents (aged 10–19), as of 2015.

### MAIN DATA SOURCES

**Population (thousands):** United Nations Population Division, 2015.

**Adolescents as a % of total population:** United Nations Population Division, 2015.

**Estimated number of adolescents living with HIV:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Adolescents living with HIV as a % of the total HIV population:** UNICEF analysis of UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of new HIV infections among adolescents (aged 15–19):** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Number of AIDS deaths among adolescents (aged 10–19):** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

### NOTES

– Data not available.

a/ Sub-Saharan Africa consists of Eastern and Southern Africa, West and Central Africa, the Sudan and Djibouti.

Due to the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-cession.

Some estimates do not add up to the totals because of rounding.

Low- and middle-income countries are classified as such by the World Bank.

TABLE 4

## Knowledge, HIV testing and sexual behaviour among adolescents in low- and middle-income countries

Countries and areas	Knowledge		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		Sexual behaviour		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	% of adolescents (aged 15–19) who have comprehensive knowledge of HIV, 2010–2015*		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		% of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months, 2010–2015*		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	Female	Male	Female	Male	Female	Male	Female	Male
Afghanistan	2	–	–	–	–	–	–	–
Albania	36 x	21 x	1 x	1 x	0 x	2 x	–	–
Algeria	7	–	–	–	–	–	–	–
Andorra	–	–	–	–	–	–	–	–
Angola	24 x	26 x	–	–	–	–	–	–
Antigua and Barbuda	40	55	13	28	21	16	54	100
Argentina	36	–	–	–	–	–	–	–
Armenia	10	4	–	0	–	6	–	–
Australia	–	–	–	–	–	–	–	–
Austria	–	–	–	–	–	–	–	–
Azerbaijan	3 x	2 x	0 x	1 x	0 x	3 x	–	–
Bahamas	–	–	–	–	–	–	–	–
Bahrain	–	–	–	–	–	–	–	–
Bangladesh	12 y	–	–	–	–	–	–	–
Barbados	66	–	9	–	0	–	–	–
Belarus	51	53	1	1	1	8	–	–
Belgium	–	–	–	–	–	–	–	–
Belize	39	–	4	–	1	–	–	–
Benin	26	27	12	17	2	8	33	40
Bhutan	22	–	2	–	0	–	–	–
Bolivia	20 x	24 x	7 x	10 x	–	10 x	–	43 x
Bosnia and Herzegovina	42	41	–	2	1	5	–	–
Botswana	–	–	2 x	3 x	2 x	1 x	–	–
Brazil	–	–	33 x	–	–	–	–	–
Brunei Darussalam	–	–	–	–	–	–	–	–
Bulgaria	–	–	–	–	–	–	–	–
Burkina Faso	29	31	8	2	1	2	57 p	76 p
Burundi	43	45	4	9	0	1	–	–
Cabo Verde	–	–	12	17	13	31	–	–
Cambodia	33	42	1	0	–	0	–	–
Cameroon	26	30	15	11	4	10	52	70
Canada	–	–	–	–	–	–	–	–
Central African Republic	17	26	27	10	6	17	28	50
Chad	10	12	18	–	1	4	54	–
Chile	–	–	–	–	–	–	–	–
China	–	–	–	–	–	–	–	–
Colombia	21	–	14	–	5	–	45	–
Comoros	18	21	6	8	1	7	–	51 p
Congo	16	25	23	23	3	20	46	56
Cook Islands	–	–	–	–	–	–	–	–
Costa Rica	29	–	12	–	4	–	59 p	–
Côte d'Ivoire	15	21	21	14	4	13	32	70
Croatia	–	–	–	–	–	–	–	–
Cuba	59	48	12	–	4	–	79 p	–
Cyprus	–	–	–	–	–	–	–	–
Czech Republic	–	–	–	–	–	–	–	–
Democratic People's Republic of Korea	7 x	–	–	–	–	–	–	–
Democratic Republic of the Congo	17	20	19	20	3	9	12	17
Denmark	–	–	–	–	–	–	–	–
Djibouti	16 x	–	–	–	–	–	–	–
Dominica	49	39	8	30	12	38	86	74
Dominican Republic	39	39	17	28	6	19	40	67
Ecuador	–	–	–	–	–	–	–	–
Egypt	3 p	5	–	–	–	–	–	–
El Salvador	–	–	–	–	–	–	–	–
Equatorial Guinea	17	12	29	34	16	26	17	31
Eritrea	22	32	6	2	–	–	–	–
Estonia	–	–	–	–	–	–	–	–
Ethiopia	24	32	7	1	0	1	–	–
Fiji	–	–	–	–	–	–	–	–

	Sexual behaviour			Reported number of adolescents (aged 10–19) receiving ART, 2015	Treatment			Countries and areas
	% of adolescents (aged 15-19) who were tested and received results in the last 12 months, 2010-2015*		% of adolescents (aged 15-19) who have been circumcised, 2010-2015*		% of adolescents (aged 10-19) living with HIV receiving ART, 2015			
	Female	Male			Estimate	Low	High	
	–	–	–	21	11	3	19	Afghanistan
	0 x	0 x	50 x	8	–	–	–	Albania
	1	–	–	262	>95	76	>95	Algeria
	–	–	–	–	–	–	–	Andorra
	–	–	–	–	–	–	–	Angola
	–	–	–	7	–	–	–	Antigua and Barbuda
	–	–	–	–	–	–	–	Argentina
	1	0	–	8	–	–	–	Armenia
	–	–	–	–	–	–	–	Australia
	–	–	–	–	–	–	–	Austria
	–	–	–	19	20	8	32	Azerbaijan
	–	–	–	42	18	13	21	Bahamas
	–	–	–	2	–	–	–	Bahrain
	–	–	–	39	20	15	24	Bangladesh
	10	–	–	10	–	–	–	Barbados
	15	15	–	201 ***	50	9	>95 ***	Belarus
	–	–	–	–	–	–	–	Belgium
	14	–	–	68	41	26	53	Belize
	9	4	93	–	–	–	–	Benin
	3	–	–	3 ***	–	–	–	Bhutan
	–	1 x	–	225	22	9	35	Bolivia
	0	0	–	–	–	–	–	Bosnia and Herzegovina
	–	–	6 x	10,860	82	59	96	Botswana
	–	–	–	9,741	35	20	44	Brazil
	–	–	–	–	–	–	–	Brunei Darussalam
	–	–	–	5	–	–	–	Bulgaria
	8	4	85	–	–	–	–	Burkina Faso
	11	6	30	3,687	53	36	65	Burundi
	–	–	–	–	–	–	–	Cabo Verde
	7	3	–	–	–	–	–	Cambodia
	15	7	92	–	–	–	–	Cameroon
	–	–	–	–	–	–	–	Canada
	15	7	–	–	–	–	–	Central African Republic
	5	2	–	–	–	–	–	Chad
	–	–	–	137	–	–	–	Chile
	–	–	–	5,991 ***	–	–	–	China
	8	–	–	1,085	19	16	22	Colombia
	2	3	99	0 ***	–	–	–	Comoros
	8	4	–	–	–	–	–	Congo
	–	–	–	–	–	–	–	Cook Islands
	9	–	–	–	–	–	–	Costa Rica
	10	5	96	–	–	–	–	Côte d'Ivoire
	–	–	–	7	–	–	–	Croatia
	19	16	–	103	66	46	79	Cuba
	–	–	–	–	–	–	–	Cyprus
	–	–	–	–	–	–	–	Czech Republic
	–	–	–	–	–	–	–	Democratic People's Republic of Korea
	5	1	97 x	–	–	–	–	Democratic Republic of the Congo
	–	–	–	–	–	–	–	Denmark
	–	–	–	36	5	3	8	Djibouti
	–	–	–	0	–	–	–	Dominica
	12	5	11	942	31	13	45	Dominican Republic
	–	–	–	–	–	–	–	Ecuador
	–	–	–	–	–	–	–	Egypt
	–	–	–	–	–	–	–	El Salvador
	27	7	–	–	–	–	–	Equatorial Guinea
	–	–	98	–	–	–	–	Eritrea
	–	–	–	–	–	–	–	Estonia
	19	17	88	–	–	–	–	Ethiopia
	–	–	–	2	–	–	–	Fiji

TABLE 4

## ◀ Knowledge, HIV testing and sexual behaviour among adolescents in low- and middle-income countries

Countries and areas	Knowledge		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		Sexual behaviour		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	% of adolescents (aged 15–19) who have comprehensive knowledge of HIV, 2010–2015*		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		% of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months, 2010–2015*		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	Female	Male	Female	Male	Female	Male	Female	Male
Finland	–	–	–	–	–	–	–	–
France	–	–	–	–	–	–	–	–
Gabon	29	35	17	35	9	15	58	77
Gambia	22	27	6	6	0	1	–	–
Georgia	–	–	–	–	–	–	–	–
Germany	–	–	–	–	–	–	–	–
Ghana	18	25	12	6	2	4	22 p	–
Greece	–	–	–	–	–	–	–	–
Grenada	59	67	12	33	16	20	92	80
Guatemala	20	18	7 x	14 x	0	7	38 p	66
Guinea	20	29	22	10	2	6	30	46
Guinea-Bissau	12	–	27	–	5	–	56	–
Guyana	53 x	45 x	10 x	16 x	1 x	8 x	–	86 x
Haiti	32	25	14	36	2	14	42	58
Holy See	–	–	–	–	–	–	–	–
Honduras	29	33	12	24	2	16	39	73
Hungary	–	–	–	–	–	–	–	–
Iceland	–	–	–	–	–	–	–	–
India	19 x	35 x	8 x	3 x	0 x	1 x	–	39 x
Indonesia	9	4 y	2	21 p	–	–	–	–
Iran (Islamic Republic of)	–	–	–	–	–	–	–	–
Iraq	3	–	–	–	–	–	–	–
Ireland	–	–	–	–	–	–	–	–
Israel	–	–	–	–	–	–	–	–
Italy	–	–	–	–	–	–	–	–
Jamaica	39 y	34 y	16	49	16	39	56 p	75
Japan	–	–	–	–	–	–	–	–
Jordan	6	–	–	–	–	–	–	–
Kazakhstan	30	30	0	0	0	8	–	94
Kenya	52	58	11	22 x	1	4	26 p	64
Kiribati	41 x	46 x	1 x	16 x	1 x	17 x	–	29 x
Kuwait	–	–	–	–	–	–	–	–
Kyrgyzstan	14	18	–	2	–	7	–	–
Lao People's Democratic Republic	23	25	5	3	–	–	–	–
Latvia	–	–	–	–	–	–	–	–
Lebanon	–	–	–	–	–	–	–	–
Lesotho	35	30	6	26 x	6	31	58 p	80
Liberia	35	19	23	9	9	4	27	22
Libya	–	–	–	–	–	–	–	–
Liechtenstein	–	–	–	–	–	–	–	–
Lithuania	–	–	–	–	–	–	–	–
Luxembourg	–	–	–	–	–	–	–	–
Madagascar	21	24	16	10	1	5	6 p	5
Malawi	43	50	13	22	1	7	38	49
Malaysia	–	–	–	–	–	–	–	–
Maldives	22 x	–	0 x	–	–	–	–	–
Mali	23	31	20	4	1	2	–	21 x
Malta	–	–	–	–	–	–	–	–
Marshall Islands	27 x	35 x	15 x	25 x	5 x	10 x	–	–
Mauritania	5	–	–	–	–	–	–	–
Mauritius	–	–	–	–	–	–	–	–
Mexico	–	–	4 x	–	–	–	–	–
Micronesia (Federated States of)	–	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–
Mongolia	18	17	0	2	1	5	–	78
Montenegro	42	35	–	–	0	11	–	64
Morocco	–	–	–	–	–	–	–	–
Mozambique	27	49	22	17	3	18	43	44
Myanmar	31	–	–	–	–	–	–	–
Namibia	56	51	7	13	2	5	61 p	75 p

	Sexual behaviour			Reported number of adolescents (aged 10–19) receiving ART, 2015	Treatment			Countries and areas
	% of adolescents (aged 15-19) who were tested and received results in the last 12 months, 2010-2015*		% of adolescents (aged 15-19) who have been circumcised, 2010-2015*		% of adolescents (aged 10-19) living with HIV receiving ART, 2015			
	Female	Male			Male	Estimate	Low	
–	–	–	–	–	–	–	–	Finland
–	–	–	–	–	–	–	–	France
20	6	–	–	745	42	31	50	Gabon
6	2	–	–	–	–	–	–	Gambia
2	–	–	–	–	–	–	–	Georgia
–	–	–	–	–	–	–	–	Germany
5	1	95	–	–	–	–	–	Ghana
–	–	–	–	20 ***	7	6	7 ***	Greece
–	–	–	–	–	–	–	–	Grenada
–	–	–	–	550	20	10	27	Guatemala
3	1	–	–	–	–	–	–	Guinea
6	–	–	–	–	–	–	–	Guinea-Bissau
22 x	14 x	–	–	–	–	–	–	Guyana
9	4	–	–	–	–	–	–	Haiti
–	–	–	–	–	–	–	–	Holy See
10	3	–	–	–	–	–	–	Honduras
–	–	–	–	1 ***	–	–	–	Hungary
–	–	–	–	–	–	–	–	Iceland
1 x	0 x	–	–	–	–	–	–	India
–	–	–	–	–	–	–	–	Indonesia
–	–	–	–	96	8	4	12	Iran (Islamic Republic of)
0	–	–	–	–	–	–	–	Iraq
–	–	–	–	–	–	–	–	Ireland
–	–	–	–	–	–	–	–	Israel
–	–	–	–	–	–	–	–	Italy
35	20	–	–	–	–	–	–	Jamaica
–	–	–	–	–	–	–	–	Japan
–	–	–	–	10	–	–	–	Jordan
14	14	75	–	222	77	39	>95	Kazakhstan
35	27	87	–	–	–	–	–	Kenya
–	–	99 x	–	0	–	–	–	Kiribati
–	–	–	–	3 ***	–	–	–	Kuwait
6	1	95	–	189	>95	81	>95	Kyrgyzstan
1	1	–	–	–	–	–	–	Lao People's Democratic Republic
–	–	–	–	–	–	–	–	Latvia
–	–	–	–	4	–	–	–	Lebanon
41	25	27 x	–	–	–	–	–	Lesotho
13	4	98	–	–	–	–	–	Liberia
–	–	–	–	–	–	–	–	Libya
–	–	–	–	–	–	–	–	Liechtenstein
–	–	–	–	3	–	–	–	Lithuania
–	–	–	–	1	–	–	–	Luxembourg
2	1	94 x	–	–	–	–	–	Madagascar
32	25	31	–	–	–	–	–	Malawi
–	–	–	–	406	43	36	47	Malaysia
–	–	–	–	0	–	–	–	Maldives
5	3	97	–	–	–	–	–	Mali
–	–	–	–	–	–	–	–	Malta
–	–	–	–	0	–	–	–	Marshall Islands
–	–	–	–	99	11	7	14	Mauritania
–	–	–	–	32	–	–	–	Mauritius
–	–	–	–	2,175	33	26	37	Mexico
–	–	–	–	–	–	–	–	Micronesia (Federated States of)
–	–	–	–	0 ***	–	–	–	Monaco
38	16	–	–	1	5	2	7	Mongolia
0	0	–	–	2	–	–	–	Montenegro
–	–	–	–	–	–	–	–	Morocco
18	8	36	–	–	–	–	–	Mozambique
–	–	–	–	–	–	–	–	Myanmar
29	14	21	–	–	–	–	–	Namibia

TABLE 4

## ◀ Knowledge, HIV testing and sexual behaviour among adolescents in low- and middle-income countries

Countries and areas	Knowledge		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		Sexual behaviour			
	% of adolescents (aged 15–19) who have comprehensive knowledge of HIV, 2010–2015*		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		% of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months, 2010–2015*		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	Female	Male	Female	Male	Female	Male	Female	Male
Nauru	8 x	8 x	15 x	35 x	–	–	–	–
Nepal	38	–	5	4	–	2	–	–
Netherlands	–	–	–	–	–	–	–	–
New Zealand	–	–	–	–	–	–	–	–
Nicaragua	–	–	13 x	–	–	–	–	–
Niger	12	21	23	1	0	0	–	–
Nigeria	22	29	16	3	1	1	38	46
Niue	–	–	–	–	–	–	–	–
Norway	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	–
Pakistan	1 y	5 y	–	–	–	–	–	–
Palau	–	–	–	–	–	–	–	–
Panama	–	–	–	–	–	–	–	–
Palesinte, State of	5	–	–	–	–	–	–	–
Papua New Guinea	–	–	4 x	–	–	–	–	–
Paraguay	–	–	7 x	4 x	6 x	–	50 x	–
Peru	21 x	–	6	–	2	–	20	–
Philippines	19 x	–	2	–	–	–	–	–
Poland	–	–	–	–	–	–	–	–
Portugal	–	–	–	–	–	–	–	–
Qatar	10	23	–	–	–	–	–	–
Republic of Korea	–	–	–	–	–	–	–	–
Republic of Moldova	35	26	1	–	1	8	–	–
Romania	–	–	–	8	–	–	–	–
Russian Federation	–	–	–	–	–	–	–	–
Rwanda	62	60	7	–	1	1	–	–
Saint Kitts and Nevis	54	55	4	13	4	22	50	54
Saint Lucia	58	–	5	17	6	–	–	–
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–
Samoa	2 x	5 x	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–
Sao Tome and Principe	41	42	10	–	4	12	–	79
Saudi Arabia	–	–	–	12 x	–	–	–	–
Senegal	26	28	10	–	0	1	–	–
Serbia	53	43	1	6	3	15	–	63
Seychelles	–	–	–	4	–	–	–	–
Sierra Leone	28	29	19	–	5	8	10	24
Singapore	–	–	–	10	–	–	–	–
Slovakia	–	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–
Solomon Islands	29 x	26 x	15 x	16 x	–	–	15 x	54 x
Somalia	3 x	–	–	–	–	–	–	–
South Africa	–	–	–	–	–	–	–	–
South Sudan	8	–	11	–	4	–	6 p	–
Spain	–	–	–	–	–	–	–	–
Sri Lanka	–	–	–	–	–	–	–	–
Sudan	8	–	–	–	–	–	–	–
Suriname	40	–	10	–	2	–	86 x	–
Swaziland	56	52	3	2	1	3	–	92
Sweden	–	–	–	–	–	–	–	–
Switzerland	–	–	–	–	–	–	–	–
Syrian Arab Republic	6 x	–	–	–	–	–	–	–
Tajikistan	7	–	0	4	0	–	–	–
Thailand	57	–	–	–	–	–	–	–
The former Yugoslav Republic of Macedonia	23 x	–	–	–	–	–	–	–
Timor-Leste	11	15	1	1	–	0	–	–
Togo	23	28	10	9	1	3	47 p	–
Tonga	10	13	1	1	–	–	–	–



	Sexual behaviour			Reported number of adolescents (aged 10–19) receiving ART, 2015	Treatment			Countries and areas
	% of adolescents (aged 15-19) who were tested and received results in the last 12 months, 2010-2015*		% of adolescents (aged 15-19) who have been circumcised, 2010-2015*		% of adolescents (aged 10-19) living with HIV receiving ART, 2015			
	Female	Male			Male	Estimate	Low	
	–	–	–	–	–	–	–	Nauru
	1	–	–	–	–	–	–	Nepal
	–	–	–	–	–	–	–	Netherlands
	–	–	–	27 ***	–	–	–	New Zealand
	–	–	–	115	21	8	31	Nicaragua
	4	2	–	498	11	8	13	Niger
	4	2	99	–	–	–	–	Nigeria
	–	–	–	–	–	–	–	Niue
	–	–	–	–	–	–	–	Norway
	–	–	–	25	–	–	–	Oman
	–	–	–	1,194	53	25	72	Pakistan
	–	–	–	–	–	–	–	Palau
	–	–	–	–	–	–	–	Panama
	–	–	–	–	–	–	–	Papua New Guinea
	–	–	–	–	–	–	–	Paraguay
	–	–	–	179	23	8	37	Peru
	–	–	–	493	21	12	28	Philippines
	0 x	–	–	100	3	1	4	Poland
	–	–	–	–	–	–	–	Portugal
	–	–	–	–	–	–	–	Qatar
	–	–	–	–	–	–	–	Republic of Korea
	–	–	–	–	–	–	–	Republic of Moldova
	10	6	–	79	48	23	69	Romania
	–	–	–	212	–	–	–	Russian Federation
	–	–	–	–	–	–	–	Rwanda
	27	22	27	–	–	–	–	Saint Kitts and Nevis
	–	–	–	2 ***	–	–	–	Saint Lucia
	12	–	–	3	–	–	–	Saint Vincent and the Grenadines
	–	–	–	–	–	–	–	Samoa
	0 x	1 x	–	1	–	–	–	San Marino
	–	–	–	–	–	–	–	Sao Tome and Principe
	66	22	4	8	–	–	–	Saudi Arabia
	–	–	–	139	–	–	–	Senegal
	10	6	–	762	28	19	34	Serbia
	1	1	–	–	–	–	–	Seychelles
	–	–	95 x	8	–	–	–	Sierra Leone
	11	3	–	–	–	–	–	Singapore
	–	–	–	5	–	–	–	Slovakia
	–	–	–	–	–	–	–	Slovenia
	–	–	–	–	–	–	–	Solomon Islands
	–	–	–	1 ***	–	–	–	Somalia
	–	–	–	–	–	–	–	South Africa
	–	–	33	–	–	–	–	South Sudan
	–	–	–	–	–	–	–	Spain
	–	–	–	–	–	–	–	Sri Lanka
	–	–	–	17	7	4	10	State of Palestine
	1	–	–	–	–	–	–	Sudan
	11	–	–	–	–	–	–	Suriname
	23	18	4 x	6,676	59	53	63	Swaziland
	–	–	–	–	–	–	–	Sweden
	–	–	–	–	–	–	–	Switzerland
	–	–	–	1	–	–	–	Syrian Arab Republic
	1	–	–	124	40	25	51	Tajikistan
	7	–	–	8,917	75	55	88	Thailand
	–	–	–	–	–	–	–	The former Yugoslav Republic of Macedonia
	–	–	4	–	–	–	–	Timor-Leste
	11	7	–	1,397	19	14	23	Togo
	0	2	99	–	–	–	–	Tonga

TABLE 4

## ◀ Knowledge, HIV testing and sexual behaviour among adolescents in low- and middle-income countries

Countries and areas	Knowledge		Sexual behaviour					
	% of adolescents (aged 15–19) who have comprehensive knowledge of HIV, 2010–2015*		% of adolescents (aged 15–19) who had sex before age 15, 2010–2015*		% of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months, 2010–2015*		% of adolescents (aged 15–19) with multiple partners who used a condom at last sex, 2010–2015*	
	Female	Male	Female	Male	Female	Male	Female	Male
Trinidad and Tobago	49 x	–	5 x	–	2 x	–	–	–
Tunisia	15	–	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–
Turkmenistan	4 x	–	–	–	–	–	–	–
Tuvalu	31 x	57 x	2 x	19 x	–	–	–	–
Uganda	36	36	11	13	2	5	26	32
Ukraine	43	37	0	2	3	15	–	90
United Arab Emirates	–	–	–	–	–	–	–	–
United Kingdom	–	–	–	–	–	–	–	–
United Republic of Tanzania	37	42	9	12	3	7	38	45
United States of America	–	–	–	–	–	–	–	–
Uruguay	36	–	11	–	5	–	67 p	–
Uzbekistan	27 x	–	–	–	0 x	–	–	–
Vanuatu	14 x	–	–	–	5	16	–	–
Venezuela (Bolivarian Republic of)	–	–	–	–	–	–	–	–
Viet Nam	51	–	0	–	0	–	–	–
Yemen	2 x,y	–	–	–	–	–	–	–
Zambia	39	42	12	18	2	8	33	38
Zimbabwe	51	49	4	5	1	4	–	62

SUMMARY INDICATORS <sup>+</sup>

Sub-Saharan Africa <sup>d/</sup>	26	33	14	9	2	5	32	44
Eastern and Southern Africa	34	41	10	10	1	5	29	44
West and Central Africa	21	26	17	8	2	5	33	44
Middle East and North Africa	5	–	–	–	–	–	–	–
South Asia**	8	–	–	–	–	–	–	–
East Asia and the Pacific**	25	–	2	–	–	–	–	–
Latin America and Caribbean	–	–	–	–	–	–	–	–
CEE/CIS	–	–	–	–	–	–	–	–
Least developed countries	23	32	12	10	2	5	–	–
Low- and middle-income countries**	21	23	10	–	–	–	–	–
World**	21	–	–	–	–	–	–	–

## DEFINITIONS OF THE INDICATORS

**Percentage of adolescents (aged 15–19) who have comprehensive knowledge of HIV:** Percentage of adolescents (aged 15–19) with comprehensive, correct knowledge of HIV, 2010–2015. Comprehensive, correct knowledge about HIV and AIDS is defined as correctly identifying the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), rejecting the two most common local misconceptions about HIV transmission and knowing that a healthy-looking person can transmit HIV.

**Percentage of adolescents (aged 15–19) who had sex before age 15:** Percentage of adolescents (aged 15–19) who reported having sex before age 15, 2010–2015.

**Percentage of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months:** Percentage of adolescents (aged 15–19) who reported having sexual intercourse with more than one partner in the last 12 months, 2010–2015.

**Percentage of adolescents (aged 15–19) with multiple partners who used a condom at last sex:** Percentage of adolescents (aged 15–19) who reported having sexual intercourse with more than one partner in the last 12 months and who reported the use of a condom during their last sexual intercourse, 2010–2015.

**Percentage of adolescents (aged 15–19) who were tested and received results:** Percentage of adolescents (aged 15–19)

who have been tested for HIV in the last 12 months and received the result of their most recent test, 2010–2015.

**Percentage of adolescent boys (aged 15–19) who have been circumcised:** Percentage of adolescent boys (aged 15–19) who have been circumcised, 2010–2015.

**Number of adolescents (aged 10–19) receiving antiretroviral therapy:** Reported number of adolescents (aged 10–19) living with HIV receiving ART, as of 2015.

**Estimated antiretroviral therapy coverage among adolescents (aged 10–19), %:** Calculated by dividing the reported number of adolescents (aged 10–19) receiving ART by the estimated number of adolescents (aged 10–19) living with HIV, as of 2015.

## MAIN DATA SOURCES

**Percentage of adolescents (aged 15–19) who have comprehensive knowledge of HIV:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of adolescents (aged 15–19) who had sex before age 15:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of adolescents (aged 15–19) who had sex with more than one partner in the last 12 months:** UNICEF

global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of adolescents (aged 15–19) with multiple partners who used a condom at last sex:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of adolescents (aged 15–19) who were tested and received results:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of adolescent boys (aged 15–19) who have been circumcised:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Number of adolescents (aged 10–19) receiving antiretroviral therapy:** UNAIDS, UNICEF, WHO, *2015 Global AIDS Response Progress Reporting*, 2016.

**Estimated antiretroviral therapy coverage among adolescents (aged 10–19):** UNAIDS, UNICEF, WHO, *2015 Global AIDS Response Progress Reporting*, 2016; and UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

	Sexual behaviour			Reported number of adolescents (aged 10–19) receiving ART, 2015	Treatment			Countries and areas
	% of adolescents (aged 15–19) who were tested and received results in the last 12 months, 2010–2015*		% of adolescents (aged 15–19) who have been circumcised, 2010–2015*		% of adolescents (aged 10–19) living with HIV receiving ART, 2015			
	Female	Male			Estimate	Low	High	
–	–	–	–	–	–	–	Trinidad and Tobago	
0	–	–	–	–	–	–	Tunisia	
–	–	–	–	–	–	–	Turkey	
–	–	–	–	–	–	–	Turkmenistan	
–	–	–	–	–	–	–	Tuvalu	
31	17	27	–	–	–	–	Uganda	
7	10	–	–	–	–	–	Ukraine	
–	–	–	–	–	–	–	United Arab Emirates	
–	–	–	–	–	–	–	United Kingdom	
21	13	66	–	–	–	–	United Republic of Tanzania	
–	–	–	–	–	–	–	United States	
7	–	–	–	–	–	–	Uruguay	
–	–	–	–	–	–	–	Uzbekistan	
–	–	–	–	–	–	–	Vanuatu	
–	–	–	–	–	–	–	Venezuela (Bolivarian Republic of)	
4	–	–	–	–	–	–	Viet Nam	
–	–	–	–	–	–	–	Yemen	
33	19	23	–	–	–	–	Zambia	
35	24	15	63,034	86	68	97	Zimbabwe	
							<b>SUMMARY INDICATORS<sup>†</sup></b>	
	13	9	74	–	–	–	Sub-Saharan Africa <sup>a/</sup>	
	23	16	57	–	–	–	Eastern and Southern Africa	
	6	3	96	–	–	–	West and Central Africa	
	–	–	–	–	–	–	Middle East and North Africa	
	–	–	–	–	–	–	South Asia <sup>**</sup>	
	–	–	–	–	–	–	East Asia and the Pacific <sup>**</sup>	
	–	–	–	–	–	–	Latin America and Caribbean	
	–	–	–	–	–	–	CEE/CIS	
	13	9	–	–	–	–	Least developed countries	
	–	–	–	–	–	–	Low- and middle-income countries <sup>**</sup>	
	–	–	–	–	–	–	World <sup>**</sup>	

## NOTES

– Data not available.

\* Data refer to the most recent year available during the period specified in the column heading.

\*\* South Asia excludes India; East Asia and the Pacific excludes China; Low- and middle-income countries and World exclude China and India.

\*\*\*Data refer to a period of time other than the full year of 1 January 2015 to 31 December 2015

† Regional averages are calculated only when the population represents 50 per cent or more of the region's total population of interest.

x Data refer to years or periods other than those specified in the column heading. Such data are not included in the calculation of regional and global averages. Estimates from years prior to 2006 are not displayed.

y Data differ from the standard definition or refer to only part of a country. If they fall within the reference period, such data are included in the calculation of regional and global averages.

p Based on small denominators (typically 25–29 unweighted cases). No data based on fewer than 25 unweighted cases are displayed.

a/ Sub-Saharan Africa consists of Eastern and Southern Africa, West and Central Africa, the Sudan and Djibouti.

Current Spectrum modelling software used by UNAIDS assumes younger adolescents (aged 10–14) who are living with HIV are due to mother-to-child transmission. No other transmission routes are included in the model for this age group and, therefore, there are no new infections in this age group.

Due to the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-cession.

Some estimates do not add up to the totals because of rounding. Low- and middle-income countries are classified as such by the World Bank.

Adolescent data that come from nationally-representative household surveys do not cover the younger adolescents who are aged 10–14 years. Therefore, the values from older adolescent respondents aged 15–19 are presented.

Antiretroviral therapy (ART) data has traditionally been reported for just two broad age groups: children (aged 0–14) and adults (aged 15+). Because of this, treatment data for adolescents (aged 10–19) are largely unavailable. Global AIDS Response Progress Reporting (GARPR) guidelines now recommend that treatment data be reported by 5-year age groups in order to calculate treatment coverage among additional age groups. It is critical that national health information and reporting systems be adapted so that treatment data can be reported for these disaggregated age groups.

TABLE 5

## Epidemiology, knowledge, HIV testing and sexual behaviour among young (&lt;25 years) key affected populations in low- and middle-income countries

Countries and areas	Epidemiology HIV prevalence (%) among higher-risk populations in capital city (< 25 years), 2011–2015*			Sexual behaviour % of higher-risk populations (< 25 years) using a condom at last sex, 2011–2015*			Access % of persons who inject drugs (< 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015*	Testing % of higher-risk populations (< 25 years) who received an HIV test and knew their result, 2011–2015*		
	People who inject drugs	Sex workers	Men who have sex with men	People who inject drugs	Sex workers	Men who have sex with men		People who inject drugs	Sex workers	Men who have sex with men
Afghanistan	3	0	0	43	53	17	64	22	4	15
Albania	–	–	–	–	–	–	–	–	–	–
Algeria	2	4	0	–	56	–	–	76	83	91
Andorra	–	–	8	–	–	–	–	–	–	–
Angola	–	7	–	–	78	25	–	–	60	30
Antigua and Barbuda	–	–	–	–	–	–	–	–	–	–
Argentina	–	–	–	–	–	–	–	–	–	–
Armenia	0	0	0	51	86	67	91	13	49	52
Australia	1	0	1	47	–	35	75	49	63	49
Austria	–	–	–	–	–	–	–	–	–	–
Azerbaijan	2	1	0	8	58	23	54	3	13	19
Bahamas	–	–	15	–	–	79	–	–	–	50
Bahrain	–	–	–	–	–	–	–	–	–	–
Bangladesh	1	0	0	41	64	46	77	40	43	44
Barbados	–	–	11	–	–	59	–	–	–	47
Belarus	3	4	4	37	83	64	87	38	61	41
Belgium	–	1	1	–	–	84	–	–	–	43
Belize	–	0	11	–	97	60	–	–	57	57
Benin	6	7	6	35	90	91	83	90	67	65
Bhutan	–	–	–	–	–	–	–	–	–	–
Bolivia (Plurinational State of)	–	13	–	–	89	67	–	–	36	36
Bosnia and Herzegovina	–	–	–	41	–	–	76	17	–	–
Botswana	–	–	–	–	–	–	–	–	–	–
Brazil	–	–	–	–	–	–	–	–	18	21
Brunei Darussalam	–	–	–	–	–	–	–	–	–	–
Bulgaria	20	2	0	60	100	59	71	63	64	55
Burkina Faso	–	5	1	–	88	–	–	–	89	100
Burundi	–	24	1	–	91	68	–	–	62	23
Cabo Verde	–	4	7	–	73	77	–	–	24	–
Cambodia	–	–	1	–	–	69	58	36	–	33
Cameroon	–	28	29	–	–	57	–	–	–	54
Canada	3	–	2	40	–	64	92	66	–	36
Central African Republic	–	15	34	–	89	54	–	–	50	29
Chad	–	20	–	–	43	–	–	–	38	–
Chile	–	0	7	–	94	50	–	–	44	26
China	4	0	8	67	94	88	79	66	67	62
Colombia	–	0	5	–	90	56	–	–	61	36
Comoros	–	0	0	–	59	43	–	–	31	74
Congo	–	4	20	–	80	50	–	–	46	26
Cook Islands	–	–	–	–	–	–	–	–	–	–
Costa Rica	–	–	–	–	–	–	–	–	–	–
Côte d'Ivoire	–	2	10	–	71	67	–	–	72	76
Croatia	–	–	2	–	–	61	–	–	–	29
Cuba	–	1	2	–	82	73	–	–	30	21
Cyprus	–	–	–	–	–	–	–	–	–	–
Czech Republic	–	0	1	–	80	40	–	–	98	27
Democratic People's Republic of Korea	–	–	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	0	5	5	0	67	79	0	20	40	61
Denmark	–	–	–	–	–	–	–	–	–	–
Djibouti	–	13	–	–	66	–	–	–	100	–
Dominica	–	–	16	–	–	70	–	–	–	24
Dominican Republic	–	2	4	–	86	41	–	–	–	–
Ecuador	–	–	9	–	–	54	–	–	–	29
Egypt	1	2	5	2	23	17	25	7	33	29
El Salvador	–	–	–	–	–	–	–	–	–	–
Equatorial Guinea	–	–	–	–	–	–	–	–	–	–
Eritrea	–	2	–	–	68	–	–	–	80	–
Estonia	25	11	–	88	100	48	92	63	56	38

Epidemiology, knowledge, HIV testing and sexual behaviour among young (<25 years) key affected populations in low- and middle-income countries

Countries and areas	Epidemiology HIV prevalence (%) among higher-risk populations in capital city (< 25 years), 2011–2015*			Sexual behaviour % of higher-risk populations (< 25 years) using a condom at last sex, 2011–2015*			Access % of persons who inject drugs (< 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015*	Testing % of higher-risk populations (< 25 years) who received an HIV test and knew their result, 2011–2015*		
	People who inject drugs	Sex workers	Men who have sex with men	People who inject drugs	Sex workers	Men who have sex with men		People who inject drugs	Sex workers	Men who have sex with men
Ethiopia	–	–	–	–	–	–	–	–	–	–
Fiji	–	0	–	–	91	–	–	–	27	–
Finland	–	–	–	–	–	45	–	–	–	24
France	0	–	2	63	–	60	–	70	63	77
Gabon	–	–	–	–	63	–	–	–	40	–
Gambia	–	–	–	–	–	–	–	–	–	–
Georgia	1	0	18	60	92	68	66	17	50	46
Germany	1	0	1	71	94	68	88	48	53	29
Ghana	–	–	–	–	–	–	–	–	–	–
Greece	23	–	–	58	–	28	93	52	57	28
Grenada	–	–	–	–	–	–	–	–	–	–
Guatemala	–	–	–	–	–	–	–	–	–	–
Guinea	–	15	60	–	96	25	–	–	83	47
Guinea-Bissau	–	22	–	–	91	–	–	–	95	28
Guyana	–	6	4	–	76	66	–	–	45	33
Haiti	–	7	13	–	91	71	–	–	66	47
Holy See	–	–	–	–	–	–	–	–	–	–
Honduras	–	1	4	–	78	73	–	–	60	50
Hungary	0	–	4	39	–	–	75	25	–	–
Iceland	–	–	–	–	–	–	–	–	–	–
India	8	1	3	81	91	84	87	–	91	–
Indonesia	3	4	24	58	63	88	83	27	76	57
Iran (Islamic Republic of)	2	1	–	42	–	–	63	25	–	–
Iraq	–	–	–	–	–	–	–	–	–	–
Ireland	–	–	–	–	–	63	–	–	–	30
Israel	–	–	–	–	–	–	–	–	–	–
Italy	–	–	–	–	–	60	–	–	–	30
Jamaica	–	1	24	–	91	71	–	–	65	72
Japan	–	–	3	–	37	66	–	–	72	42
Jordan	–	–	–	–	–	–	–	–	–	–
Kazakhstan	2	1	1	56	97	68	44	52	79	56
Kenya	16	–	12	–	–	–	–	–	–	–
Kiribati	–	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–
Kyrgyzstan	2	2	4	48	96	84	94	30	53	39
Lao People's Democratic Republic	–	1	1	–	93	44	–	–	37	16
Latvia	7	15	3	89	80	40	–	92	60	24
Lebanon	–	–	–	–	–	–	–	–	–	–
Lesotho	–	–	–	–	–	–	–	–	–	–
Liberia	–	–	–	–	–	–	–	–	–	–
Libya	–	–	–	–	–	–	–	–	–	–
Liechtenstein	–	–	–	–	–	–	–	–	–	–
Lithuania	–	0	0	–	–	41	75	93	100	17
Luxembourg	–	–	–	–	–	60	–	–	–	46
Madagascar	–	0	9	–	–	60	–	–	–	12
Malawi	–	–	–	–	–	–	–	–	–	–
Malaysia	0	4	6	30	78	57	96	21	35	32
Maldives	–	–	–	–	–	–	–	–	–	–
Mali	–	–	11	–	–	–	–	–	–	–
Malta	–	–	–	–	–	–	–	9	–	–
Marshall Islands	–	–	–	–	–	–	–	–	–	–
Mauritania	–	0	36	–	–	–	–	–	79	63
Mauritius	14	6	6	17	66	57	66	27	50	43
Mexico	1	8	12	29	85	72	76	32	73	44
Micronesia (Federated States of)	–	–	–	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–	–	–
Mongolia	–	0	8	–	81	73	–	–	91	93
Montenegro	0	0	4	50	87	52	93	6	1	29

TABLE 5

## ◀ Epidemiology, knowledge, HIV testing and sexual behaviour among young (&lt;25 years) key affected populations in low- and middle-income countries

Countries and areas	Epidemiology HIV prevalence (%) among higher-risk populations in capital city (< 25 years), 2011–2015*			Sexual behaviour % of higher-risk populations (< 25 years) using a condom at last sex, 2011–2015*			Access % of persons who inject drugs (< 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015*	Testing % of higher-risk populations (< 25 years) who received an HIV test and knew their result, 2011–2015*		
	People who inject drugs	Sex workers	Men who have sex with men	People who inject drugs	Sex workers	Men who have sex with men		People who inject drugs	Sex workers	Men who have sex with men
Morocco	5	1	2	40	47	52	58	6	16	52
Mozambique	–	–	–	–	–	–	–	–	–	–
Myanmar	17	6	6	22	79	77	87	24	43	52
Namibia	–	–	–	–	–	–	–	–	–	–
Nauru	–	–	–	–	–	–	–	–	–	–
Nepal	1	–	1	56	–	85	98	21	–	38
Netherlands	–	–	–	–	–	52	–	–	–	41
New Zealand	–	–	–	–	–	–	–	–	–	–
Nicaragua	–	1	5	–	88	52	–	–	63	49
Niger	–	14	4	–	82	78	–	–	15	10
Nigeria	2	10	19	55	87	48	75	18	37	21
Niue	–	–	–	–	–	–	–	–	–	–
Norway	–	–	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	–	1	–	–
Pakistan	34	2	–	22	34	–	64	8	6	–
Palau	–	–	–	–	–	–	–	–	–	–
Palestine, State of	–	–	–	–	–	–	–	–	–	–
Panama	–	3	13	–	90	59	–	–	–	93
Papua New Guinea	–	13	–	–	75	60	–	–	43	63
Paraguay	–	4	13	48	98	67	93	71	66	46
Peru	–	1	19	–	70	52	–	–	31	7
Philippines	15	1	3	15	69	48	60	18	23	14
Poland	–	–	2	–	–	51	–	–	–	38
Portugal	–	2	3	–	99	71	–	–	46	58
Qatar	–	–	–	–	–	–	–	–	–	–
Republic of Korea	–	–	4	–	–	57	–	–	–	23
Republic of Moldova	1	7	2	26	88	56	100	36	20	22
Romania	58	1	–	–	90	27	39	43	29	39
Russian Federation	–	–	–	–	–	–	–	–	–	–
Rwanda	–	42	–	–	83	–	–	–	86	–
Saint Kitts and Nevis	–	–	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	–	13	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	0	–	–	94	–	–	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–
Senegal	–	15	44	0	95	75	50	0	53	44
Serbia	0	0	3	45	87	66	84	18	38	35
Seychelles	1	0	1	1	–	–	–	23	100	6
Sierra Leone	–	–	6	52	17	–	39	16	55	27
Singapore	–	–	3	–	–	–	–	–	–	–
Slovakia	–	–	–	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–	–	54
Solomon Islands	–	–	–	–	–	–	–	–	–	–
Somalia	–	–	–	–	–	–	–	–	–	–
South Africa	–	–	–	–	–	–	–	–	–	–
South Sudan	–	–	–	–	–	–	–	–	–	–
Spain	0	2	7	–	–	59	–	–	–	37
Sri Lanka	–	0	0	37	95	47	–	–	26	10
Sudan	–	0	1	–	33	25	–	–	24	15
Suriname	–	5	–	–	–	75	–	–	93	99
Swaziland	–	64	–	–	–	–	–	–	–	–
Sweden	–	–	1	29	–	38	40	47	–	47
Switzerland	6	–	4	67	67	0	67	65	–	9
Syrian Arab Republic	–	–	–	–	–	–	–	–	–	–
Tajikistan	7	1	2	55	70	77	89	35	62	55
Thailand	25	–	11	49	94	85	73	54	40	27

## Epidemiology, knowledge, HIV testing and sexual behaviour among young (<25 years) key affected populations in low- and middle-income countries

Countries and areas	Epidemiology HIV prevalence (%) among higher-risk populations in capital city (< 25 years), 2011–2015*			Sexual behaviour % of higher-risk populations (< 25 years) using a condom at last sex, 2011–2015*			Access % of persons who inject drugs (< 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015*	Testing % of higher-risk populations (< 25 years) who received an HIV test and knew their result, 2011–2015*		
	People who inject drugs	Sex workers	Men who have sex with men	People who inject drugs	Sex workers	Men who have sex with men		People who inject drugs	Sex workers	Men who have sex with men
The former Yugoslav Republic of Macedonia	–	–	0	53	86	51	89	92	32	32
Timor-Leste	–	–	–	–	–	–	–	–	–	–
Togo	–	10	10	–	90	43	–	24	53	54
Tonga	–	–	0	–	–	12	–	–	–	2
Trinidad and Tobago	–	–	–	–	–	–	–	–	–	–
Tunisia	0	0	11	44	56	50	82	11	10	20
Turkey	–	–	–	–	–	–	–	–	–	–
Turkmenistan	–	–	–	–	–	–	–	–	–	–
Tuvalu	–	–	–	–	–	–	–	–	–	–
Uganda	–	–	–	–	68	–	–	–	–	–
Ukraine	4	1	5	61	88	74	96	27	43	51
United Arab Emirates	–	–	–	–	–	–	–	–	–	–
United Kingdom	–	–	2	–	–	–	–	–	–	–
United Republic of Tanzania	12	–	15	24	77	56	84	66	77	100
United States	–	–	–	18	–	50	24	51	–	74
Uruguay	–	–	6	–	–	–	–	–	–	–
Uzbekistan	1	3	5	61	50	98	90	27	32	58
Vanuatu	–	–	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	–	–	–	–	–	–	–	–	–	–
Viet Nam	3	2	5	42	87	65	96	21	39	30
Yemen	–	–	3	–	–	19	–	–	–	19
Zambia	–	–	–	–	–	–	–	–	–	–
Zimbabwe	–	33	–	–	65	–	–	–	84	–

### DEFINITIONS OF THE INDICATORS

**HIV prevalence (%) among higher-risk populations in capital city (aged below 25 years), 2011–2015:** Percentage of higher-risk populations aged <25 (people who inject drugs, sex workers and men who have sex with men) living with HIV.

**Percentage of higher-risk populations (aged below 25 years) using a condom at last sex, 2011–2015:** Percentage of higher-risk populations aged <25 (people who inject drugs, sex workers and men who have sex with men) using a condom at last sex.

**Percentage of persons who inject drugs (aged below 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015:** Percentage of people who inject drugs aged <25 reporting the use of sterile injecting equipment the last time they injected.

**Percentage of higher-risk populations (aged below 25 years) who received an HIV test and knew their result, 2011–2015:** Percentage of higher-risk populations aged <25 (people who inject drugs, sex workers and men who have sex with men) who received and HIV test in the past 12 months and knew the result.

### MAIN DATA SOURCES

**HIV prevalence (%) among higher-risk populations in capital city (aged below 25 years), 2011–2015:** UNAIDS online database, <www.aidsinfo.unaids.org> accessed August 2016.

**Percentage of higher-risk populations (aged below 25) using a condom at last sex, 2011–2015:** UNAIDS online database, <www.aidsinfo.unaids.org> accessed August 2016.

**Percentage of persons who inject drugs (aged below 25 years) reporting use of sterile injecting equipment the last time they injected, 2011–2015:** UNAIDS online database, <www.aidsinfo.unaids.org> accessed August 2016.

**Percentage of higher-risk populations (aged below 25 years) who received an HIV test and knew their result, 2011–2015:** UNAIDS online database, <www.aidsinfo.unaids.org> accessed August 2016.

### NOTES

– Data not available.

\* Data refer to the most recent year available during the period specified in the column heading.

a/ Sub-Saharan Africa consists of Eastern and Southern Africa, West and Central Africa, the Sudan and Djibouti.

Due to the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-cession.

Some estimates do not add up to the totals because of rounding.

TABLE 6

## Protection, care and support for children affected by HIV and AIDS in low- and middle-income countries

Countries and areas	Children who have lost one or both parents due to all causes, 2015	Orphaned and vulnerable children						
		Children who have lost one or both parents due to AIDS, 2015			Children both of whose parents have died due to any cause, 2015	Children both of whose parents have died due to AIDS, 2015	Orphan school attendance ratio, 2010–2015*±	% of children whose households received external support, 2010–2015*±
		Estimate	Low	High				
Afghanistan	1,400,000	4,000	2,300	7,700	170,000	<1,000	–	–
Albania	–	–	–	–	–	–	–	–
Algeria	460,000	<1,000	<1,000	1,100	32,000	<200	–	–
Andorra	–	–	–	–	–	–	–	–
Angola	1,500,000	130,000	85,000	190,000	220,000	39,000	0.85 x	17 x
Antigua and Barbuda	–	–	–	–	–	–	–	–
Argentina	630,000	18,000	16,000	20,000	36,000	2,100	–	–
Armenia	–	–	–	–	–	–	–	–
Australia	150,000	2,800	2,500	3,100	6,900	<500	–	–
Austria	–	–	–	–	–	–	–	–
Azerbaijan	130,000	1,600	<1,000	2,400	8,400	<500	–	–
Bahamas	5,500	2,300	2,200	2,400	<500	<500	–	–
Bahrain	–	–	–	–	–	–	–	–
Bangladesh	2,500,000	5,100	4,100	6,200	160,000	<1,000	0.88	–
Barbados	–	–	–	–	–	–	–	–
Belarus	140,000	2,400	1,600	3,300	9,400	<1,000	–	–
Belgium	–	–	–	–	–	–	–	–
Belize	8,600	<1,000	<1,000	1,100	<1,000	<200	0.92	–
Benin	470,000	36,000	25,000	50,000	63,000	10,000	0.78	–
Bhutan	–	–	–	–	–	–	–	–
Bolivia (Plurinational State of)	280,000	9,500	6,800	13,000	26,000	1,600	–	–
Bosnia and Herzegovina	–	–	–	–	–	–	–	–
Botswana	97,000	60,000	51,000	66,000	20,000	18,000	–	26 x
Brazil	3,300,000	100,000	73,000	140,000	210,000	15,000	–	–
Brunei Darussalam	–	–	–	–	–	–	–	–
Bulgaria	–	–	–	–	–	–	–	–
Burkina Faso	840,000	71,000	57,000	88,000	120,000	22,000	1.01	7 x
Burundi	590,000	69,000	59,000	79,000	98,000	24,000	0.82	–
Cabo Verde	8,600	1,600	1,200	2,000	<1,000	<500	–	–
Cambodia	–	–	–	–	–	–	0.88	–
Cameroon	1,200,000	310,000	290,000	350,000	200,000	96,000	0.86	9 x
Canada	–	–	–	–	–	–	–	–
Central African Republic	300,000	82,000	75,000	88,000	60,000	31,000	0.88	7 x
Chad	980,000	100,000	82,000	130,000	190,000	42,000	1.17	–
Chile	–	–	–	–	–	–	–	–
China	–	–	–	–	–	–	–	–
Colombia	750,000	23,000	20,000	27,000	47,000	3,400	–	–
Comoros	–	–	–	–	–	–	1.08	–
Congo	–	–	–	–	–	–	0.90	–
Cook Islands	–	–	–	–	–	–	–	–
Costa Rica	45,000	1,100	<1,000	1,300	2,200	<200	–	–
Côte d'Ivoire	1,200,000	230,000	180,000	280,000	220,000	79,000	0.66	–
Croatia	–	–	–	–	–	–	–	–
Cuba	88,000	<1,000	<500	<1,000	4,700	<100	–	–
Cyprus	–	–	–	–	–	–	–	–
Czech Republic	–	–	–	–	–	–	–	–
Democratic People's Republic of Korea	–	–	–	–	–	–	–	–
Democratic Republic of the Congo	4,100,000	330,000	260,000	400,000	690,000	120,000	0.80	9 x
Denmark	–	–	–	–	–	–	–	–
Djibouti	37,000	5,300	3,800	7,300	6,400	1,800	–	–
Dominica	–	–	–	–	–	–	–	–
Dominican Republic	250,000	44,000	31,000	64,000	24,000	8,700	0.97	–
Ecuador	260,000	11,000	8,500	14,000	17,000	1,400	–	–
Egypt	1,600,000	1,900	1,200	3,300	100,000	<500	–	–
El Salvador	150,000	4,000	3,400	4,700	10,000	<1,000	–	–
Equatorial Guinea	43,000	9,200	7,300	11,000	6,900	2,700	–	–
Eritrea	140,000	8,400	6,000	12,000	20,000	2,900	–	–
Estonia	–	–	–	–	–	–	–	–
Ethiopia	–	–	–	–	–	–	0.90	–



## Protection, care and support for children affected by HIV and AIDS in low- and middle-income countries

Countries and areas	Orphaned and vulnerable children							% of children whose households received external support, 2010–2015* ‡
	Children who have lost one or both parents due to all causes, 2015	Children who have lost one or both parents due to AIDS, 2015			Children both of whose parents have died due to any cause, 2015	Children both of whose parents have died due to AIDS, 2015	Orphan school attendance ratio, 2010–2015* ‡	
		Estimate	Low	High				
Fiji	–	–	–	–	–	–	–	–
Finland	–	–	–	–	–	–	–	–
France	–	–	–	–	–	–	–	–
Gabon	65,000	16,000	12,000	19,000	9,300	4,800	1.01	–
Gambia	95,000	11,000	8,600	15,000	14,000	3,300	0.90	–
Georgia	52,000	<1,000	<1,000	1,000	2,800	<200	–	–
Germany	–	–	–	–	–	–	–	–
Ghana	1,100,000	160,000	130,000	190,000	170,000	48,000	0.94	–
Greece	69,000	2,000	1,800	2,200	3,000	<200	–	–
Grenada	–	–	–	–	–	–	–	–
Guatemala	460,000	11,000	5,800	16,000	40,000	1,800	–	–
Guinea	600,000	49,000	39,000	58,000	89,000	15,000	0.71	–
Guinea-Bissau	–	–	–	–	–	–	1.08	8 x
Guyana	21,000	1,000	<1,000	1,800	1,700	<500	–	13 x
Haiti	340,000	110,000	89,000	140,000	52,000	30,000	0.96	5 x
Holy See	–	–	–	–	–	–	–	–
Honduras	170,000	18,000	15,000	22,000	16,000	3,300	0.91	–
Hungary	–	–	–	–	–	–	–	–
Iceland	–	–	–	–	–	–	–	–
India	–	–	–	–	–	–	0.72 x	–
Indonesia	5,100,000	110,000	91,000	140,000	460,000	17,000	–	–
Iran (Islamic Republic of)	760,000	18,000	13,000	25,000	42,000	2,000	–	–
Iraq	–	–	–	–	–	–	0.94	–
Ireland	–	–	–	–	–	–	–	–
Israel	–	–	–	–	–	–	–	–
Italy	300,000	3,800	2,900	4,500	13,000	<500	–	–
Jamaica	62,000	13,000	10,000	15,000	6,100	2,300	–	–
Japan	–	–	–	–	–	–	–	–
Jordan	–	–	–	–	–	–	0.80	–
Kazakhstan	460,000	3,800	2,900	5,000	36,000	<1,000	–	–
Kenya	2,000,000	660,000	540,000	810,000	330,000	200,000	0.99	21 x
Kiribati	–	–	–	–	–	–	0.82 x	–
Kuwait	–	–	–	–	–	–	–	–
Kyrgyzstan	130,000	1,900	1,300	2,400	8,900	<500	–	–
Lao People's Democratic Republic	–	–	–	–	–	–	0.80	–
Latvia	30,000	1,600	1,500	1,700	1,800	<500	–	–
Lebanon	–	–	–	–	–	–	–	–
Lesotho	120,000	73,000	59,000	83,000	26,000	22,000	0.98 x	–
Liberia	200,000	28,000	25,000	32,000	32,000	9,100	0.75	–
Libya	–	–	–	–	–	–	–	–
Liechtenstein	–	–	–	–	–	–	–	–
Lithuania	–	–	–	–	–	–	–	–
Luxembourg	–	–	–	–	–	–	–	–
Madagascar	890,000	41,000	33,000	49,000	100,000	9,600	0.74 x	–
Malawi	830,000	530,000	460,000	590,000	130,000	120,000	0.96	17
Malaysia	480,000	70,000	62,000	80,000	29,000	2,300	–	–
Maldives	–	–	–	–	–	–	–	–
Mali	770,000	66,000	55,000	79,000	100,000	18,000	0.81	–
Malta	–	–	–	–	–	–	–	–
Marshall Islands	–	–	–	–	–	–	–	–
Mauritania	130,000	9,400	7,600	12,000	15,000	2,200	1.00	–
Mauritius	–	–	–	–	–	–	–	–
Mexico	1,700,000	58,000	52,000	64,000	89,000	5,300	–	–
Micronesia (Federated States of)	–	–	–	–	–	–	–	–
Monaco	–	–	–	–	–	–	–	–
Mongolia	64,000	<100	<100	<100	4,500	<100	1.02	–
Montenegro	–	–	–	–	–	–	–	–
Morocco	410,000	6,300	4,600	8,500	28,000	<1,000	–	–
Mozambique	1,800,000	590,000	430,000	790,000	340,000	190,000	0.91	22 x

TABLE 6

## ◀ Protection, care and support for children affected by HIV and AIDS in low- and middle-income countries

Countries and areas	Children who have lost one or both parents due to all causes, 2015	Orphaned and vulnerable children						
		Children who have lost one or both parents due to AIDS, 2015			Children both of whose parents have died due to any cause, 2015	Children both of whose parents have died due to AIDS, 2015	Orphan school attendance ratio, 2010–2015* ‡	% of children whose households received external support, 2010–2015* ‡
		Estimate	Low	High				
Myanmar	1,300,000	110,000	96,000	130,000	140,000	21,000	–	–
Namibia	89,000	45,000	36,000	52,000	14,000	11,000	1.02	17 x
Nauru	–	–	–	–	–	–	–	–
Nepal	690,000	25,000	21,000	29,000	58,000	3,500	–	–
Netherlands	–	–	–	–	–	–	–	–
New Zealand	–	–	–	–	–	–	–	–
Nicaragua	110,000	4,900	3,300	8,700	8,000	<1,000	–	–
Niger	880,000	69,000	58,000	82,000	110,000	17,000	1.09	–
Nigeria	–	–	–	–	–	–	1.23	6 x
Niue	–	–	–	–	–	–	–	–
Norway	–	–	–	–	–	–	–	–
Oman	–	–	–	–	–	–	1.01	–
Pakistan	3,900,000	18,000	11,000	31,000	320,000	2,700	0.79	–
Palau	–	–	–	–	–	–	–	–
Palestine, State of	–	–	–	–	–	–	–	–
Panama	56,000	4,200	3,800	4,700	3,600	<1,000	–	–
Papua New Guinea	300,000	12,000	9,400	14,000	37,000	3,300	–	–
Paraguay	120,000	6,800	4,500	11,000	10,000	<1,000	–	–
Peru	480,000	21,000	16,000	27,000	35,000	3,000	1.00	–
Philippines	2,700,000	3,100	1,800	5,200	230,000	<1,000	–	–
Poland	–	–	–	–	–	–	–	–
Portugal	–	–	–	–	–	–	–	–
Qatar	–	–	–	–	–	–	–	–
Republic of Korea	–	–	–	–	–	–	–	–
Republic of Moldova	70,000	3,400	2,700	4,500	5,300	<1,000	–	–
Romania	–	–	–	–	–	–	–	–
Russian Federation	–	–	–	–	–	–	–	–
Rwanda	430,000	70,000	61,000	79,000	56,000	19,000	0.91	–
Saint Kitts and Nevis	–	–	–	–	–	–	–	–
Saint Lucia	–	–	–	–	–	–	–	–
Saint Vincent and the Grenadines	–	–	–	–	–	–	–	–
Samoa	–	–	–	–	–	–	–	–
San Marino	–	–	–	–	–	–	–	–
Sao Tome and Principe	–	–	–	–	–	–	–	4 x
Saudi Arabia	–	–	–	–	–	–	–	–
Senegal	470,000	25,000	19,000	32,000	51,000	5,300	0.97	–
Serbia	–	–	–	–	–	–	–	–
Seychelles	–	–	–	–	–	–	–	–
Sierra Leone	430,000	23,000	18,000	28,000	78,000	8,200	0.81	–
Singapore	–	–	–	–	–	–	–	–
Slovakia	–	–	–	–	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–
Solomon Islands	–	–	–	–	–	–	–	–
Somalia	630,000	25,000	19,000	32,000	97,000	7,600	0.78 x	–
South Africa	3,300,000	2,100,000	1,800,000	2,400,000	840,000	760,000	0.98 x	–
South Sudan	580,000	100,000	68,000	140,000	88,000	30,000	0.78	–
Spain	250,000	5,500	4,500	6,500	11,000	<1,000	–	–
Sri Lanka	340,000	<1,000	<500	<1,000	19,000	<100	–	–
Sudan	1,500,000	21,000	14,000	28,000	170,000	4,800	0.82	–
Suriname	13,000	1,200	<1,000	1,400	1,200	<500	–	–
Swaziland	77,000	47,000	40,000	52,000	17,000	14,000	1.00	41 x
Sweden	–	–	–	–	–	–	–	–
Switzerland	–	–	–	–	–	–	–	–
Syrian Arab Republic	–	–	–	–	–	–	–	–
Tajikistan	180,000	6,000	4,400	7,800	13,000	<1,000	0.81	–
Thailand	1,100,000	140,000	110,000	180,000	96,000	25,000	0.94	21 x
The former Yugoslav Republic of Macedonia	–	–	–	–	–	–	–	–
Timor-Leste	–	–	–	–	–	–	0.75	–
Togo	370,000	68,000	56,000	82,000	64,000	24,000	0.97	6 x

## Protection, care and support for children affected by HIV and AIDS in low- and middle-income countries

Countries and areas	Children who have lost one or both parents due to all causes, 2015	Children who have lost one or both parents due to AIDS, 2015			Orphaned and vulnerable children		Orphan school attendance ratio, 2010–2015* ‡	% of children whose households received external support, 2010–2015* ‡
		Estimate	Low	High	Children both of whose parents have died due to any cause, 2015	Children both of whose parents have died due to AIDS, 2015		
Tonga	–	–	–	–	–	–	–	–
Trinidad and Tobago	25,000	1,700	1,400	1,800	1,900	<500	–	–
Tunisia	–	–	–	–	–	–	–	–
Turkey	–	–	–	–	–	–	–	–
Turkmenistan	–	–	–	–	–	–	1.00 x	–
Tuvalu	–	–	–	–	–	–	–	–
Uganda	1,900,000	660,000	550,000	790,000	290,000	180,000	0.88	11 x
Ukraine	830,000	41,000	33,000	51,000	61,000	9,400	–	–
United Arab Emirates	–	–	–	–	–	–	–	–
United Kingdom	–	–	–	–	–	–	–	–
United Republic of Tanzania	2,700,000	790,000	700,000	880,000	440,000	240,000	0.95	7 x
United States	–	–	–	–	–	–	–	–
Uruguay	45,000	2,600	1,900	3,500	2,600	<500	1.00	–
Uzbekistan	600,000	27,000	20,000	38,000	43,000	3,200	–	–
Vanuatu	–	–	–	–	–	–	–	–
Venezuela (Bolivarian Republic of)	520,000	16,000	14,000	19,000	31,000	2,400	–	–
Viet Nam	1,200,000	54,000	45,000	64,000	60,000	5,400	–	–
Yemen	880,000	3,700	2,200	5,800	96,000	<1,000	–	–
Zambia	960,000	380,000	310,000	450,000	180,000	130,000	0.86	19 x
Zimbabwe	720,000	450,000	400,000	500,000	140,000	120,000	0.94	21 x
<b>SUMMARY INDICATORS</b>								
Sub-Saharan Africa <sup>a/</sup>	49,400,000	10,900,000	9,100,000	12,800,000	8,200,000	3,500,000	0.96	–
Eastern and Southern Africa	23,100,000	7,200,000	6,200,000	8,300,000	3,900,000	2,300,000	0.92	–
West and Central Africa	24,800,000	3,600,000	2,800,000	4,600,000	4,000,000	1,200,000	1.01	–
Middle East and North Africa	5,800,000	58,000	42,000	76,000	480,000	11,000	–	–
South Asia	36,600,000	930,000	730,000	1,200,000	3,200,000	150,000	0.83 **	–
East Asia and the Pacific	24,400,000	710,000	610,000	810,000	1,800,000	99,000	–	–
Latin America and Caribbean	10,000,000	490,000	420,000	580,000	680,000	85,000	–	–
CEE/CIS	–	–	–	–	–	–	–	–
Least developed countries	36,800,000	5,200,000	4,500,000	6,000,000	5,200,000	1,500,000	0.89	–
Low- and middle-income countries	132,000,000	13,200,000	10,300,000	17,500,000	14,600,000	3,800,000	0.93 **	–
World	140,000,000	13,400,000	11,400,000	15,700,000	15,100,000	3,800,000	–	–

### DEFINITIONS OF THE INDICATORS

**Children who have lost one or both parents due to all causes:** Estimated number of children (aged 0–17) who have lost one or both parents due to any cause, as of 2015.

**Children who have lost one or both parents due to AIDS:** Estimated number of children (aged 0–17) who have lost one or both parents due to AIDS, as of 2015.

**Children both of whose parents have died due to any cause:** Estimated number of children (aged 0–17) who have lost both parents due to any cause, as of 2015.

**Children both of whose parents have died due to AIDS:** Estimated number of children (aged 0–17) who have lost both parents due to AIDS, as of 2015.

**Orphan school attendance ratio:** Percentage of children (aged 10–14) who have lost both biological parents and who are currently attending school as a percentage of non-orphaned children of the same age who live with at least one parent and who are attending school, 2010–2015.

**Percentage of children whose households received external support:** Percentage of orphaned and vulnerable children whose households received free basic external support in caring for the child, 2010–2015.

### MAIN DATA SOURCES

**Children who have lost one or both parents due to all causes:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Children who have lost one or both parents due to AIDS:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Children both of whose parents have died due to any cause:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Children both of whose parents have died due to AIDS:** UNAIDS 2016 estimates, based on 2016 Spectrum modelling, June 2016.

**Orphan school attendance ratio:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

**Percentage of children whose households received external support:** UNICEF global databases, 2016, based on DHS, MICS and other national surveys, 2006–2015.

### NOTES

– Data not available.

\* Data refer to the most recent year available during the period specified in the column heading.

\*\* South Asia excludes India; East Asia and the Pacific excludes China; Low- and middle-income countries and World exclude China and India.

‡ Regional averages are calculated only when the population represents 50 per cent or more of the region's total population of interest.

x Data refer to years or periods other than those specified in the column heading. Such data are not included in the calculation of regional and global averages. Estimates from years prior to 2006 are not displayed.

a/ Sub-Saharan Africa includes the Sudan and Djibouti.

Due to the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States are not yet available for all indicators. In these cases, aggregated data are presented for the Sudan pre-cession.

Some estimates do not add up to the totals because of rounding.

Low- and middle-income countries are classified as such by the World Bank.

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