



**SEIZING THE  
OPPORTUNITY:  
ENDING AIDS  
IN THE MIDDLE EAST  
AND NORTH AFRICA**

## Acknowledgements

### The core report team

**Ider Dungerdorj** and **Kira Bochamikova** from UNICEF Middle East and North Africa Regional Office.

**Rangaiyan Gurumurthy** and **Simone Albert Salem** from UNAIDS Regional Support Team for the Middle East and North Africa.

**Akram Ali Eltom**, **Hagar Azab** and **Joumana George Hermez** from WHO Eastern Mediterranean Regional Office.

**Chewe Luo**, **Catherine Langevin-Falcon**, **Chibwe Lwamba**, **Aleya Khalifa** and **Shaffiq Essajee** from UNICEF HQ.

The authors are also grateful for the support and expertise of the following UNICEF colleagues:

**Geert Cappelaere**, **Bertrand Bainvel**, **Juliette Touma**, **Philip Hazou**, **Diana Samman**, **Salim Oweis**, **Veera Mendonca** and **Charlie Denny** from UNICEF Middle East and North Africa Regional office.

**Maged Ragaie** from UNICEF Egypt.

**Zineb Boujrada** and **Hasna Abdallah Ali** from UNICEF Djibouti.

The principal writer of this report was **Jeff Hoover**, in close collaboration with the core report team.

Designed by **B-design & marketing**, on the basis of a design by Prographics, Inc., of Women: At the heart of the HIV response for children (UNICEF, 2018).

Edited by **Tamara Sutila**

Suggested citation: *Seizing the Opportunity: Ending AIDS in the Middle East and North Africa*. Amman: United Nations Children's Fund (UNICEF), 2019.

© United Nations Children's Fund (UNICEF), July 2019

ISBN: 978-92-806-5043-3

UNICEF takes all necessary steps to safeguard the identities of children and their parents in accordance with their wishes and the global standards of child rights protection. Written consent has been obtained by UNICEF from people depicted in the photos of this report. Unless otherwise stated, people depicted in this publication, and in the accompanying materials online, should not be assumed to be living with HIV.

The designations employed in this publication and the presentation of the material do not imply on the part of the United Nations Children's Fund (UNICEF) the expression of any opinion whatsoever concerning the legal status of any country or territory, or of its authorities or the delimitations of its frontiers.

All reasonable precautions have been taken by UNICEF to verify the information contained in this publication.

Photo caption: An adolescent girl and a young girl child at a "Lifeskills" event in Union Development & Culture Community Centre in Djibouti City, Djibouti.

Photo credit: © UNICEF/UN0199041/Noorani



**SEIZING THE  
OPPORTUNITY:  
ENDING AIDS**  
IN THE MIDDLE EAST  
AND NORTH AFRICA



الجمهورية التونسية  
وزارة الصحة العمومية  
المدىون الوطني للأسرة والعمران البشري

ما يشاع عني خطأ.

أين تجديني!

خلافًا لما يعتقد البعض فإنني لا أمنع  
الشعور باللذة الجنسية ، وحتى أكون صريحاً  
معك ، باستخدامي أو عدم استخدامي سيكون  
الفرق ضئيلاً جداً لدرجة أنك له تشعر به.  
وبالتعود على استعمالني سوف له تشعر حتى  
بوجودي ، ويرداد بذلك إطمئنانك.

سعيد بمعرفتك ...  
إلى اللقاء ...





إذا رحبت في استعمالني، فعندما سجد جداً.  
أنا متوفر مجاناً في كل مراكز التنظيم العائلي  
ومراكز الصحة الأساسية أو بالصيدليات مقابل  
تمه رمزي.

يقال عني أيضاً أنني رقيق سجد التمرف، وودي  
على ذلك أنك إذا أحسنت استعمالني سلمت منه  
كل المخاطر... حينئذ تكتشف قرباتي.

رجال  
بيننا  
و  
بيننا

تعاون مع صندوق الأمم المتحدة للسكان

# Contents

	<b>Foreword</b>	<b>1</b>
	<b>Acronyms</b>	<b>3</b>
	<b>CHAPTER 1</b> <b>Introduction</b>	<b>5</b>
	1.1 HIV in the Middle East and North Africa: Low-burden region, poorly understood epidemics	5
	1.2 Situation analysis, trends and observations	8
	1.3 Other challenges to more effective HIV responses, including data collection	12
	1.4 Summary of HIV epidemic among children and adolescents	13
	<b>CHAPTER 2</b> <b>PMTCT and paediatric AIDS</b>	<b>15</b>
	2.1 The situation of mother-to-child transmission of HIV in the region	15
	2.2 Pregnant women living with HIV: Testing and treatment	17
	2.3 Children born to mothers living with HIV	19
	<b>CHAPTER 3</b> <b>Adolescents</b>	<b>23</b>
	3.1 Situation overview: Heightened invisibility and vulnerability	23
	3.2 Special concerns about future risks and impact	29
	3.3 Adolescent key populations: The bulk of the burden	30
	3.4 Children and adolescents in humanitarian crises	31
	<b>CHAPTER 4</b> <b>Strategizing for the future: Taking advantage of opportunities to end HIV as a threat among children and adolescents</b>	<b>33</b>
	4.1 Exploiting unique opportunities to turn around failing responses	33
	4.2 Recommendations on how to achieve new and sustained progress	37
	<b>Endnotes</b>	<b>40</b>
	<b>Annex: Statistical table</b>	<b>43</b>

# Foreword

On behalf of the United Nations Children's Fund (UNICEF), the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO), we are pleased to jointly present this report covering the Middle East and North Africa region. It provides insights into the situation facing children and adolescents challenged by HIV and AIDS.

With its concentrated HIV epidemic, the Middle East and North Africa region has the advantage of a relatively low HIV burden among the general population, as well as among children and adolescents. Considerable efforts have been invested at the local, national, regional and global levels to respond to the challenges posed by HIV in this region. Country leaders have committed to the targets of the Sustainable Development Goals (SDGs), particularly SDG3.3, which calls for ending AIDS by 2030. More recently, governments in the region have also committed to achieving universal health coverage for all.

Yet, challenges remain, and are highlighted by the report. The region has one of the highest rates of new HIV infections and a relatively high rate of AIDS-related deaths globally, including among the children and adolescents. In the context of the 'youth bulge', whereby population groups under the age of 20 are the fastest growing demographic segment, the rise in the number

of new infections is alarming as the number of children and adolescents continues to grow. Furthermore, the Middle East and North Africa is one of only two regions in the world with a growing incidence and one of the lowest rates of early infant diagnosis (EID) of HIV and antiretroviral therapy (ART) coverage, which results in one of the highest rates of mother-to-child-transmission (MTCT) worldwide.

However, the challenge is not only demographic. The countries in the region lack a conducive environment to support effective programming to reach under-served children and adolescents, particularly those belonging to key populations as well as their partners and clients. In combination, the lack of harm reduction approaches and the restrictive consent rules in most countries' legislative and policy frameworks, the pervasive stigma and discrimination against key populations and people living with HIV are key factors that drive the epidemic underground and pose significant access barriers for the affected individuals and communities. Moreover, eight out of the 20 countries in the region are currently facing severe humanitarian challenges, including armed conflict.

To address these challenges, this report highlights key policy and programmatic measures that can enable the countries in the region to dramatically scale up their

interventions and improve the performance of their national HIV response. Key among these are improvements in the legal and policy environment aimed at reducing the stigma and discrimination against people living with HIV and key populations; improving and utilizing strategic information to achieve better tailoring of the response, adapting service delivery approaches to the needs of young people and young key populations along the continuum of prevention and treatment; and, where possible, integrating HIV services by leveraging a number of well-performing child and maternal health services, as well as increasing the share of domestic financing invested in the national HIV response.

If political will and commitment can be rapidly mobilized to implement the recommendations of this report, there is a potential for some countries in the region to achieve the 90-90-90 targets by 2020 and, thereafter, end AIDS. The consequences of inaction will be costly while the



© UNICEF/UN0199072/Noorani

time to act is limited, as the window of opportunity to mount such an effort diminishes. However, ending the epidemic in the region is an achievable goal. The relatively high levels of human and financial resources available, coupled with low prevalence, enable the countries to eliminate HIV as a public health threat.

Now is the time to seize this opportunity.

**Geert Cappelaere**  
Regional Director,  
Middle East and North  
Africa Regional Office  
UNICEF

**Rangaiyan Gurumurthy**  
Regional Director, a.i.,  
Regional Support Team for the  
Middle East and North Africa  
UNAIDS

**Dr. Ahmed Al-Mandhari**  
Regional Director,  
Eastern Mediterranean  
Regional Office  
WHO

# Acronyms

<b>AIDS</b>	acquired immunodeficiency syndrome	<b>IDP</b>	internally displaced person
<b>ANC</b>	antenatal care	<b>MENA</b>	Middle East and North Africa
<b>ART</b>	antiretroviral therapy	<b>MSM</b>	men who have sex with men
<b>ARV</b>	antiretroviral	<b>MTCT</b>	mother-to-child transmission (of HIV)
<b>DTP</b>	diphtheria, tetanus and pertussis (vaccine)	<b>PMTCT</b>	prevention of mother-to-child transmission (of HIV)
<b>EID</b>	early infant diagnosis (of HIV)	<b>PrEP</b>	pre-exposure prophylaxis
<b>EMTCT</b>	elimination of mother-to-child transmission (of HIV)	<b>SDG</b>	Sustainable Development Goal
<b>FGM</b>	female genital mutilation	<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>GBV</b>	gender-based violence	<b>UNICEF</b>	United Nations Children's Fund
<b>HIV</b>	human immunodeficiency virus	<b>WHO</b>	World Health Organization
<b>IBBS</b>	integrated biological and behavioural surveillance		





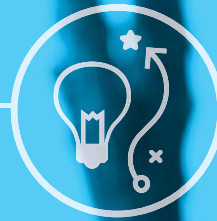
Introduction



PMTCT and  
paediatric AIDS



Adolescents



Strategizing  
for the future





# 1. Introduction

## 1.1 HIV in the Middle East and North Africa: Low-burden region, poorly understood epidemics

Although the Middle East and North Africa is the region with the world's lowest overall HIV burden, it has a lot of catching up to do in the AIDS response. This is especially true for children, adolescents, pregnant women as well as other key and vulnerable populations among whom the epidemic is largely concentrated, such as sex workers, people who inject drugs, and men who have sex with men (MSM).

The modest progress has persisted even though the region has some apparent advantages compared with

many others. The HIV burden in the Middle East and North Africa is small and concentrated compared to other regions, and the region has not experienced HIV epidemics of the same magnitude or intensity as elsewhere over the past three decades. As a result, the region has long had an opportunity to be among the first to truly end AIDS as a public health threat among all people, including children and adolescents.<sup>1</sup> However, the current window for putting the epidemics in the 20 countries<sup>2</sup> of the region on that trajectory could close quickly.

Another compelling reason for seizing the opportunity sooner rather than later is that the region also has some of the more difficult and deep-seated challenges in further reducing HIV risk and vulnerabilities among children, adolescents, pregnant women and mothers, especially (but not only) if they are members of key populations. As noted throughout this report, some of the



barriers are structural; some are related to political and governmental priority setting and capacities; and some are associated with social and cultural conservatism that often constrains agency among women, adolescents and key populations and makes HIV a highly stigmatized condition. These challenges will only become harder to confront if the number of new HIV infections does not decline.

One major overarching obstacle is that the epidemic is poorly understood in much of the region. Data are lacking in many critical areas. According to a study published in 2013, for example, only three countries in the region had surveillance systems that enabled them to assess epidemic trends in the same populations and locations over time using the same methods.<sup>3</sup> Data collection has improved over the past few years, but major gaps remain.

Some countries in the region do not routinely collect or publicize comprehensive data (or any data at all) on HIV. Many do not report age- or sex-disaggregated data, which means that the challenges and needs of children, adolescents and women cannot be known with a high degree of certainty, either within individual countries or across the region as a whole.

Even less is known in much of the Middle East and North Africa about the size of most key populations, their HIV prevalence or incidence, or their access to HIV prevention and treatment services, but the evidence and estimates that do exist strongly indicate that epidemics in the region historically have been concentrated among them.<sup>4</sup> According to available UNAIDS HIV data for the region, HIV prevalence among at least one of the three populations most commonly categorized as 'key populations' in the HIV context (MSM, sex workers and people who inject drugs) was 2 per cent or higher in most countries in the Middle East and North Africa.<sup>5</sup>



It is logical to assume, even in the absence of specific data, that the majority of adolescents and youth who are living with and most vulnerable to HIV are part of key population groups or their sexual partners (for example, adolescent girls who have sex with people who inject drugs). Yet these young people are largely invisible in HIV information and responses because so little data on them exist.

The paucity of HIV data complicates efforts to assess the scope and extent of HIV epidemics as it makes all figures and reporting for the Middle East and North Africa cumbersome, with wide confidence intervals significantly lowering data accuracy. As a result, progress toward global HIV goals, including the UNAIDS '90-90-90' targets,<sup>6</sup> is far more difficult to gauge or estimate with any certainty compared with other regions. The lack of data input and consistency in reporting – not only for HIV but for some other key health indicators – has the potential to greatly reduce some countries' ability to design and implement quality universal health coverage platforms that advance SDG 3 of the 2030 Agenda for Sustainable Development.<sup>7</sup>

The data deficiency is both a symptom and a cause of some other notable challenges to further progress on HIV in the region; namely, the large proportion of countries undergoing major humanitarian challenges and the pervasive stigma and discrimination.

Firstly, eight out of the 20 countries in the Middle East and North Africa are currently facing severe humanitarian challenges, including armed conflict. These include Iraq, Jordan, Lebanon, Libya, Somalia, Sudan, Syrian Arab Republic and Yemen. The disruptive effects of such crises shift national attention away from HIV as a lower order of priority among policy-makers and practitioners alike. Furthermore, the crises invariably lead to mass population displacement either as a result of the crisis within the country (for example, Libya, Somalia, Syrian Arab Republic and Yemen) or as a result of hosting large numbers of refugees from a neighbouring country experiencing such a crisis (Jordan and Lebanon) or both (Iraq and Sudan).

The resultant destruction and disruption of services as a result of such crises and their attendant population

displacement complicates the task of ensuring uninterrupted social and health services. In this context, HIV-related services as well as the key populations that are affected by HIV are often deprioritized when basic life-saving measures such as first aid and nutritional support receive most of the attention. Additionally, the population displacement itself becomes a new risk factor compared to the situation prior to the crisis. This adds a further level of complexity to an already weak national response. Not only are services difficult to plan or deliver under such circumstances but basic strategic information and data become even harder to collect, analyse or use for decision-making.

Secondly, in many countries there is limited political commitment to understand the disease better, allocate financial and other resources to it, and in some cases even mention it publicly. HIV largely remains a disease of the most vulnerable and stigmatized people in society, including people whose behaviour violates prevailing cultural sensitivities and is prohibited or restricted by policies and laws that reflect social and religious taboos. Knowledge about HIV and AIDS among most people – including the vast majority of adolescents and young people – remains minimal.

Overcoming all the challenges that are relevant in each context is unlikely, but that does not mean substantial and sustainable progress cannot be made among pregnant women, children and adolescents vulnerable to or living with HIV. The time to act is now, while epidemics are relatively small and the challenges are as potentially manageable as they will ever be. Accepting modest progress is not a strategy or approach that is likely to result in the region meeting key HIV goals or reducing the devastating and costly individual, public health and socio-economic consequences of HIV. There is an increasingly urgent need for stronger, more effective measures to break longstanding trends of stalled or no improvement in HIV responses in the Middle East and North Africa. Such measures should include identifying the most useful and needed interventions and taking targeted, consistent and evidence-based action to reduce all forms of HIV transmission and ensure that all who are living with HIV have access to essential HIV treatment, care and support services.





## 1.2 Situation analysis, trends and observations

The limited progress in the region in recent years can be seen in several indicators and trends. As illustrated in Figure 1 on the next page, the estimated numbers of both annual new HIV infections and annual AIDS-related deaths in the Middle East and North Africa have been about the same over the past five years (and even longer for new infections). But, such indicators have been

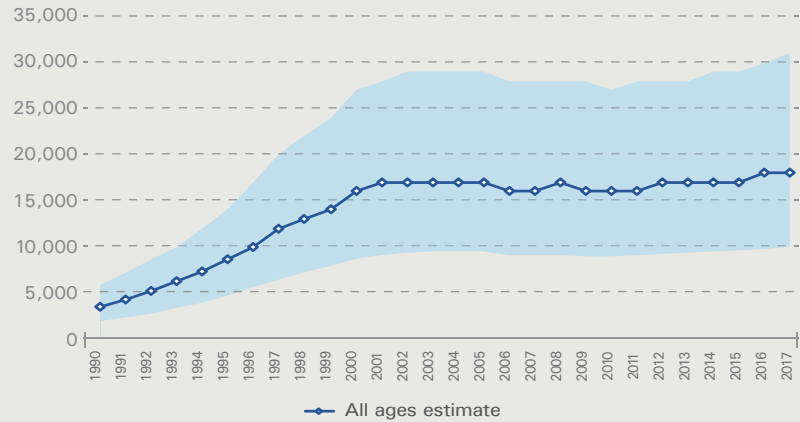
on a much more positive trend in most other parts of the world over the same period: the Middle East and North Africa is one of only two of the world's regions<sup>8</sup> where new HIV infections and AIDS-related deaths among all ages have not been declining steeply or even gradually on an annual basis in recent years. The estimated 18,000 [10,000–31,000] new infections in 2017 were the highest ever recorded for the region, and were about 12 per cent higher than the figure reported in 2010. The number of AIDS-related deaths in 2017 was also higher than the 2010 total by nearly the same share (11 per cent).

FIGURE 1.

### Trends in new HIV infections and AIDS-related deaths

#### Trend of new HIV infections, Middle East and North Africa, 1990–2017

Data source: UNAIDS 2018 estimates.  
 Note: UNAIDS regional classification of the Middle East and North Africa region.



#### Trend of AIDS-related deaths, Middle East and North Africa, 1990–2017

Data source: UNAIDS 2018 estimates.  
 Note: UNAIDS regional classification of the Middle East and North Africa region.

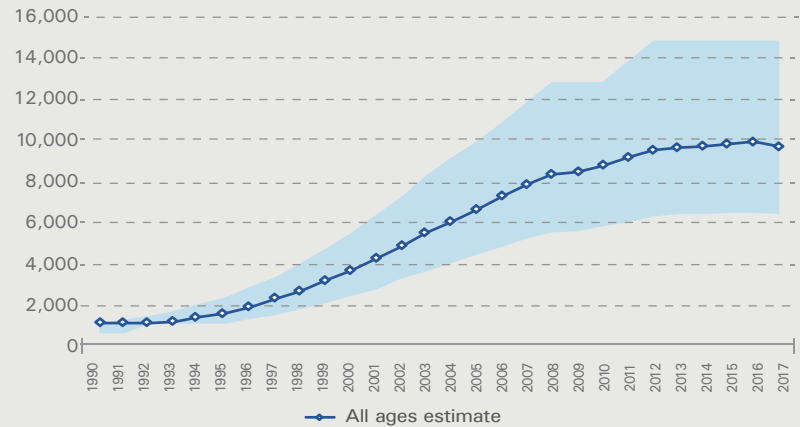
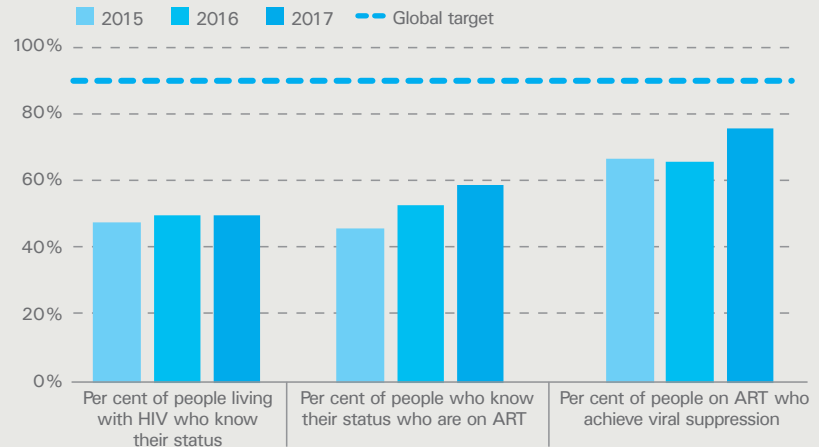


FIGURE 2.

### HIV testing and treatment cascade, Middle East and North Africa, 2015–2017

Data source: UNAIDS 2018 Estimates.  
 Note: UNAIDS regional classification of the Middle East and North Africa region.



The region is also lagging behind in the key areas of HIV diagnosis and treatment. Of the 220,000 [150,000–300,000] people estimated to be living with HIV in the Middle East and North Africa, less than one third or 63,200 [55,600–65,700] reportedly had access to HIV treatment in 2017. That huge disparity is a sign that, overall, the region is not close to achieving the UNAIDS 90-90-90 targets. As illustrated in Figure 2, region-wide in 2017, an estimated 50 [30–73] per cent of people living with HIV were aware of their status, 59 [35–86] per cent of those who knew their positive status were on ART, and 76 [45–>95] per cent of those on treatment had achieved viral suppression. The comparable global estimates for 2017, meanwhile, were 75 [55–92] per cent, 79 [59–>95] per cent and 81 [60–>95] per cent, respectively.

The deficiencies in HIV testing, ART access and viral suppression put the health and well-being of people living with HIV in peril. Without viral suppression, the risk of them transmitting the virus to their sexual partners and others in their lives remains high, and such individual and public health risks are particularly worrisome in the Middle East and North Africa because so many people are unaware of their HIV-positive status.

Two other indicators further illustrate the less robust progress overall in the Middle East and North Africa compared with most other regions and in the world in general. The HIV incidence:prevalence ratio is a metric that compares the number of new HIV infections in a

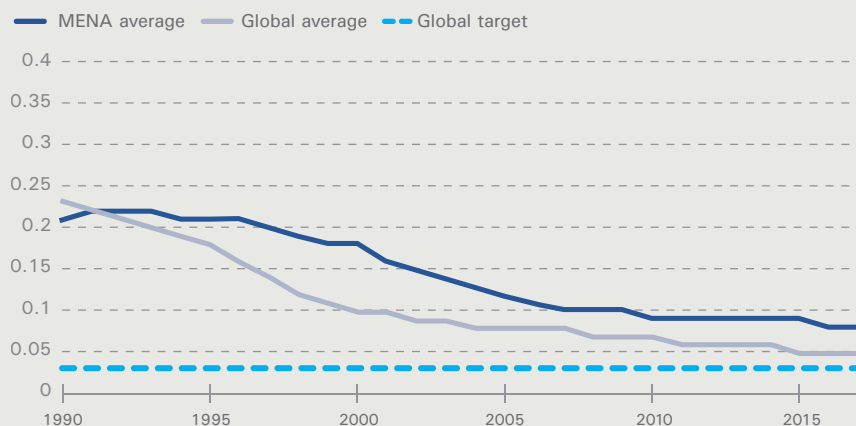
given time period (incidence) to the number of people living with HIV (prevalence). It is an important indicator of an epidemiologically significant shift in an epidemic, with lower ratios the ultimate goal. Ratios worldwide have been declining steadily since 1990, but the decline in the Middle East and North Africa has not been as significant. As seen in Figure 3, its incidence:prevalence ratio of 0.08 [0.05–0.14] for 2017 is greater than the 0.05 [0.04–0.07] global ratio and much further from the 0.03 benchmark selected by UNAIDS as indicating epidemic transition.<sup>9</sup>

Another metric, the incidence:mortality ratio, is useful for assessing current and future HIV resource needs, including financial investments. A ratio greater than 1 indicates that there have been more new infections than AIDS-related deaths, which in turn means that there has been a net increase in the number of people living with HIV.

With this metric, the Middle East and North Africa also compares poorly with other regions and overall global findings. In 2017, the incidence:mortality ratio in the Middle East and North Africa was 1.73 [0.95–2.91], higher than the global ratio of 1.53 [1.18–2.01]. This has considerable implications for the region’s public health budgets and capacities, as it indicates that financial burdens associated with HIV are likely to increase.

FIGURE 3.

**Incidence:prevalence ratio, global and MENA average, 1990–2017**



Data source: UNAIDS 2018 estimates.

Note: UNAIDS regional classification of the Middle East and North Africa region.

FIGURE 4.

### Distribution of new HIV infections, by population group, Middle East and North Africa, 2017

**Data source:** UNAIDS 2018 estimates.  
**Notes:** UNAIDS regional classification of the Middle East and North Africa region.  
 \*Individuals in this category did not report any HIV-related risk behaviour.

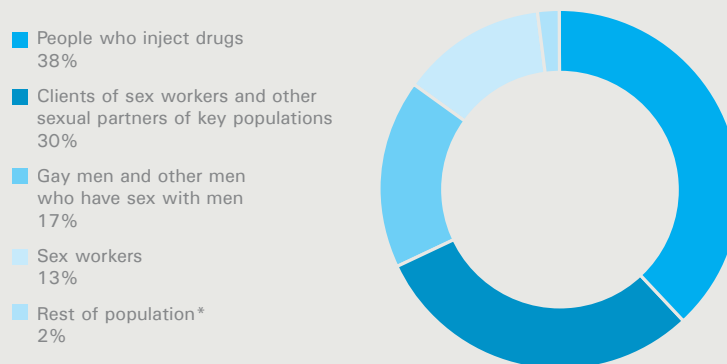
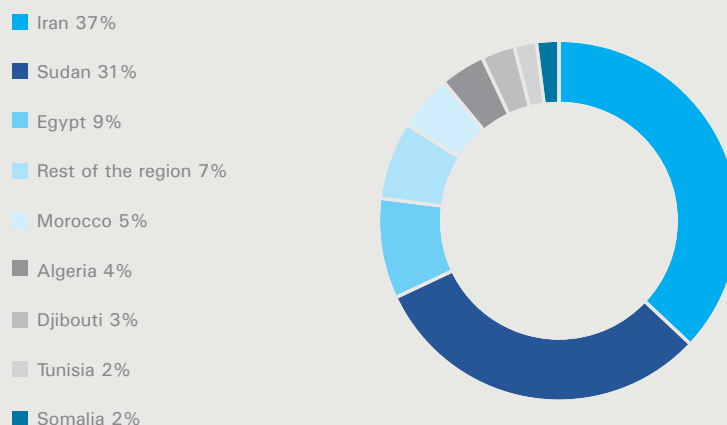


FIGURE 5.

### Distribution of new HIV infections, by country, Middle East and North Africa, 2017

**Data source:** UNAIDS 2018 estimates.  
**Note:** UNAIDS regional classification of the Middle East and North Africa region, which includes 20 countries/territories: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.



Also notable in terms of the situation analysis is that the epidemic in the Middle East and North Africa is concentrated among key populations. According to UNAIDS estimates published in 2018, nearly all (98 per cent) of new infections in 2017 were directly or indirectly linked with key populations. In descending order, as shown in Figure 4, new HIV infections among adults by population group were recorded as the following: 38 per cent among people who inject drugs, 17 per cent among MSM, and 13 per cent among sex workers. Most of the remaining new infections reportedly were among

clients of sex workers and other sexual partners of key populations (30 per cent).

### Country variations and gaps

The HIV epidemic burden varies greatly across the region's countries. For example, of the 220,000 people [150,000–300,000] estimated to be living with HIV in the Middle East and North Africa in 2017, half were reported in two countries: Iran (27 [14–50] per cent of the regional total) and Sudan (23 [12–38] per cent).



For 2017, those two countries also recorded the highest numbers of AIDS-related deaths and new infections. More than one third (35 per cent) of the regional total of nearly 9,800 [6,400–15,000] AIDS-related deaths is estimated to have occurred in Iran and 27 per cent in Sudan. The two countries accounted for more than two thirds (or 68 per cent) of the 18,000 [10,000–31,000] new infections in the region.

Trends also differ by country. As illustrated in Figure 5, Egypt, for example, accounted for only 9 per cent of new HIV infections in the region, according to the most recent UNAIDS estimates. Yet the HIV epidemic is growing much more rapidly in Egypt than in the region as a whole. The number of people living with HIV in Egypt in 2017 (16,000 [15,000–18,000]) more than doubled over the 2010 estimate of 7,700 [6,900–8,400].

### 1.3 Other challenges to more effective HIV responses, including data collection

Individual contexts vary, but several obstacles and challenges continue to restrict improved HIV data collection or more effective responses in the Middle East and North Africa. They include the following:

- **Humanitarian crises and volatile and fragile contexts.** Several countries in the Middle East and North Africa are in the midst of severe conflicts or have yet to create strong governance or surveillance systems due to social and governmental focus on conflicts. Such countries include Iraq, Libya, Syrian Arab Republic and Yemen. Other countries, including Egypt, Jordan and Lebanon, are home to millions of refugees from neighbouring countries whose HIV vulnerabilities are unclear, a situation that complicates the parameters of what those countries can or should report or provide regarding HIV.<sup>10</sup> In most such settings, gathering HIV data and providing high-quality, comprehensive prevention and

treatment services in a reliable and consistent manner would be extremely challenging even if aggressively attempted by governments or other partners such as multilateral humanitarian and health agencies. Refugee and other migrant populations typically face a wide range of social, economic and physical and mental health challenges; HIV is just one of many potential priority issues. Often, too, there are numerous logistical and legal obstacles that can delay or prevent access to services and support for those living with or vulnerable to HIV in such settings – including national policies restricting non-citizens’ access to affordable and convenient health care.

- **HIV-related stigma and discrimination** remain pervasive. Gauging the impact of stigma is difficult and imprecise in any context. But cultural, social and political factors in the Middle East and North Africa lend support to the belief that the people living with, affected by, and vulnerable to HIV face especially steep challenges compared with other parts of the world.<sup>11</sup> HIV is closely associated with sex, which is a taboo subject in many of the region’s countries.
- **Criminalization of certain key populations.** In nearly every context, members of all key populations in the Middle East and North Africa are not only highly stigmatized but face particularly harsh and forbidding legal barriers to their health, safety and lives.<sup>12</sup> Same-sex relations between men are explicitly criminalized across much of the region and even punishable by death in some countries and jurisdictions.<sup>13</sup> Sex workers and people who inject drugs in most places in the region risk death, imprisonment or other harsh consequences as well due to prevailing laws and policies.<sup>14</sup>

Deep-seated stigma and punitive legal regimes of this sort contribute to low uptake of HIV testing, prevention and treatment services, including by individuals who acknowledge risk factors but are fearful of being exposed.



© UNAIDS/PViroT

## 1.4 Summary of HIV epidemic among children and adolescents

Tables 1–3 summarize some key HIV and AIDS-related indicators considering children (aged 0–9) and adolescents (aged 10–19). As with figures and estimates for overall HIV epidemics in the Middle East and North Africa, the numbers are relatively small compared with other regions and the confidence intervals are quite wide.

According to available data, an estimated 3,900 [1,700–8,200] new HIV infections in children and adolescents aged 0–19 years occurred in 2017, with two thirds of them among adolescents (10–19 years old). A similar share (62 per cent) of the 16,200 [11,000–25,000] children and adolescents estimated to be living with HIV in the region in 2017 are aged 10–19 as well. The situation is reversed, however, for AIDS-related deaths. About three fourths of such deaths among children and adolescents in 2017 are estimated to have occurred among children aged 0–9. (It is important to note, however, that the estimates suggest the total number of AIDS-related deaths among children and adolescents overall to be around 1,000 or even lower.)

The available data do not point to significant gender disparities in the number of new HIV infections, number of individuals living with HIV and the number of AIDS-related deaths in 2017 among children and adolescents aged 10–19. In this age category, boys and girls each account for roughly half of the total number for each of the aforementioned indicators. For treatment coverage, there is no sex-disaggregated data available for the required age group.

The limited data make it difficult to obtain and compare country-level estimates within the region. Based on information currently available, however, there appear to be some important differences in risk and impact. For example, of the estimated 1,300 [<1,000–1,900] new HIV infections in children aged 0–9 years in the region in 2017, nearly half (47 per cent) occurred in Sudan, with only two other countries having shares larger than 10 per cent: Djibouti, at 12 per cent, and Iran (11 per cent).

### *Specific concerns about reaching adolescents and youth in the future*

The apparent slow reduction in the number of new HIV infections among adolescents and youth in the Middle East and North Africa is relatively common across other regions in the world. But the situation is particularly concerning in the Middle East and North Africa for two reasons: (1) the social, cultural and legal obstacles to evidence-based sexuality education in which HIV is discussed (as reviewed in this report's section on adolescents); and (2) demographic trends suggesting that the number of adolescents and youth will continue to grow during the first half of the century in 12 of the region's 20 countries.<sup>15</sup> Thus, countries will need to find ways to effectively support the increasing number of adolescents and youth in understanding what HIV is and how they can protect themselves and others in their lives, including sexual and drug-injecting partners.

TABLE 1.

**Number of new infections among children and adolescents, 2017**

Age	Number of new HIV infections		
	Estimate	Low-high	Percentage of all new HIV infections among children and adolescents (aged 0–19)
Children 0–9 years	1,300	<1,000–1,900	33
Adolescents 10–19 years	2,600	<1,000–5,900	67
Girls 10–19 years	1,300	<500–3,300	35
Boys 10–19 years	1,200	<500–4,000	32
<b>All children and adolescents aged 0–19</b>	<b>3,900</b>	<b>1,700–8,200</b>	

Data source: UNAIDS 2018 estimates.

Note: All estimates have been rounded to the nearest second digit. Percentages are based on exact values, so they may not reflect a direct calculation of the rounded estimates.

TABLE 2.

**Number of children and adolescents living with HIV, 2017**

Age	Number of children living with HIV		
	Estimate	Low-high	Percentage of all children and adolescents (aged 0–19) living with HIV
Children 0–9 years	6,200	4,800–8,100	38
Adolescents 10–19 years	10,000	4,800–19,000	62
Girls 10–19 years	5,200	2,300–10,000	32
Boys 10–19 years	4,800	2,500–11,000	30
<b>All children and adolescents aged 0–19</b>	<b>16,200</b>	<b>11,000–25,000</b>	

Data source: UNAIDS 2018 estimates.

TABLE 3.

**Number of AIDS-related deaths among children and adolescents, 2017**

Age	Number of AIDS-related deaths		
	Estimate	Low-high	Percentage of all AIDS-related deaths among children and adolescents
Children 0–9 years	<1,000	<500–1,100	78
Adolescents 10–19 years	<500	<200–<500	22
Girls 10–19 years	<200	<100–<200	11
Boys 10–19 years	<200	<100–<200	11
<b>All children and adolescents aged 0–19</b>	<b>&lt;1,000</b>	<b>&lt;1,000–1,200</b>	

Data source: UNAIDS 2018 estimates.

Notes: UNAIDS regional classification of the Middle East and North Africa region.

UNAIDS estimates are not available for Iraq and Libya. These countries are not included in the regional total. The estimates may not add up to the total due to rounding, as estimates presented are rounded to the nearest second digit. HIV infections are assumed to only occur before age 5 through mother-to-child transmission and between ages 15–19 through sexual transmission.

Numbers may not add up to total, due to rounding.



## 2. PMTCT and paediatric AIDS

### 2.1 The situation of mother-to-child transmission of HIV in the region

Only about 5,200 [3,600–7,700] births to women living with HIV in the region took place in 2017 (as shown in Figure 6), but PMTCT programmes struggled to adequately serve this relatively small group of women and their newborns. Gaps are evident in all areas – awareness, testing, prevention and treatment. Less than one quarter (22 [15–32] per cent) of pregnant women living with HIV received ART, an essential intervention for their own health as well as to prevent MTCT. An even smaller share (18 [12–27] per cent) of infants born to women living with HIV were tested for HIV within two months of birth, as recommended by WHO guidelines on EID.

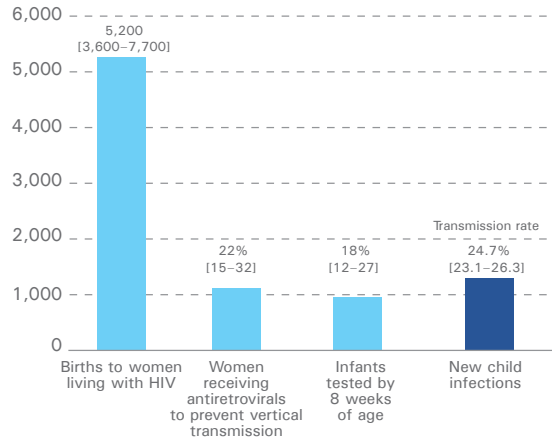
The consequences of such modest results are not surprising. The regional MTCT rate (25 infants newly infected with HIV for every 100 mothers living with HIV) is nearly twice as high as the global rate of 13 per cent, and it has barely declined from a 28 per cent level in 2010. This is in contrast with other indicators of maternal and child health that show good progress and results across the region. For example, as illustrated in Figure 7, antenatal care (ANC) coverage of at least one visit was 87 per cent in the Middle East and North Africa, which is on par with the global level of 86 per cent.<sup>16</sup>

*The regional MTCT rate (25 infants newly infected with HIV for every 100 mothers living with HIV) is nearly twice as high as the global rate of 13 per cent.*



FIGURE 6.

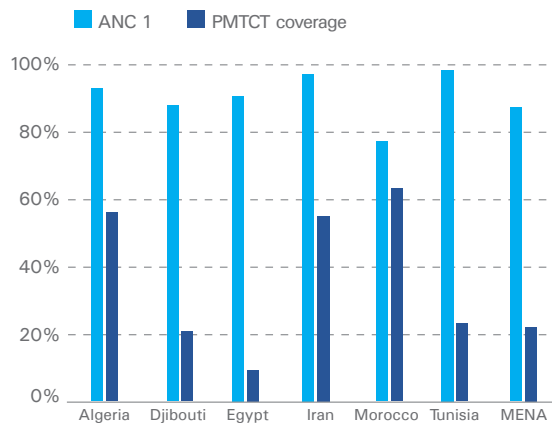
**Cascade of services for preventing vertical transmission and transmission rate, Middle East and North Africa, 2017**



**Data source:** Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.  
**Note:** UNAIDS regional classification of the Middle East and North Africa.

FIGURE 7.

**Percentage of women receiving antenatal care and PMTCT services, by country, Middle East and North Africa, 2017**



**Data source:** ANC 1 (first ANC visit) - population-based nationally representative surveys, including DHS and MICS, 2010–2018.  
 PMTCT Coverage - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.  
**Note:** Data are not available if a country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.



## 2.2 Pregnant women living with HIV: Testing and treatment

According to findings from a recent WHO study, a universal approach to antenatal HIV testing is cost-effective and results in cost savings over the long term because of the ability to identify women living with HIV and offer them treatment to prevent transmission<sup>17</sup>. This holds true across a range of HIV prevalence settings, including in low and concentrated epidemics.<sup>18</sup> However, as shown in Figure 8, only five countries in the Middle East and North Africa region reported data in 2017 on HIV testing through ANC visits and facilities.

Three of those countries with available data (Algeria, Iran and Morocco) managed to achieve coverage rates of ART for PMTCT above 50 per cent, as illustrated in Figure 9. Compared with countries such as Egypt (9 [8–10] per cent) and Sudan (7 [4–12] per cent), those results are reassuring. But they are still far lower than what has been achieved in other parts of the world, including in countries with much greater HIV burdens.

Moreover, as indicated in Figure 10, the PMTCT ART coverage rate in the region has risen much more slowly, and from a much lower level (13 [8–18] per cent to 22 [15–32] per cent) from 2010 to 2017. In comparison, the global PMTCT ART coverage in 2017 was 29 percentage points higher than it was in 2010.

FIGURE 8.

### Antenatal clinic-based HIV testing of pregnant women, by country, 2017

Data source: Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.

Note: Data are not available if country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.

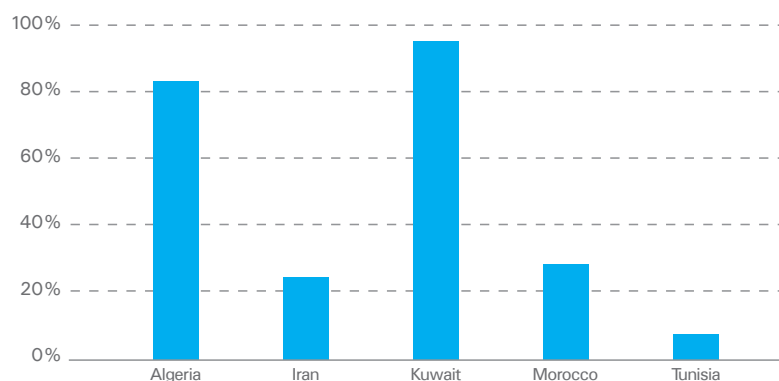


FIGURE 9.

### Coverage of pregnant women living with HIV who received ART for PMTCT, by country, 2017

Data source: Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.

Note: Data are not available if country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.

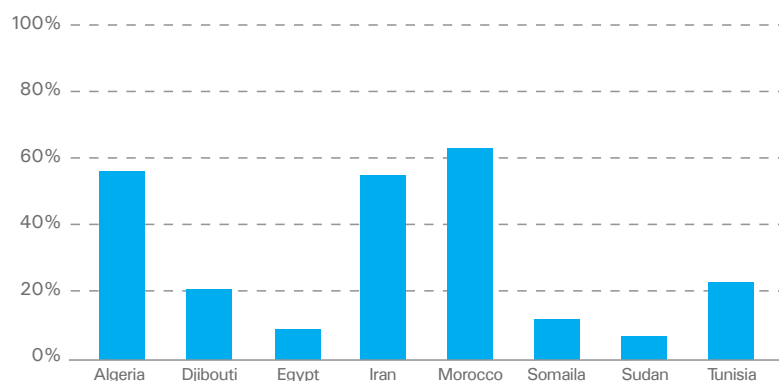
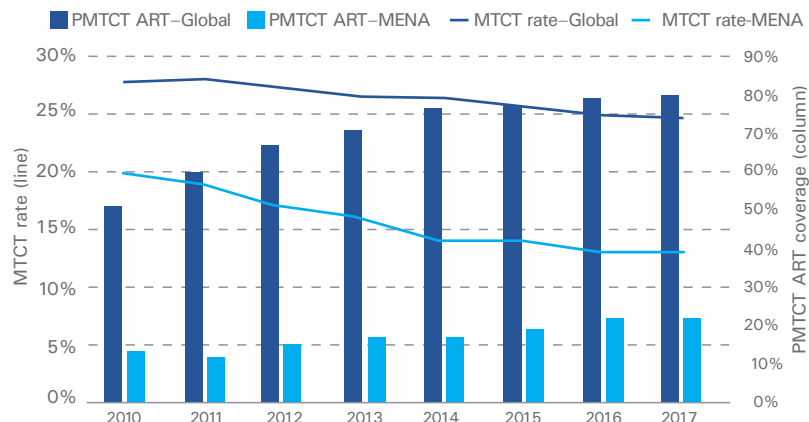


FIGURE 10.

### PMTCT ART coverage and MTCT rates, global and MENA, 2010–2017



Data source: Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.

Some country-specific estimates and developments in the Middle East and North Africa suggest that there is only a weak correlation, if any, between the relative impact of the epidemic and response. In Sudan, for example, adult HIV prevalence is twice as high as the overall region (0.2 [0.1–0.4] per cent compared with 0.1 [ $<0.1$ –0.1] per cent) and it alone accounts for nearly one fourth of all people living with HIV in the region. But the country has achieved just 7 [4–12] per cent ART coverage among pregnant women and similarly low EID coverage. At the same time, some other countries with far lower HIV burdens have exhibited strong policy-making interest, committed considerable investments and taken appropriate action in seeking to eliminate vertical transmission.

To date, none of the 11 countries and territories validated by WHO as having achieved the elimination of mother-to-child transmission (EMTCT) of HIV<sup>19</sup> are from the Middle East and North Africa – even though all the region’s countries would seem to be prime candidates because their overall burdens are so low. Leaders in the region recognized this fact in 2012, when they developed a regional EMTCT conceptual framework centred around the four prongs that are at the centre of the comprehensive approach to preventing MTCT: (1) primary prevention of HIV infection among women of childbearing age; (2) preventing unintended pregnancies among women

living with HIV; (3) preventing HIV transmission from a woman living with HIV to her infant; and (4) providing appropriate treatment, care and support to mothers living with HIV and their children and families.<sup>20</sup>

Six years later, HIV programming results summarized in this report underscore the fact that little overall progress across the region has been made toward three of the four strategic priorities in the regional conceptual framework: improving coverage and quality of PMTCT services; promoting integration/linkages with relevant health programmes; and ensuring access to services for vulnerable women.<sup>21</sup> The potential for scaling up PMTCT services is enormous, but only a few countries are seeking to do better in these three areas through their attention to the fourth strategic priority: ensuring commitment to EMTCT. Attempts are being made to fast-track EMTCT services in the region, including through integration of EMTCT into national maternal and child health (MCH) programmes. For example, WHO and UNICEF supported Libya in developing a national PMTCT strategy, and Iran and Algeria were assisted in reviewing their PMTCT services. Currently, a roadmap for the certification process is being developed for Kuwait, and technical guidance on EMTCT is provided to Kuwait and Iran by the Regional Validation Team, which was established by UNAIDS, WHO and UNICEF in 2018.<sup>22</sup>





© UNICEF/UNI166399/Noorani

## 2.3 Children born to mothers living with HIV

Existing data suggest a mixed picture in the region regarding the two most crucial HIV response indicators for children: diagnosis and treatment. As noted in Figure 11, the region-wide EID coverage rate is far lower than some other important health interventions among infants and young children. For example, a rate of 91 per cent in 2017<sup>23</sup> was recorded for one vital indicator of immunization coverage – for diphtheria, tetanus and pertussis (DTP1). Increased uptake of HIV testing in immunization clinics has been confirmed in a number of studies,<sup>24</sup> yet this potential is not tapped in the region.

Country-level differences underscore wide variation in EID access, as demonstrated in Figure 12. Both Algeria (61 [57–68] per cent) and Morocco (57 [48–68] per cent) are top performers on EID coverage, while Egypt (11 [10–12] per cent) and Djibouti (10 [7–15] per cent) lag far behind. The potential for doing much better is evident.

For the region as a whole, the difference between the excellent results in ANC and immunization coverage and the relatively poor ones regarding the MTCT rate highlights the potential of existing health services to reach pregnant and breastfeeding women living with HIV with HIV testing and treatment.

However, data suggest that children in the Middle East and North Africa are faring better than adults in regard to one key HIV indicator: access to lifesaving ART. As indicated in Figure 14, in 2017 about 35 [22–47] per cent of children younger than 15 living with HIV in the region were receiving ART. That share was slightly higher than the treatment coverage rate among the region's adults (29 [17–43] per cent) and represented a significant improvement over the 11 [7–15] per cent figure in 2010.

Paediatric ART coverage rates among the seven countries where data in recent years have been available illustrate varying trends. Much of the recent improvement in the Middle East and North Africa is due to progress in Iran, with coverage rates rising from 9 [6–14] per cent in 2010 to 53 [32–84] per cent in 2017. Algeria and Morocco have reported coverage rates of 95 per cent over the past three years, which means they reached the UNAIDS global target and have basically achieved universal coverage. At the other end of the spectrum, Djibouti, Somalia and Sudan are lagging behind considerably, Egypt only less so. The strong results in Algeria and Morocco are offset by the low rates in Sudan (19 [14–26] per cent), which is home to a larger number of children living with HIV than the other two combined (as indicated in Figure 13), and Egypt (33 [31–35] per cent), which is the region's most populous country.



FIGURE 11.

### DTP1 and EID rates, 2017

Percentage of infants receiving DTP1 immunization and HIV testing within two months of birth, by country, Middle East and North Africa, 2017

**Data source:** DTP1 immunization coverage - WHO and UNICEF estimates of national routine immunization coverage, 2017 revision.

**EID coverage** - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.

**Note:** Data are not available if a country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.

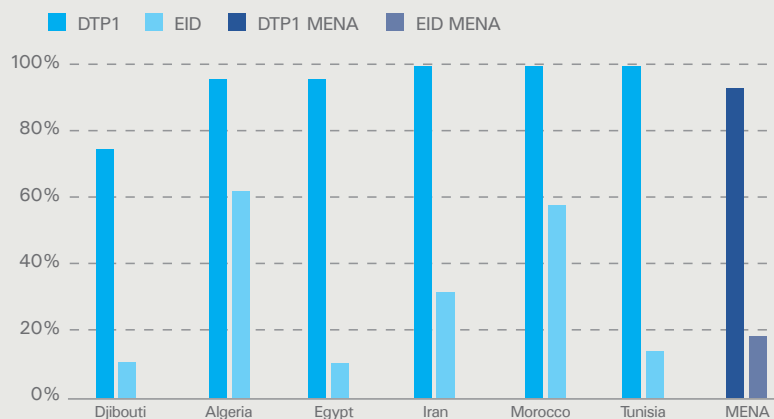


FIGURE 12.

Percentage of infants born to women living with HIV receiving a virological test for HIV within two months of birth, 2010–2017

**Data source:** Global AIDS Monitoring 2018 and UNAIDS 2018 estimates.

**Note:** Data are not available if a country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.

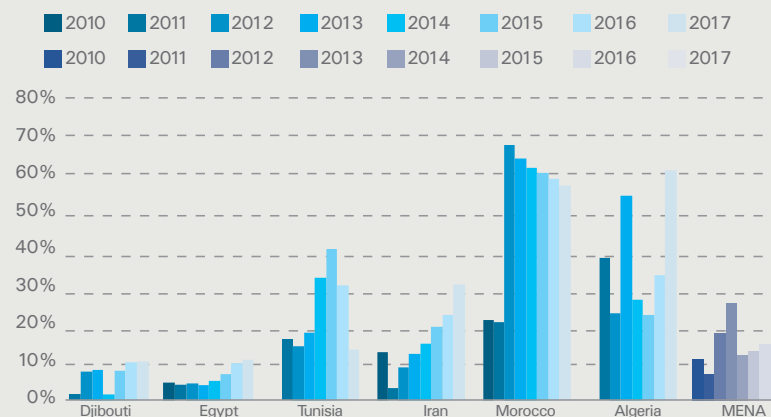


FIGURE 13.

Number and percentage distribution of children aged 0–9 living with HIV, by country, Middle East and North Africa, 2017

**Data source:** UNAIDS 2018 estimates.

**Note:** Data are not available for Yemen, Saudi Arabia and Syrian Arab Republic – though they are included in the regional total.

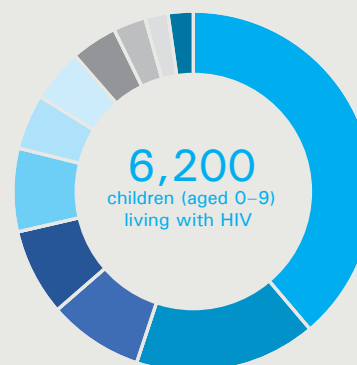
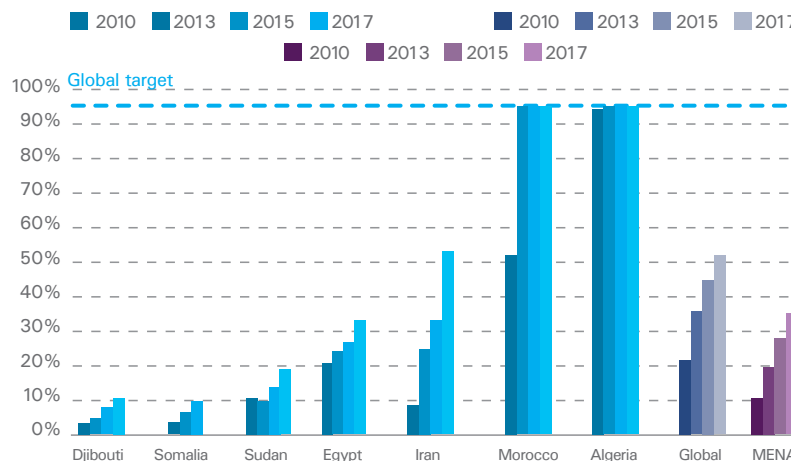


FIGURE 14.

**Percentage of children aged 0–14 living with HIV who received ART, by country, 2010, 2013, 2015 and 2017**



**Data source:** UNAIDS 2018 estimates.  
**Note:** Data are not available if a country did not submit data to Global AIDS Monitoring or if estimates of pregnant women living with HIV are not published.

More age-specific data are needed to understand why and where paediatric ART access in the Middle East and North Africa is higher than the comparable figure for adults. Yet, even though this indicator suggests notable progress in HIV responses for children, the region remains significantly behind much of the rest of the world: The global share of children aged 0–14 living with HIV who had access to ART in 2017 was 52 [33–70] per cent.

With such limited data available, there is a risk that the estimated 65 per cent of children living with HIV in the region who are ‘missing’ from HIV treatment coverage could continue to be left behind. Increased efforts to identify them and get them into treatment and care are needed to help save their lives and also to reduce preventable AIDS-related deaths among children and adolescents.

**Box 1. Positive actions, negative lab results: Heartbreak and hope in Egypt**

“Her health started deteriorating a week after birth,” Nesma (not her real name) said, referring to her daughter, but “nobody knew what was wrong.” Until their baby girl was 9 months old, Nesma and her husband, residents of Cairo, Egypt, did not know they were living with HIV and that the virus had passed to their daughter. An HIV test was suggested as an attempt to explain the reason for their baby’s poor health, and the result came back as positive.

Unfortunately, the news did not save their daughter’s life. “When health care professionals knew she was HIV-positive, nobody dared to even insert a needle in her tiny arm to save her life,” Nesma said, remembering the struggle. The baby lost her life due to pneumonia days after she and her parents were refused admission and treatment.

As the days of mourning passed, the parents were concerned about

their other two children. They had them tested for HIV, and both tests were negative. Nesma decided to tell them that she and their father were living with HIV just in case something happened. She said, “I wanted them to know exactly what to do or where to seek help in case their father or I got sick. I didn’t want them to go through what I went through with their late sister.”

Months after their baby’s death,



© UNICEF/Egypt/2016/CDS

Attendees at an event organized by Nusoor ('Eagles'), a network of people living with HIV in Egypt.

the couple found out that Nesma was pregnant again. The situation was a lot different from what they went through previously. This time around she knew what to do.

“During the counselling I received after learning I was pregnant, I was told about precautions I could take so the chances of HIV transmission to my baby would be minimal,” Nesma said.

Also, during one of her regular monthly follow-up visits to the hospital and pharmacy while pregnant, she was advised to seek help and receive support from Nusoor ('Eagles'), a network of people living with HIV in Egypt. Advice from the network was helpful. She strictly followed the suggestions and information she received

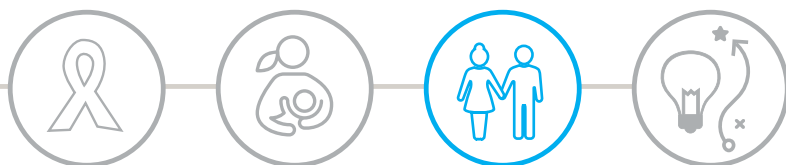
from Nusoor, including about the importance of regularly taking her HIV drugs (which she obtained from a government health facility) and not missing any pregnancy follow-up visits.

Yet with her due date approaching, she had a hard choice to make: whether to tell her obstetrician that she had HIV. Based on her previous experience with HIV-related stigma, she decided not to disclose. “I told my doctor I had [hepatitis] C instead of HIV,” Nesma said, adding, “I wanted him to take all of his highest infection-control precautions and stay safe while getting my baby safely delivered.”

Thanks to the support from Nusoor, Nesma was able to safely

deliver an HIV-negative baby girl. The good news was hard to believe for a mother who had recently experienced the painful loss of a child. Nesma said that she re-tested her daughter several times until she turned 2 years old before she found relief. Nesma continued to receive treatment, and the Nusoor team continued supporting her in adherence to it.

Nesma's story illustrates both the worst and the best of possible outcomes for mothers and people living with HIV in Egypt. Many struggle to find health care services in general – or critical HIV-specific services such as testing, care, support and treatment – because of persistent stigma. As a result, most vulnerable individuals are not tested early enough.



## 3. Adolescents

### 3.1 Situation overview: Heightened invisibility and vulnerability

The data scarcity that characterizes HIV estimates in the Middle East and North Africa is especially wide regarding adolescents. Only a few countries collect age-disaggregated data in ways that would best support effective adolescent programming. Among the more useful approaches from the perspective of enabling more targeted, efficient interventions would be data that are collected every year by consistent processes and standards for more than one discrete age group – for example, HIV programme data that can be reported separately for those aged 10–19, 15–19, 20–24, etc.

Publicly available information and estimates offer only a limited window into the scope and extent of HIV trends,

risks and service access among adolescents in the region. Those limitations should be kept in mind when considering some of the most important indicators, including the following:

- The UNAIDS estimate for the number of adolescents (aged 10–19) living with HIV in the Middle East and North Africa in 2017 was 10,000 [4,800–19,000], as illustrated in Figure 15. That estimate is derived from data from eight countries: Algeria, Djibouti, Egypt, Iran, Morocco, Somalia, Sudan and Tunisia. Five of those countries estimated that fewer than 1,000 adolescents in this age group are living with HIV. The largest number is from Sudan (3,800 [1,500–9,300], or 38 per cent of the total). The general trend, although slow and based on small numbers, has been for the estimated total number of adolescents living with HIV in the Middle East and North Africa to increase annually. Overall for the region, the 2017 estimate represented a



22 per cent increase from the 2010 figure of 8,200 [3,900–15,000]. That is marginally higher than the 20 per cent increase over the same period in the total number of people living with HIV in the region to 220,000 [150,000–300,000] in 2017. HIV prevalence remains below 1 per cent among both adults and adolescents in the region, but the recent trend of faster population growth among adolescents compared with adults – the so-called ‘youth bulge’ – reinforces the importance of focusing more attention on adolescents and their HIV prevention and treatment needs.

- Across the region, an estimated 2,600 [<1,000–5,900] adolescents between the ages of 10 and 19 were newly infected with HIV in 2017. The sex distribution was roughly even. Trends observed in limited data indicate a steady rise in new infections among these young people, although the lack of aligned or consistent data points makes comparisons inexact.
- Fewer than 500 [<200–<500] adolescents in the 10–19 age group died of AIDS-related causes in 2017, according to existing data sources. That number has remained below 500 for the past three years.
- Limited specific information is known about ART coverage among adolescents. As noted previously in this report, the region-wide ART coverage among adults (aged 15 and over) in 2017 was only 29 [17–43] per cent, with much of the gap stemming from extremely low access in three relatively populous countries: Sudan (15 [8–25] per cent), Iran (18 [9–34] per cent) and Egypt (24 [21–26] per cent).
- As per the data from 2017 (shown in Figure 16), the Middle East and North Africa is home to an estimated 89,000 [63,000–120,000] children under age 18 who have lost one or both parents due to



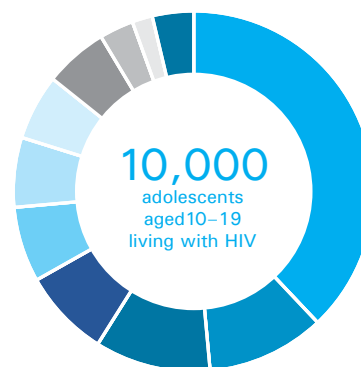
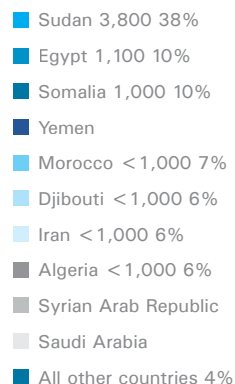


AIDS. Three countries are home to the largest numbers of children who have lost one or both parents due to AIDS by far: Sudan (24,000 [18,000–32,000]), Iran (19,000 [13,000–28,000]) and Somalia

(17,000 [12,000–20,000]). The estimated 2017 total for this indicator is proof that the cumulative impact of even relatively small HIV epidemics can be quite significant.

FIGURE 15.

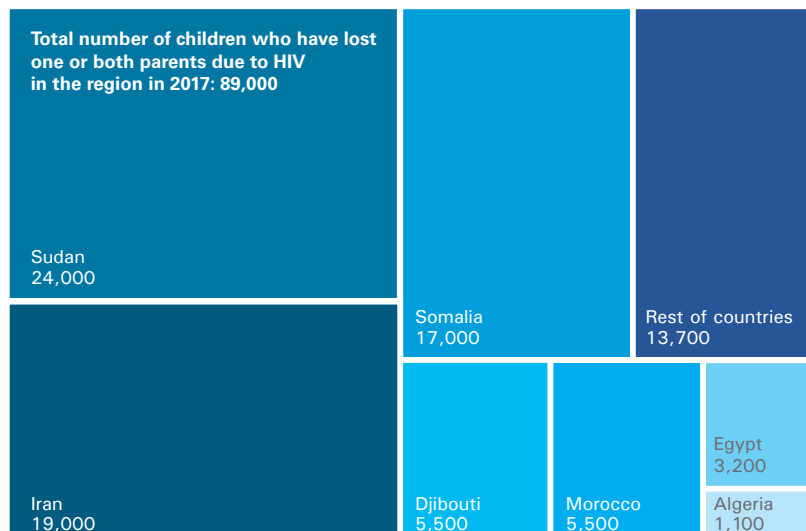
**Number and percentage distribution of adolescents aged 10–19 living with HIV, by country, Middle East and North Africa, 2017**



Data source: UNAIDS 2018 estimates.  
 Note: Data are not available for Yemen, Saudi Arabia and Syrian Arab Republic - though they are included in the regional total.

FIGURE 16.

**Estimated number of children aged 0–17 who have lost one or both parents due to HIV, by country, Middle East and North Africa, 2017**



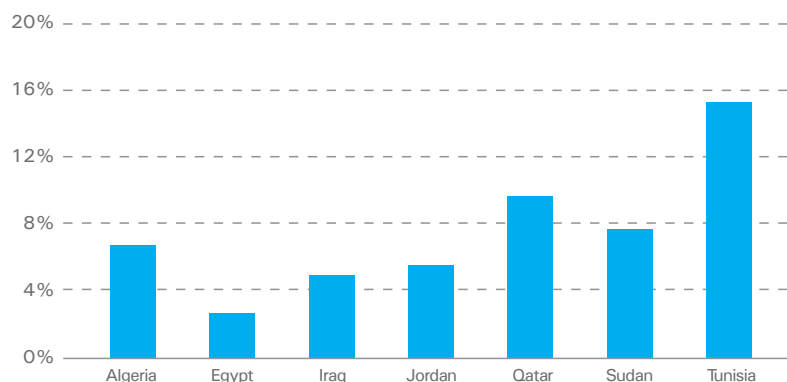
Data source: UNAIDS 2018 estimates.

Some other indicators offer useful information of relevance to adolescents' risk and vulnerability to HIV. They include factors such as comprehensive knowledge of HIV; uptake of HIV testing; access to sexual and reproductive health information and services; access to comprehensive sexuality education; and girls' education opportunities and access to health services in general. Available information relevant to these indicators for 2017 includes the following:

- Based on UNICEF analysis of data from seven countries, only 5 per cent of adolescent girls aged 15–19 in the region had comprehensive knowledge about HIV<sup>25</sup> (comparable data for boys were not available). As indicated in Figure 17, the rates per country reporting such information range from a high of 15.3 per cent in Tunisia to 2.7 per cent in Egypt.

FIGURE 17.

**Percentage of adolescent girls aged 15–19 with comprehensive knowledge of HIV, by country, Middle East and North Africa, 2017**



**Data sources:** Nationally representative population-based surveys, including Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), AIDS Indicator Surveys (AIS) and other household-based surveys, 2010–2017.



© UNAIDS/PViroT

## Box 2. Paulette, a change-maker for adolescents in Djibouti



© UNICEF/Djibouti/2018/Boujrada

Paulette, an HIV educator in Djibouti

Paulette is an active member of the health community management committee in Hayable, a district in Djibouti's capital city. It all started when she lost her older son, Houssein, to suicide by self-immolation 10 years ago, an act she interpreted as a response to denial and desperation related to his HIV-positive status. "He was only 21 years old and wanted to discover the world," Paulette said.

"My son was not informed about risky sexual behaviour and he ended up engaging in activities that

increased his vulnerability to HIV infection," she added. Having engaged in sexual intercourse without protection, her son got infected with HIV.

Paulette, now 56 years old, remembers with sorrow how Houssein decided to put an end to his life when he came to know that he was living with HIV. He had told his mother about his status, hoping to find support and lift the weight off his young shoulders. Now, the guilt will forever live in his mother's memory. For him, it was the end of the tunnel because

he thought he had absolutely no future with such a disease.

The loss of Houssein made Paulette realize the dangers of all the stigma and self-stigma that surrounds HIV – stigma that cost her the life of her son. The pervasive negative perceptions around HIV in the community – within one's own social circle as well as within health facilities – represent an environmental factor that reinforces the self-stigma, sense of shame, and thus amplifies the feelings of hopelessness and desperation. Realizing the devastating impact

this vicious circle of stigma had on her son, Paulette decided to start her work as a promoter of change within her community for people living with and vulnerable to HIV.

Her work primarily focuses on young people – girls and boys alike. Today, Paulette is engaged in a wide range of information-support activities including sexuality education, promoting safe sexual behaviour and the importance of immunization against childhood diseases. She is an influential member of the local community management committee, which

is composed of religious and traditional leaders as well as other local community representatives.

As a committee member, Paulette also conducts community dialogues – including in community development centres and youth recreational centres – and participates in door-to-door campaigns to raise HIV awareness among adolescents and youth, contributing to minimizing the stigma around HIV.

As part of this overall effort, Paulette also goes to other neighbour-

hoods to talk directly with young people and explain to them the importance of protection (including condoms) while having sex, and to help to demystify the misconceptions around HIV. Many of them, she said, often seem uncomfortable and non-receptive at times to what she has to tell them. But she persists, noting, “Without knowledge, young people like my son are in danger of HIV and AIDS. Young people need awareness raising to know how to prevent HIV and AIDS and the importance of testing.”

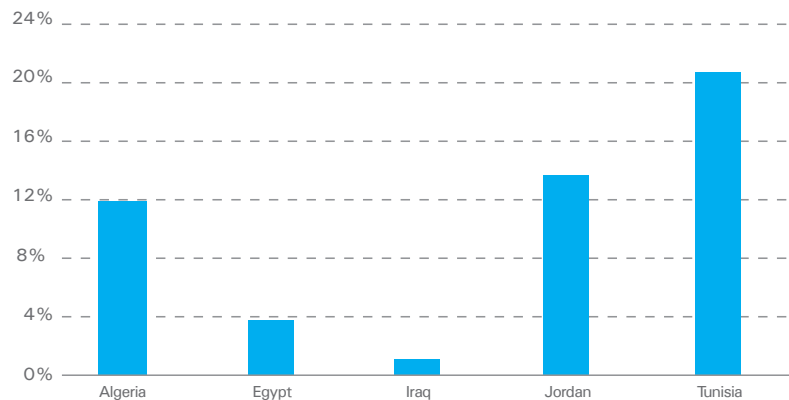
- By far the majority of adolescent girls aged 15–19 in the region do not know where to get tested for HIV. As seen in Figure 18, of the five countries with information for this indicator, girls in Iraq had the least knowledge (0.9 per cent), while those in Tunisia had the most (20.6 per cent).<sup>26</sup> Sex education of any sort is rare in schools across the region,<sup>27</sup> and studies that have explored such issues have found low levels of

reported communications between adolescents and parents about sexual matters.<sup>28</sup> Without access to comprehensive sexuality education (or any sexuality information at all), adolescents therefore usually have inadequate knowledge about what HIV is, whether and why they might be at risk, and where they might go to get HIV services of any kind.

FIGURE 18.

**Percentage of adolescent girls aged 15–19 who know where to get tested for HIV, by country, Middle East and North Africa, 2017**

**Data sources:** Nationally representative population-based surveys, including Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), AIDS Indicator Surveys (AIS) and other household-based surveys, 2010–2017.







© UNAIDS/PViroT

### 3.2 Special concerns about future risks and impact

Although based on limited input, the data on comprehensive knowledge about HIV indicate how poorly served the region's adolescents are with the tools and information they need to understand and protect themselves from HIV. One reason the current situation is such a concern is due to the youth bulge (as discussed previously) where large proportions of people in countries with rapid population growth are younger than 20. As the number of young people expands, the number of people exposed to HIV risk factors also increases. Fuelled largely by a lack of political commitment to eliminate stigma and discrimination as well as social taboos, such factors include inadequate or substandard education, high rates of unemployment and economic pressure, and limited or non-existent sexuality education.

Another concern is closely linked to most of those risk factors but deserves special attention: the unique vulnerability of adolescent girls and young women, who remain at a higher risk of experiencing potentially negative sexual health consequences due to existing gender inequalities and gender-based violence (GBV). Practices such as female genital mutilation (FGM) represent the most extreme manifestations of GBV that are highly prevalent in many countries in the region, with Egypt and Sudan having some of the highest rates of FGM prevalence worldwide. The highest FGM prevalence globally is registered in Egypt: 87 per cent of women and girls aged 15–49 have undergone FGM as of 2015, and 14 per cent of girls aged 0–14 as of 2016.<sup>29</sup> In Sudan, the prevalence is 86.6 per cent among girls and women aged 15–49<sup>30</sup> and 32 per cent among girls aged 0–14.<sup>31</sup> FGM is also widespread in Djibouti (78 per cent among women of all age cohorts)<sup>32</sup> and Yemen (19 per cent among girls and women aged 15–49).<sup>33</sup> FGM is also practised in Iraq, particularly in the northern parts of the country, with the prevalence standing as high as 38 per cent for girls and women aged 15–49 in Kurdistan region.<sup>34</sup>

Although data are scarce in the region for many indicators around issues related to GBV and gender inequalities, the extent and social acceptance of violence against adolescent girls and young women are further suggested by existing statistics on gender-related perceptions – for example, nearly half (45 per cent) of girls aged 15–19 consider a husband to be justified in hitting or beating his wife for at least one of the following specified reasons: if his wife burns the food, argues with him, goes out without telling him, neglects the children or refuses sexual relations.

In much of the Middle East and North Africa, therefore, adolescent girls not only are unlikely to know about HIV or how to protect themselves but might not be able to act on that knowledge even if they have it.

New infections among adolescents are projected to increase in the next few years, as shown in Figure 19. In order to achieve the 2020 target of 75 per cent reduction in new infections for children and adolescents aged 10–19, measures must be taken to address the above concerns.

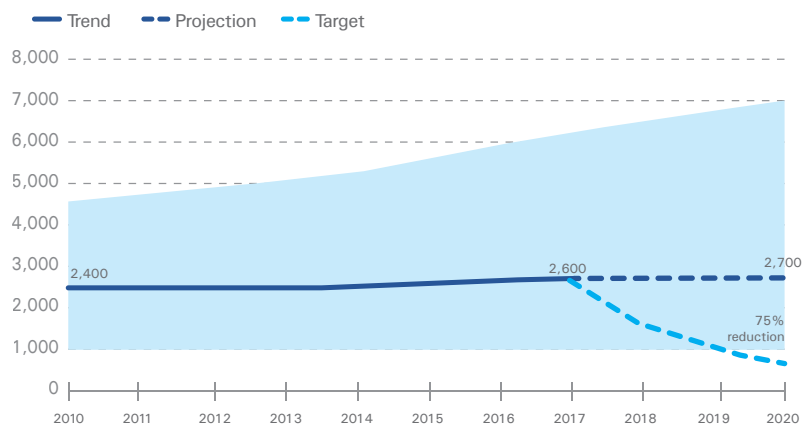


FIGURE 19.

### Number of new HIV infections among adolescents aged 10–19, Middle East and North Africa 2010–2017 trend, 2017–2020 projection and 2020 target

Data sources: UNICEF analysis of UNAIDS 2018 estimates.

Note: The 2020 target for children age 0–9 is a 95 per cent reduction in new HIV infections. The 2020 target for adolescents aged 10–19 is 75 per cent reduction in new HIV infections. Projections are based on the average annual rate of reduction in new HIV infections from 2010–2017.



## 3.3 Adolescent key populations: The bulk of the burden

Although age- and risk-aggregated data are largely unavailable in the Middle East and North Africa, it is likely that adolescent key populations are bearing, and will continue to bear, the biggest HIV burden among adolescents in general.

The full impact to date is difficult to know because data are scarce in areas such as the size of individual key populations, their share of people living with HIV and annual new infections, and the share of adolescents living with HIV who are members of key populations. Moreover, many countries in the Middle East and North Africa still require that adolescents must obtain parental consent before being tested for HIV; a situation which is further exacerbated by the stigma and social taboos faced by adolescents on any matters related to sexuality or HIV within their families.

Only a handful of countries in the region have conducted integrated biological and behavioural surveillance (IBBS) surveys among one or more of the three main HIV key population groups (MSM, female sex workers

and people who inject drugs).<sup>35</sup> Even those that have conducted surveys at various times have not done so consistently.

The limited and inconclusive data nevertheless underscore the severely heightened HIV risk and vulnerability for those populations and the longstanding assumption that they are driving epidemics in the region. For MSM, only about one third of the region’s countries reportedly have conducted at least one IBBS survey, but results indicate prevalence several times higher than the general population – for example, ranging from 3.6 per cent in Lebanon (2007) to 13 per cent in Tunisia (2011).<sup>36</sup> HIV prevalence estimates over the past decade for people who inject drugs were as high as 15 per cent in Iran (2011)<sup>37</sup>, and 6.5 and 6.8 per cent in two major cities of Egypt – Alexandria and Cairo, respectively (2010).<sup>38</sup> Such estimates and reports are the basis for statements by WHO that evidence from different countries has shown that there are concentrated HIV epidemics among people who inject drugs in Egypt, Iran, Libya and Morocco; that epidemics among MSM are becoming increasingly prominent in Egypt, Sudan and Tunisia; that there is “elevated” HIV prevalence among female sex workers in Djibouti, Morocco and Somalia; and that there is evidence of onward transmission of HIV from male migrant workers to their spouses upon return to their home countries.<sup>39</sup>



However, there are some signs of improvement in targeted data collection, with the results likely to offer better indications of HIV-related vulnerabilities in parts of the region. Jordan and Lebanon, for example, conducted IBBS surveys on MSM and female sex workers in 2018, with both studies aiming to provide estimates of the size of the populations and the prevalence of HIV, syphilis and associated risk behaviours among them.<sup>40</sup>

*There are some signs of improvement in targeted data collection, with the results likely to offer better indications of HIV-related vulnerabilities in parts of the region.*

### 3.4 Children and adolescents in humanitarian crises

Increased and improved data on the three ‘traditional’ key populations in HIV contexts are also critical to help assess and respond to HIV risks and impact among other vulnerable populations in the region, including refugees, migrants and internally displaced persons (IDPs). Conflict, natural disasters and other kinds of disruptions are affecting massive numbers of people in several countries of the region. More than 2.3 million IDPs are dispersed across Yemen,<sup>41</sup> and more than 170,000 in Libya.<sup>42</sup> Jordan has received more than 1 million refu-

gees in the past several years due to strife and turmoil in neighbouring countries,<sup>43</sup> with about the same number now also being hosted in Lebanon.<sup>44</sup>

Children and adolescents are disproportionately represented among many of these groups in the region. In Sudan, for example, of the 2.3 million IDPs reported in 2017, UNICEF has estimated that 1.4 million (60 per cent) were children under the age of 18.<sup>45</sup> The HIV threats for them and their under-18 counterparts among IDPs, refugees and migrants throughout the region are intensified by factors including instability and violence, poverty, lack of education and lack of access to health care systems and services in general and HIV-related ones in particular.

Some efforts have been initiated to mitigate HIV risks. Agencies such as the International Organization for

Migration (IOM) have supported civil society groups to provide HIV-related services to vulnerable groups, including refugees, IDPs, migrant workers, people in hard-to-reach areas in Syria and Yemen, in addition to local communities.<sup>46</sup> Part of this work includes targeted interventions aimed at providing support to key populations.<sup>47</sup> Such initiatives and approaches are vital to address some of the HIV prevention and treatment needs among the most vulnerable adolescents across the Middle East and North Africa. For every country in the region, more extensive and consistent collecting of age- and gender-disaggregated data could help to provide a more detailed picture of HIV burdens and risks among adolescents within various key populations. Targeted knowledge of this sort is necessary to boost progress in all components of HIV responses among children and adolescents.





## 4. Strategizing for the future: Taking advantage of opportunities to end HIV as a threat among children and adolescents

### 4.1 Exploiting unique opportunities to turn around failing responses

This report's assessment of the HIV situation among children and adolescents in the Middle East and North Africa discusses many examples of how and where the region has made little or no progress and is falling further behind other regions. But as has been noted, the Middle East and North Africa also has some distinct advantages, the most important of which is the low overall HIV burden. Countries across the region have so far avoided major HIV epidemics.

Therefore, even with all the challenges to improved HIV responses across the region – including limited data,

financial and human resource constraints, stigma, lack of awareness, harsh attitudes and policies to key populations, civil strife and conflicts, etc. – **ending HIV as a public health threat in the Middle East and North Africa is an achievable goal.**

It is also likely, however, that this opportunity is not open-ended. Failure to act, or to act responsibly, could increase economic, social and security consequences in addition to the devastating individual and public health effects. One strategy is to **focus on improving prevention efforts by targeting those most vulnerable – notably key populations of all ages, including adolescent girls; women and girls who are pregnant or breastfeeding; and adolescents in general.** Making and sustaining progress in these specific prevention areas promises to have the greatest impact in reversing the epidemic's spread and saving countries billions of dollars and thousands of lives over the longer term.



Countries in the Middle East and North Africa could take advantage of and benefit from the experiences and learning in countries and regions that are more advanced in their HIV responses. More tools and evidence-informed guidelines, including those tailored to concentrated epidemics, are available on how to prevent HIV transmission, including the value and impact of combination prevention. That approach is based on making available – especially to the most vulnerable and at risk – a wide range of biomedical, behavioural and structural interventions and support services such as full realization of ‘test and treat’ policies (especially for pregnant women); pre-exposure prophylaxis (PrEP), especially for certain key populations; adherence support for people initiated on ART; HIV self-testing; partner notification; and extensive engagement by community groups and other civil society organizations in all aspects of HIV prevention, treatment and support services. Similarly, countries with hugely varying epidemics around the world have dramatically improved PMTCT results by quickly adopting and aggressively implementing each new global protocol, including ‘Option B+’ (lifelong ART for all pregnant and breastfeeding women).<sup>48</sup>

Because of the low region-wide HIV burden, the Middle East and North Africa could become an example to the world by leading global efforts to end HIV as a public health threat. ***The region is especially well placed to eliminate MTCT.*** As noted in Section 2 of this report, countries such as Iran and Kuwait have taken strong measures to make elimination a priority. Other countries can learn from their approaches even as they introduce and implement improved PMTCT interventions that are tailored specifically to their contexts. Box 3 discusses some additional challenges and opportunities related to eliminating vertical transmission in the region.



### Box 3. Eliminating vertical transmission: Challenges and opportunities

Eliminating vertical transmission would reduce and eventually end altogether the need for specialized and often costly paediatric ARV drugs. It would also represent a significant step toward the ultimate objective of putting HIV epidemics into irreversible declines and ending HIV as a public health threat. Because HIV burdens are relatively low, eliminating vertical transmission across the Middle East and North Africa is objectively a more achievable goal than in most other regions.

#### *Challenges*

However, numerous challenges exist to that vision in the Middle East and North Africa, many of which were extensively articulated in the regional EMTCT framework from 2012<sup>49</sup> and remain valid seven years later. Most of the challenges related to EMTCT that are summarized below mirror or contribute to those relevant to the overall HIV epidemics in the region, including many discussed elsewhere in this report.

- Limited prioritization of HIV in legislation, policy-making and political arenas is due to pervasive stigma and discrimination against people living with HIV and against key populations, as well as low HIV prevalence in general. Despite existing

evidence, the costs of testing large numbers of low-risk pregnant women in order to identify the few who are infected with HIV may appear high, and cost-effectiveness has been questioned. But the evidence shows that a universal approach to antenatal HIV testing achieves the best health outcomes, is most cost-effective, and results in the most cost savings in the long term across a range of HIV prevalence settings, including in low and concentrated epidemics.<sup>50</sup>

- Limited domestic and donor funding for HIV, coupled with competing priorities for health spending, result in even lower priority for HIV services.
- Integrating PMTCT services within reproductive, maternal, neonatal and child health programmes can be challenging, as programmes historically are run vertically. Also, there is limited global guidance or regional- or country-level best practices for PMTCT approaches in contexts of low prevalence and concentrated epidemics.<sup>51</sup>
- Social challenges include high levels of HIV-related stigma and discrimination, which are due in part to limited understanding or awareness of HIV

risks and realities among the general population, and conservative and often restrictive cultural and religious traditions that minimize women's decision-making power and education.

An overarching consideration is that several countries in the Middle East and North Africa are experiencing civil strife or are in post-crisis or recovery situations. In such contexts, competing health priorities – especially those that seem more immediately urgent or affect more people directly – crowd out attention and resources for PMTCT or HIV in general.

#### *Opportunities and possible solutions*

PMTCT results in countries such as Algeria and Morocco have demonstrated the acceptability of large-scale PMTCT interventions (for example, HIV testing of pregnant women and the initiation of those living with HIV on ART). Lessons from those countries and some others (for example, Iran) indicate that quality and coverage can be improved even in environments where health systems face chronic fiscal constraints. The most successful countries also tend to have more extensive integration of PMTCT services into ANC programmes.

New technologies also hold promise for greater efficiency and effectiveness. For example, integrating point-of-care diagnostic platforms in existing conventional systems could dramatically improve EID uptake.

Other opportunities might exist in highlighting the cost-benefits of more effective PMTCT service delivery. In every setting, the lifetime costs of caring for each child living

with HIV greatly exceed those associated with preventing the infection in the first place. Improving PMTCT ART coverage to global levels alone (80 per cent in 2017, compared with the region's 22 per cent) could represent significant long-term savings for health systems in many countries in the Middle East and North Africa through reductions in MTCT, horizontal transmission and improvements in maternal health.

Highlighting cost-benefits also has the potential added value of concentrating policy-makers' attention on the economic and social impacts of HIV in general, including their roles and responsibilities in understanding and curbing epidemics. Eliminating MTCT and ending HIV as a public health threat could be presented as a high-profile 'win' that could be realistically achieved while absolute burdens and risks remain low.



© UNAIDS/PViroT





© UNICEF/UN0199046/Noorani

## 4.2 Recommendations on how to achieve new and sustained progress

**Political will is the most important requirement for positive change on behalf of children and adolescents vulnerable to HIV in all countries in the Middle East and North Africa.** Only limited improvements can be attained without guidance and instruction from legislators and government decision-makers, as well as effective monitoring and follow-through over time. Governments are most likely to exhibit greater political will to confront HIV epidemics when they have a better understanding of the cost-benefits of more effective responses.

Partnerships and coordination are a second overarching requirement. **To achieve desired and sustained improvements, most countries in the Middle East and North Africa would benefit from increased and enhanced engagement with external and internal partners from a wide range of different sectors** (other governments, civil society groups, foundations, research, the private sector and academic institutions, etc.). All can provide vital expertise and support. External partners can provide technical and financial assistance; internal ones can help to ensure that services and programmes reach those most in need in the most effective ways (for example, through community-based outreach among key populations).

For partnerships to be most effective, especially those involving external partners providing resources, countries should increase domestic financing for HIV programming. This would also be an important signal of increased political will to tackle the epidemic more effectively and responsibly.

Listed below are examples of other recommended strategies, interventions and approaches aimed at improving HIV responses among children and adolescents in the Middle East and North Africa:

- **Make improved data gathering a top initial priority.** With input and support from internal and external partners, health ministry staff and other relevant government officials should agree on a limited set of indicators against which HIV-relevant data will be collected regularly and consistently. The set should include age- and sex-disaggregated indicators – including within distinct and different key population groups, which align with global reporting mechanisms and standards. As part of this overall effort, IBBS surveys should be routinely conducted among all three ‘traditional’ HIV key populations. External partners can help build technical capacity and qualified human resources to conduct IBBS activities.

There are encouraging signs that the region’s countries recognize they must do more to bridge the gaps in data and awareness regarding HIV. At the top level, some



important developments in recent years stem from the Arab Strategic Framework for the Response to HIV and AIDS (Arab AIDS Strategy 2014–2020), with an aim to advance achievement of key United Nations (UN) HIV goals and targets.<sup>52</sup> In April 2017, for example, the technical committee responsible for the operationalization of the Arab AIDS Strategy made the following statement, showing strong support and encouragement for improved collection of comprehensive data on HIV:

*Limited strategic information on the HIV situation, high level of stigma and discrimination against people living with HIV and limited financial and technical resources are key factors hindering an effective HIV response. In this context, it is essential to increase the effectiveness of epidemic surveillance to generate more strategic information and to ensure prevention activities are strengthened and developing strong and multi-sectoral response.*<sup>53</sup>

Upgrades and changes to existing surveillance systems might be needed in many countries. External partners are likely to be able and willing to provide technical and financial support for such improvements, as well as for data-gathering activities, if quality action plans are in place and they are convinced of the government's commitment. In any environment, a quality action plan to gather HIV-relevant data will include participation by civil society groups and, ideally, by those with expertise and understanding of key populations within the country. Therefore, governments' efforts to improve data collection rely as well on pragmatic and open-minded cooperation with sectors whose activities are often restricted and individuals who are often highly stigmatized and harassed in society. It is particularly important to obtain basic size estimates of key populations as an essential denominator for other parts of the 90-90-90 cascade analysis.

- ***Integrate HIV within ANC and immunization service delivery.*** The notable success in ANC and immunization coverage across the Middle East and North Africa offers a relatively easy and obvious entry point to improve PMTCT service delivery. At the very least, HIV testing should be offered to all women attending ANC services and to all mothers

living with HIV and their children at immunization visits. These two targeted approaches could help to prevent new infections transmitted from mother to child during birth and breastfeeding as well as identify infants and children living with HIV who are currently not on ART. Investments by the region's governments in ANC and immunization services could be further optimized by offering other testing and monitoring opportunities for women in those settings, including for syphilis and viral hepatitis. The adoption of approaches such as Integrated Management of Newborn and Child Illnesses (IMNCI) and Integrated Management of Adolescent and Adult Illnesses (IMAAI) have yielded positive results as tools which help leverage the success of maternal and child health service delivery platforms to address HIV and other illnesses.

All staff members at ANC and immunization facilities who are involved in HIV testing should be trained to provide reliable and accurate information about HIV and treatment options. Also, mechanisms should be introduced to hold them accountable for providing the HIV services as directed and in appropriately confidential ways. This broad-based integrated testing of mothers and children must be linked to robust systems for referral and linkage to treatment services for individuals who are found to be positive and who need access to care.

- ***Make the concept of combination prevention a guiding principle and ensure that it is followed through.*** As discussed previously, combination prevention is an approach that aims to reach all people with accessible, affordable and acceptable HIV prevention tools while also addressing behavioural and structural obstacles. The idea is based on the understanding that each person might want or need different kinds of support at different times in their lives. Therefore, a wide range of support services should be available, even if they are not relevant for everyone. Adolescents who inject drugs, for example, might benefit most from opioid substitution therapy (OST). The best (and perhaps only) way to reach women and adolescent girls in rural, isolated villages, meanwhile, might be through localized peer-support initiatives.

Combination prevention sounds as though it could be expensive and complicated to implement, both conceptually and in reality. Guidance and examples from other contexts are available, however. Costs are likely to be more manageable than assumed because many of the most expensive and difficult-to-deliver interventions, such as PrEP and OST, can and should only be targeted to key populations or others who are highly vulnerable.

- **Identify and implement more effective strategies to raise awareness about HIV among adolescents and increase their uptake of HIV testing, treatment and prevention services.** Cultural sensitivities make this a complicated proposition. But, little progress will be made in HIV prevention overall without expanded knowledge and access among adolescents and young people. Knowledge, meanwhile, often can only translate into improvements when there is greater access to affordable and reliable services, including condoms and testing for HIV and sexually transmitted infections (STIs), etc. Confidentiality is a critical priority, especially for staff and volunteers involved in all aspects of interacting with adolescents, including at health facilities.

Perhaps the best approach might be to use improved data to identify the most at-risk and vulnerable individuals and communities (including key populations), and to introduce highly tailored interventions for them. Lessons learned can then be used to expand elsewhere. Depending on the context, interacting and working with local leaders, teachers and parents might help to create more open environments for such activities.

- **Honour existing commitments.** The region's countries are signatories to all major United Nations declarations on HIV/AIDS and thus have committed to meeting the '90-90-90' targets and other goals. Moreover, many governments also have made commitments at the regional level that, if implemented more widely and consistently, could have a major beneficial impact on their HIV responses.

For example, the Arab Strategic Framework for the Response to HIV and AIDS (2014–2020), endorsed by the Council of Arab Ministers of Health, includes 10 strategic goals and targets.<sup>54</sup> At this point, as the strategy's timeline nears the end, signs of progress toward meeting most of them have been minimal in many endorsing countries. Still, the aspirational goals deserve more attention and commitment. It is noteworthy, for example, that one of the goals refers to eliminating new infections among children.

Each country in the Middle East and North Africa also should **recognize the importance of integrating HIV into other agendas and frameworks that they have agreed are regional priorities.** For example, by signing up to the 2030 Agenda for Sustainable Development, the region's countries have committed to equity and gender quality in access to health services and human rights protection. Improved HIV responses in the region, therefore, must focus on reducing the impact of some of the most severe barriers that children, adolescents, pregnant and breastfeeding women and adolescent members of key populations face in getting the care and services they need, including social stigma and harsh legal and policy restrictions.

Few countries in the Middle East and North Africa will find it easy or simple to achieve region-wide EMTCT and other positive HIV response milestones directly related to adolescents, children, pregnant women and mothers. It will be much more difficult for some, due to the huge disparities across countries in wealth, education, conflict impact, and social and cultural expectations and limits. Most, though, could do a better job by at least making a minimum package of HIV prevention services available more consistently. That would be a critical stepping stone for the Middle East and North Africa as a whole, as it could jumpstart progress toward reducing the impact of HIV and thereby minimize its destructive consequences for individuals and families as well as countries' public health, economies and societies.

# Endnotes

- 1 Unless stated otherwise, definitions of children (0–17 years old), adolescents (10–19 years old), youth (15–24 years old) and young people (10–24 years old) adopted by the United Nations are used in this report.
- 2 The UNAIDS regional classification is used for this report. The 20 countries in the Middle East and North Africa region include: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.
- 3 Bozicevic, Ivana, Gabriele Riedner and Jesus Maria Garcia Calleja, 'HIV Surveillance in MENA: Recent developments and results', *Sex Transm Infect*, 89 (2013), pp. iii11-iii16, 10.1136/sextrans-2012-050849, 23 February 2013.
- 4 Gökengin D., et al., 'HIV/AIDS: Trends in the Middle East and North Africa region', *Int J Infect Dis*. 2016;44:66–73. doi: 10.1016/j.ijid.2015.11.008, March 2016.
- 5 Unless stated otherwise, the statistics cited throughout this report are based on Global AIDS Monitoring 2018 and UNAIDS 2018 estimates for the 20 countries classified as being in the Middle East and North Africa region.
- 6 UNAIDS set the global '90-90-90' targets in 2014, and it supports all countries in tracking progress toward them. The targets are part of the UNAIDS 'Fast-Track' agenda aimed at ending the HIV epidemic as a public health threat by 2030. The three main targets for 2020 are: 90 per cent of people living with HIV know their HIV status; 90 per cent of people who know their HIV-positive status are on treatment; and 90 per cent of people on treatment have suppressed viral loads.
- 7 SDG 3 is the main health-focused goal of the 17 SDGs. Its stated aim is to "ensure healthy lives and promote well-being for all at all ages." SGD 3.3 is the following: "By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases." <[www.who.int/sdg/targets/en/](http://www.who.int/sdg/targets/en/)>.
- 8 The other region is Eastern Europe and Central Asia.
- 9 Joint United Nations Programme on HIV/AIDS, *UNAIDS Data 2018: The state of the epidemic*, UNAIDS, Geneva, 2018. The 0.03 ratio selected by UNAIDS corresponds to an average life expectancy after infection of 30 years. As noted in the source publication, p.14: "UNAIDS has selected an epidemic transition benchmark of 0.03, which corresponds to an average life expectancy after infection of 30 years. At this average life expectancy, the total population of people living with HIV will gradually fall if the number of new HIV infections is less than three per 100 people living with HIV per year."
- 10 United Nations Children's Fund, *Uprooted: The growing crisis for refugees and migrant children*, UNICEF, New York, 2016.
- 11 Joint United Programme on HIV/AIDS, *Prevention Gap Report*, UNAIDS, Geneva, 2016.
- 12 Abu-Raddad, Laith J., et al., *Characterizing the HIV/AIDS Epidemic in the Middle East and North Africa: Time for strategic action*, World Bank, Washington, DC, 2010.
- 13 Carroll, Aengus and Lucas Ramón Mendos, *State-sponsored Homophobia 2017: A world survey of sexual orientation laws: criminalisation, protection and recognition*, International Lesbian, Gay, Bisexual, Trans and Intersex Association, Geneva, 2017. According to existing laws, men can be sentenced to death for engaging in same-sex practices in 10 countries around the world as well as some states in an 11th (Nigeria). Of the 10, seven are in the Middle East and North Africa as defined for this report: Iran, Qatar, Saudi Arabia, Somalia, Sudan, United Arab Emirates and Yemen.
- 14 For example: Himmich H., Kazatchkine M. and Stimson G., 'Drug Policy and Human Rights in the Middle East and North Africa: Harm reduction, legal environment and public health', *International Journal of Drug Policy*, Volume 31, May 2016, pp. 4-5.
- 15 United Nations Children's Fund, *MENA Generation 2030: Investing in children and youth today to secure a prosperous region tomorrow*, UNICEF, April 2019.
- 16 United Nations Children's Fund, Global databases of population-based household surveys, including Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS), 2010–2018. <<https://data.unicef.org/topic/maternal-health/antenatal-care/>>.

- 17 Ishikawa, Naoko, et al., 'Should HIV testing for all pregnant women continue? Cost-effectiveness of universal antenatal testing compared to focused approaches across high to very low HIV prevalence settings', *J Int AIDS Soc.* 2016;19(1):21212, 14 December 2016.
- 18 Ibid.
- 19 World Health Organization validation for the elimination of mother-to-child transmission of HIV and/or syphilis. <[www.who.int/reproductivehealth/congenital-syphilis/WHO-validation-EMTCT/en/](http://www.who.int/reproductivehealth/congenital-syphilis/WHO-validation-EMTCT/en/)>.
- 20 World Health Organization Regional Office for the Eastern Mediterranean, *Towards the Elimination of Mother-to-Child Transmission of HIV: Conceptual framework for the Middle East and North Africa*, WHO, Cairo, 2012.
- 21 Ibid.
- 22 Joint United Nations Programme on HIV/AIDS, *MENA Regional Joint Programme Monitoring System (JPMS) Report*, UNAIDS, 2019.
- 23 World Health Organization and United Nations Children's Fund, 'Estimates of national routine immunization coverage', WHO and UNICEF, 2017 revision.
- 24 McCollum, Eric D., et al., 'Superior Uptake and Outcomes of Early Infant Diagnosis of HIV Services at an Immunization Clinic Versus an 'Under-Five' General Pediatric Clinic in Malawi', *Journal of Acquired Immune Deficiency Syndromes*, Vol. 60, No. 4, August 2012, pp. 107–110, doi:10.1097/QAI.0b013e31825aa721; Chamla, Dick, et al., 'Integration of HIV Infant Testing into Immunization Programmes: A systematic review', *Paediatrics and International Child Health*, Vol. 35, No. 4, 2015.
- 25 United Nations Children's Fund, Global databases of population-based household surveys, including DHS, MICS, AIDS Indicator Surveys (AIS) and other such surveys, 2010–2018.
- 26 United Nations Children's Fund, Global databases of population-based household surveys, including DHS, MICS, AIS and other such surveys, 2010–2018.
- 27 See for example: Dejong, J. and El-Khoury, G., 'Reproductive Health of Arab Young People'. *BMJ* (Clinical research ed.). 333. 849-51. 10.1136/bmj.38993.460197.68, 2006; International Women's Health Coalition, 'Young Adolescents' Sexual and Reproductive Health and Rights: Middle East and North Africa', Policy brief, October 2007.
- 28 Obermeyer, Carla, 'Adolescents in Arab Countries: Health statistics and social context', Doha International Family Institute, 10 April 2015.
- 29 Ministry of Health and Population [Egypt], El-Zanaty and Associates [Egypt], and ICF International, *Egypt Demographic and Health Survey 2014*, Cairo, Egypt and Rockville, Maryland, USA, 2015.
- 30 Central Bureau of Statistics and United Nations Children's Fund, *Multiple Indicator Cluster Survey 2014 of Sudan: Final report*, CBS and UNICEF, Khartoum, February 2016.
- 31 United Nations Children's Fund, *Programming for and with Adolescents and Youth: Regional guidance for the Middle East and North Africa*, UNICEF, 2018.
- 32 Ministry of Health [Djibouti], Directorate of Statistics and Demographic Studies [Djibouti], The Pan-Arab Project for Family Health, *The Second Djiboutian Survey on Family Health EDSF/PAPFAM 2, Final report*, 2012.
- 33 Ministry of Public Health and Population [Yemen], Central Statistical Organization [Yemen], Pan Arab Program for Family Health and ICF International, *Yemen National Health and Demographic Survey 2013*, MOPHP, CSO, PAPFAM and ICF International, Rockville, Maryland, 2015.
- 34 United Nations Children's Fund, 'Female Genital Mutilation Country Profiles: Iraq', [https://data.unicef.org/wp-content/uploads/country\\_profiles/Iraq/FGM\\_IRQ.pdf](https://data.unicef.org/wp-content/uploads/country_profiles/Iraq/FGM_IRQ.pdf), UNICEF, 2019.
- 35 Gökengin D., et al. 'HIV/AIDS: Trends in the Middle East and North Africa region'. *Int J Infect Dis.* 2016;44:66–73. doi: 10.1016/j.ijid.2015.11.008. At the time the article was published, in 2016, only three countries had conducted and published IBBS surveys on all three of those populations at least once: Egypt, Lebanon and Tunisia. See also: Bozicevic, Ivana, Gabriele Riedner and Jesus Maria Garcia Calleja, 'HIV Surveillance in MENA: Recent developments and results', *Sex Transm Infect*, 89 (2013), pp. iii11-iii16, [10.1136/ssextrans-2012-050849](https://doi.org/10.1136/ssextrans-2012-050849), 23 February 2013.
- 36 Bozicevic, Ivana, Gabriele Riedner and Jesus Maria Garcia Calleja, 'HIV Surveillance in MENA: Recent developments and results', *Sex Transm Infect*, 89 (2013), pp. iii11-iii16, [10.1136/ssextrans-2012-050849](https://doi.org/10.1136/ssextrans-2012-050849), 23 February 2013.
- 37 Ibid.
- 38 Ministry of Health and FHI, *HIV/AIDS Biological & Behavioral Surveillance Survey: Round two summary report*, MOH and FHI, Cairo, 2010.



- 39 World Health Organization Regional Office for the Eastern Mediterranean, AIDS/HIV/STI page. <[www.emro.who.int/health-topics/aids-hivsti/index.html](http://www.emro.who.int/health-topics/aids-hivsti/index.html)>.
- 40 International Organization for Migration, *Middle East Response Annual Report*, IOM, 2018.
- 41 International Organization for Migration, *Yemen: Task Force on Population Movement (TFPM) 17th Report, August 2018*, IOM, 25 September 2018.
- 42 International Organization for Migration, Displacement Tracking Matrix, *Libya's Migrant Report – Round 23, November-December 2018*, IOM, 2019.
- 43 Rahhal, Assad, *Evaluation of HIV/AIDS activities in Jordan, July 2018*, International Organization for Migration, Amman.
- 44 United Nations High Commissioner for Refugees, 'Syria Regional Refugee Response', <<https://data2.unhcr.org/en/situations/syria/location/71>>, accessed 31 March 2019.
- 45 United Nations Children's Fund, *Sudan Humanitarian Situation Report*, UNICEF, June 2017.
- 46 International Organization for Migration, *Middle East Response Annual Report*, IOM, 2018.
- 47 Ibid.
- 48 Introduced by WHO in 2013, Option B+ is a PMTCT protocol in which all pregnant women living with HIV are offered access to lifelong ART at the time of diagnosis. It has been adopted by most countries around the world and is a precursor of a more recent WHO recommendation that all people who test positive are offered ART ('test and treat').
- 49 World Health Organization Regional Office for the Eastern Mediterranean. *Towards the Elimination of Mother-to-Child Transmission of HIV: Conceptual framework for the Middle East and North Africa*, WHO, Cairo, 2012.
- 50 Ishikawa, Naoko, et al., 'Should HIV testing for all pregnant women continue? Cost-effectiveness of universal antenatal testing compared to focused approaches across high to very low HIV prevalence settings', *J Int AIDS Soc.* 2016;19(1):21212, 14 December 2016.
- 51 Ibid.
- 52 Joint United Nations Programme on HIV/AIDS, 'The Council of Arab Ministers of Health endorses strategy to halt the HIV epidemic in Arab countries', press release, 17 March 2014. <[www.unaids.org/en/resources/presscentre/featurestories/2014/march/20140317arabaidstrategy](http://www.unaids.org/en/resources/presscentre/featurestories/2014/march/20140317arabaidstrategy)>
- 53 Ministry of Health [Saudi Arabia], 'Technical committee of Arab AIDS Strategy holds its 3rd meeting in Riyadh', MOH News, 29 April 2017. <[www.moh.gov.sa/en/Ministry/Media-Center/News/Pages/News-2017-04-29-001.asp](http://www.moh.gov.sa/en/Ministry/Media-Center/News/Pages/News-2017-04-29-001.asp)>
- 54 Social Affairs Sector - Directorate of Health and Humanitarian Aid and Technical Secretariat of the Council of Arab Ministers of Health, League of Arab States, *Arab Strategic Framework for the Response to HIV and AIDS (2020–2014)*, March 2014.

# Annex

---

## Statistical Tables

# Population estimates, Middle East and North Africa, 2018

Countries and territories	Number of births (thousands), 2018	Population size (thousands), by age, 2018							Population size (thousands), by age and sex, 2018							
		Age 0-19	Age 0-4	Age 5-9	Age 10-14	Age 15-19	Age 10-19 male	Age 10-19 female	Age 0-4 male	Age 5-9 male	Age 10-14 male	Age 15-19 male	Age 0-4 female	Age 5-9 female	Age 10-14 female	Age 15-19 female
Algeria	839	15,227	4,579	4,404	3,406	2,838	3,185	3,059	2,338	2,247	1,737	1,448	2,241	2,157	1,669	1,390
Bahrain	22	381	108	103	90	80	87	83	55	53	45	42	53	50	44	39
Djibouti	21	395	102	98	97	98	99	97	52	49	49	50	50	48	48	49
Egypt	2,403	41,634	12,642	11,206	9,270	8,515	9,142	8,643	6,509	5,775	4,772	4,370	6,133	5,431	4,498	4,145
Iran (Islamic Republic of)	1,217	24,652	6,582	6,825	5,992	5,253	5,813	5,432	3,368	3,452	3,055	2,759	3,214	3,373	2,937	2,494
Iraq	1,222	19,867	5,944	5,308	4,582	4,034	4,428	4,188	3,056	2,729	2,357	2,071	2,888	2,579	2,225	1,963
Jordan	247	4,459	1,240	1,177	1,068	974	1,031	1,011	634	598	539	491	606	579	528	482
Kuwait	65	1,131	324	306	261	240	265	236	165	157	136	129	158	149	125	111
Lebanon	96	1,903	479	439	457	529	485	501	244	221	226	258	234	218	231	270
Libya	116	2,344	610	617	576	542	572	546	313	316	295	277	297	301	281	264
Morocco	671	12,773	3,454	3,313	3,063	2,944	3,075	2,932	1,773	1,698	1,568	1,506	1,680	1,614	1,495	1,438
Oman	81	1,298	408	361	274	255	264	264	210	186	133	130	198	174	140	124
Qatar	26	494	134	131	110	120	131	99	68	67	55	76	66	63	55	44
Saudi Arabia	628	10,630	3,024	2,803	2,516	2,288	2,450	2,353	1,536	1,424	1,279	1,171	1,487	1,378	1,237	1,116
Somalia	597	8,692	2,761	2,315	1,957	1,658	1,814	1,802	1,392	1,165	983	831	1,370	1,150	975	827
Sudan	1,270	21,358	6,105	5,585	5,110	4,558	4,902	4,766	3,104	2,838	2,593	2,309	3,001	2,747	2,517	2,250
Syrian Arab Republic	343	8,740	1,887	2,264	2,385	2,204	2,355	2,234	967	1,161	1,221	1,133	920	1,102	1,164	1,071
Tunisia	197	3,595	1,036	953	814	792	822	784	530	487	416	406	506	466	398	386
United Arab Emirates	82	1,732	451	472	403	406	429	380	230	241	202	227	221	231	201	179
Yemen	840	14,564	4,139	3,841	3,458	3,126	3,354	3,230	2,115	1,961	1,763	1,591	2,025	1,880	1,695	1,535
Middle East and North Africa	57,059	195,870	56,009	52,520	45,888	41,454	44,702	42,639	28,659	26,828	23,425	21,276	27,348	25,691	22,462	20,177

## Data sources:

**Number of births** - UN Population Division World Population Prospects, 2017 revision  
**Population size** - UN Population Division World Population Prospects, 2017 revision

## Notes:

- Data are not available

UNAIDS classification of the Middle East and North Africa includes 20 countries/territories: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.

# HIV epidemiology, Middle East and North Africa, 2017

Countries and territories	Number of people living with HIV												Number of new HIV infections													
	Age 0-14			Age 10-19			Age 10-19, male			Age 10-19, female			Age 0-14			Age 10-19			Age 10-19, male			Age 10-19, female				
	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low
Algeria	<500	<500	<500	<1000	<500	<1000	<500	<200	<1000	<500	<500	<500	<100	<100	<100	<200	<200	<500	<100	<100	<500	<200	<100	<200		
Bahrain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Djibouti	<1000	<1000	1,000	<1000	<500	<1000	<500	<500	<500	<500	<200	<500	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
Egypt	<500	<500	<500	1,100	<500	1,800	<1000	<200	1,800	<500	<500	<1000	<100	<100	<200	<500	<200	<1000	<500	<100	<1000	<200	<200	<500		
Iran (Islamic Republic of)	<1000	<500	1,100	<1000	<500	1,200	<500	<200	<1000	<500	<200	<1000	<100	<100	<500	<200	<100	<500	<100	<100	<200	<100	<100	<200		
Iraq	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jordan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lebanon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Libya	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Morocco	<500	<500	<1000	<1000	<500	1,100	<500	<200	<1000	<500	<500	<500	<100	<100	<100	<200	<100	<500	<100	<100	<500	<100	<100	<200		
Oman	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Qatar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Somalia	1,500	1,400	1,600	1,000	<1000	1,300	<500	<500	<1000	<1000	<500	<1000	<200	<200	<500	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	
Sudan	3,000	2,100	4,100	3,800	1,500	9,300	1,700	<1000	5,100	2,100	<1000	5,300	<1000	<500	<1000	1,100	<500	3,300	<500	<100	2,000	<1000	<100	2,000		
Syrian Arab Republic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tunisia	<100	<100	<100	<200	<100	<500	<100	<100	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100		
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Yemen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Middle East and North Africa	8,200	6,000	11,000	10,000	4,800	19,000	4,800	2,500	11,000	5,200	2,300	10,000	1,300	<1000	1,900	2,600	<1000	5,900	1,200	<500	4,000	1,300	<500	3,300		



## HIV epidemiology, Middle East and North Africa, 2017 (continued)

HIV Incidence per 1,000 population						Number of AIDS-related deaths												Children who have lost one or both parents due to HIV, age 0-17			All children who have lost one or both parents, age 0-17			Countries and territories	
Age 15-19, male			Age 15-19, female			Age 0-14			Age 10-19			Age 10-19, male			Age 10-19, female			Estimate	Low	High	Estimate	Low	High		
Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High								
<.01	<.01	<.01	<.01	<.01	<.01	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	1,100	<1000	1,400	420,000	420,000	420,000	Algeria	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Bahrain
0.24	0.02	0.76	0.58	0.09	1.25	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	5,500	4,100	7,100	32,000	30,000	34,000	Djibouti	
0.06	0.02	0.16	0.04	0.03	0.06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	3,200	2,500	3,700	1,700,000	1,700,000	1,700,000	Egypt	
0.02	0.01	0.07	0.03	0.01	0.07	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	19,000	13,000	28,000	750,000	740,000	760,000	Iran (Islamic Republic of)	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Iraq
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jordan
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Kuwait
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Lebanon
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Libya
0.07	0.02	0.17	0.05	0.03	0.08	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	5,500	3,400	8,300	350,000	350,000	360,000	Morocco	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Oman
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Qatar
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Saudi Arabia
0.02	0.01	0.07	0.08	0.06	0.11	<200	<200	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	17,000	12,000	20,000	830,000	830,000	830,000	Somalia	
0.22	0.02	0.93	0.28	0.04	0.93	<500	<500	<1000	<100	<100	<200	<100	<100	<100	<100	<100	<100	24,000	18,000	32,000	1,500,000	1,500,000	1,500,000	Sudan	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Syrian Arab Republic
0.06	0.02	0.18	0.04	0.03	0.08	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<500	<500	<1000	110,000	110,000	110,000	Tunisia	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	United Arab Emirates
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yemen
0.07	0.01	0.23	0.08	0.03	0.20	<1000	<1000	1,200	<500	<200	<500	<200	<100	<200	<200	<100	<200	89,000	63,000	120,000	7,500,000	7,500,000	7,600,000	Middle East and North Africa	

### Data sources:

Number of people living with HIV - UNAIDS 2018 estimates

Number of new HIV infections - UNAIDS 2018 estimates

HIV Incidence among adolescents 15-19 - UNAIDS 2018 estimates

Number of AIDS-related deaths - UNAIDS 2018 estimates

Number of children who have lost one or both parents due to HIV - UNAIDS 2018 estimates

Number of all children who have lost one or both parents - UNAIDS 2018 estimates

### Notes:

- Data are not available

UNAIDS estimates are not available for Iraq and Libya. These countries are not included in the regional total. There is a one-year lag in UNAIDS estimates, so estimates published in 2018 represent 2017 data.

# PMTCT programmes and intervention coverage, Middle East and North Africa, 2017

Countries and territories	Number of births (thousands) 2018	ANC coverage (%) (at least one visit)				PMTCT coverage (%)			ANC HIV testing coverage (%)		Number of pregnant women living with HIV			Number of pregnant women receiving ARVs 2017	DTP1 coverage (%)	EID coverage (%)			ART coverage (%), children 0–14			MTCT rate – perinatal			MTCT rate – perinatal and postnatal		
		Total	Urban	Rural	Source	Estimate	Low	High	2015	2017	Estimate	Low	High			Estimate	Low	High	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High
Algeria	4,500	93	94	91	MICS 2012–2013	56	51	60	46%	83%	<500	<500	<1,000	264	95	61	57	68	>95	<95	>95	8	7	9	12	11	13
Bahrain	109	–	–	–	–	–	–	–	–	–	–	–	–	–	98	–	–	–	–	–	–	–	–	–	–	–	–
Djibouti	108	88	95	66	Other NS 2012	21	15	29	66%	–	<500	<200	<500	50	74	10	7	15	11	8	14	17	16	19	33	31	35
Egypt	12,306	90	93	89	DHS 2014	9	8	10	–	–	<500	<500	<500	31	95	11	10	12	33	31	35	17	15	18	27	26	29
Iran (Islamic Republic of)	6,334	97	97	97	MICS 2010–2011	55	29	>95	4%	24%	<500	<500	<1,000	258	99	31	16	58	53	32	84	10	2	14	16	4	23
Iraq	6,303	78	83	66	MICS 2011	–	–	–	–	–	–	–	–	–	73	–	–	–	–	–	–	–	–	–	–	–	–
Jordan	1,235	99	99	99	DHS 2012	–	–	–	–	–	–	–	–	–	99	–	–	–	–	–	–	–	–	–	–	–	–
Kuwait	326	–	–	–	–	–	–	–	–	>95%	–	–	–	–	99	–	–	–	–	–	–	–	–	–	–	–	–
Lebanon	457	–	–	–	–	–	–	–	–	–	–	–	–	–	82	–	–	–	–	–	–	–	–	–	–	–	–
Libya	605	–	–	–	–	–	–	–	–	–	–	–	–	–	99	–	–	–	–	–	–	–	–	–	–	–	–
Morocco	3,445	77	92	63	ENPSF 2011	63	53	75	–	28%	<500	<500	<500	209	99	57	48	68	>95	>95	>95	8	4	11	10	7	14
Oman	403	99	–	–	MICS 2014	–	–	–	–	–	–	–	–	–	99	–	–	–	–	–	–	–	–	–	–	–	–
Qatar	131	91	–	–	MICS 2012	–	–	–	–	–	–	–	–	–	98	–	–	–	–	–	–	–	–	–	–	–	–
Saudi Arabia	3,159	–	–	–	–	–	–	–	–	–	–	–	–	–	99	–	–	–	–	–	–	–	–	–	–	–	–
Somalia	3,221	–	–	–	–	12	11	13	–	–	<1,000	<1,000	<1,000	80	52	–	–	–	10	9	11	19	17	21	29	26	30
Sudan	6,652	79	91	75	MICS 2014	7	4	12	10%	9%	1,900	<1,000	3,300	134	98	–	–	–	19	14	26	19	17	20	29	28	31
Syrian Arab Republic	1,927	–	–	–	–	–	–	–	–	–	–	–	–	–	63	–	–	–	–	–	–	–	–	–	–	–	–
Tunisia	1,015	98	99	97	MICS 2011–2012	23	19	31	–	7%	<100	<100	<100	12	99	13	10	17	52	40	72	15	13	17	22	20	25
United Arab Emirates	437	–	–	–	–	–	–	–	–	–	–	–	–	–	97	–	–	–	–	–	–	–	–	–	–	–	–
Yemen	4,386	60	80	51	DHS 2013	–	–	–	–	–	–	–	–	–	76	–	–	–	–	–	–	–	–	–	–	–	–
Middle East and North Africa	57,059	87	92	83	–	22	15	32	–	–	5,200	3,400	7,500	1,155	92	18	12	27	35	22	47	16	11	23	25	17	36

## Data sources:

**Number of births** - UN Population Division World Population Prospects, 2017 revision

**ANC coverage** - population-based nationally representative surveys, including DHS and MICS, 2010–2018

**PMTCT coverage** - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates

**ANC HIV testing coverage** - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates

**Number of pregnant women living with HIV** - UNAIDS 2018 estimates

**Number of pregnant women receiving ARVs** - UNAIDS 2018 estimates

**DTP1 immunization coverage** - WHO and UNICEF estimates of national routine immunization coverage, 2017 revision

**EID coverage** - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates

**ART coverage, children 0–14** - Global AIDS Monitoring 2018 and UNAIDS 2018 estimates

**MTCT rate (perinatal; perinatal and postnatal)** - UNAIDS 2018 estimates

## Notes:

- Data are not available

Survey-based data are aggregated to the regional level if the countries with nationally-representative survey data represent at least 50 per cent of the total regional population.

Numbers are rounded to the nearest integer.

# Adolescent HIV prevention programmes and intervention coverage, Middle East and North Africa

Countries and territories	Comprehensive knowledge about HIV (%)			Tested for HIV in the last 12 months and received the results (%)		
	Girls 15–19	Boys 15–19	Source	Girls 15–19	Boys 15–19	Source
Algeria	6.8	–	MICS 2013	0.7	–	MICS 2013
Bahrain	–	–	–	–	–	–
Djibouti	–	–	–	–	–	–
Egypt	2.7	4.7	HIS 2015	–	–	–
Iran (Islamic Republic of)	–	–	–	–	–	–
Iraq	5.0	–	MICS 2018	0.7	–	MICS 2018
Jordan	5.6	–	DHS 2012	–	–	–
Kuwait	–	–	–	–	–	–
Lebanon	–	–	–	–	–	–
Libya	–	–	–	–	–	–
Morocco	–	–	–	–	–	–
Oman	–	–	–	–	–	–
Qatar	9.7	22.8	MICS 2012	–	–	–
Saudi Arabia	–	–	–	–	–	–
Somalia	–	–	–	–	–	–
Sudan	7.7	–	MICS 2014	–	–	–
Syrian Arab Republic	–	–	–	–	–	–
Tunisia	15.3	–	MICS 2011–2012	–	–	–
United Arab Emirates	–	–	–	–	–	–
Yemen	–	–	–	–	–	–
Middle East and North Africa	4.9	–	–	–	–	–

## Data sources:

**Comprehensive knowledge about HIV** - population-based nationally representative surveys, including DHS and MICS, 2010–2018

**HIV testing in the last 12 months** - population-based nationally representative surveys, including DHS and MICS, 2010–2018

## Notes:

- Data are not available







