

ECDC SPECIAL REPORT

HIV testing in Europe and Central Asia

Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2022 progress report



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Abbreviations

ART Antiviral therapy

EEA European Economic Area

ECDC European Centre for Disease Prevention and Control EMCDDA European Monitoring Centre for Drugs and Drug Addiction

EU European Union
GAM Global AIDS Monitoring
MSM Men who have sex with men
PLHIV People living with HIV
PrEP Pre-exposure prophylaxis
PWID People who inject drugs

STI Sexually transmitted infection WHO World Health Organization

UNAIDS The Joint United Nations Programme on HIV/AIDS

Executive summary

This report presents the situation of HIV testing in Europe and Central Asia, summarising data on the implementation of national guidelines that shape HIV testing policies, the provision and uptake of HIV testing services and efforts being made to widen engagement with HIV testing and reduce late diagnosis. In the reporting year 2022, responses were submitted to ECDC from 51 of the 55 European and Central Asian countries (Andorra, Liechtenstein, Türkiye and Turkmenistan provided no data).

Key findings include:

- Only 83% of people living with HIV (PLHIV) across Europe and Central Asia know their HIV status, highlighting a need to strengthen and expand testing services. In the EU/EEA, approximately 89% of PLHIV know their HIV status.
- Forty countries reported having national guidelines for HIV testing, however, a third of reporting countries indicated their guidance was over five years old. Half of countries with guidance over five years old reported no plans to revise guidance.
- There is a wide range of testing interventions implemented across the region. Despite recent increases in the levels of implementation of novel, innovative testing modes, such as home testing and lay provider testing, traditional, clinic-based testing interventions remain among the most implemented across Europe and Central Asia.
- Legal and regulatory barriers to HIV testing continue to exist across Europe and Central Asia, with thirtythree countries reporting restrictions on who can administer an HIV test and eight countries reporting restricted access for HIV tests for certain populations.
- Data on the uptake of HIV testing among key populations was limited, especially for migrants, undocumented migrants and transgender people.
- Providing HIV testing services with suboptimal linkage to care has limited benefits, therefore clear time standards and referral pathways are important, especially with increasing levels of testing in non-traditional settings. Forty-three countries have linkage to care recommendations and twenty-three countries were able to provide data on the proportion of people promptly linked to care, with rates ranging from 76% to 100%.
- The COVID-19 pandemic and resultant public health measures negatively impacted the provision and uptake
 of HIV testing, with countries reporting reduced testing services and increased difficulties accessing testing.

Background

In 2015, the United Nations member states adopted the Sustainable Development Goals (SDGs) for 2030, including SDG 3.3: 'Ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, waterborne and other communicable diseases' [1].

Despite progress in reducing HIV transmissions, in 2021 there were 106 508 people newly diagnosed with HIV across Europe and Central Asia [2]. Over half of those diagnosed in 2021 were diagnosed at an advanced stage of HIV infection, where the immune system is not functioning effectively ('late diagnosis'). A diagnosis is defined as late when the CD4 cell count is below 350 per mm3 blood at the time of diagnosis. [2]. Individuals who are diagnosed late are more likely to experience negative health consequences, as late diagnosis is a strong indicator of increased morbidity and mortality. Additionally, it increases the risk of onwards transmission of HIV, as it is estimated that people diagnosed late have been living with an undiagnosed infection for at least three to five years [3,4]. Therefore, early HIV testing, prompt diagnosis and linkage to care is critical to achieve the SDG goal and to ensure good health outcomes for people living with HIV.

Methodology

Between January and March 2022, an ECDC survey was used to collect data to monitor the implementation of the 2004 Dublin Declaration. The monitoring questionnaire was disseminated to the 53 countries that are part of the WHO European region, plus Kosovo¹ and Liechtenstein via an online survey.

National health authorities were asked to complete the Dublin Declaration survey between February and the end of March. In July and August 2022, a validation exercise was performed by each country and corrections were made where necessary.

The survey contained specific questions in relation to HIV testing, including questions about national testing guidelines, the provision and monitoring of testing services, uptake of testing among key populations, linkage to care and the continuum of HIV care. The responses to these questions are presented in this report.

As well as considering the picture for the whole European and Central Asian region, findings are presented by WHO sub-regions (East, Centre and West) which broadly group areas of Europe and Central Asia by geography and epidemic type, as depicted in Figure 1.

The countries covered by the report are grouped as follows:

West, 24 countries: Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Liechtenstein, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, the United Kingdom.

Centre, 16 countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Hungary, Kosovo, North Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, Türkiye.

East, 15 countries: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.



Figure 1. Geographical/epidemiological division of the WHO European Region

¹ This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

Progress and remaining challenges

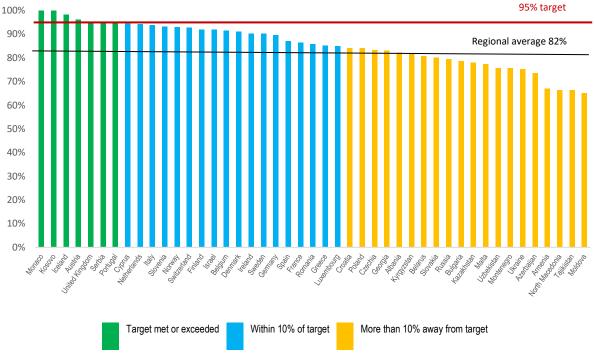
The scale-up of HIV testing is an essential element of the HIV response necessary to achieve the first UNAIDS continuum of care target: 95% or more of all people living with HIV (PLHIV) knowing their status by 2025.

In the 45 countries reporting data within Europe and Central Asia for both stage 1 (estmated number of PLHIV) and stage 2 (PLHIV that have been diagnosed), an estimated 2 312 179 people are living with HIV, 1 912 968 of whom (83%; range 65–100%) have been diagnosed. This is equivalent to approximately one in six (17%; range 0–35%) people living with HIV in Europe and Central Asia being unaware of their HIV status. Overall, the proportion of undiagnosed people living with HIV is highest in countries of the East sub-region and lowest in those of the Centre sub-region.

Of the 24 countries in the EU/EEA able to provide data for both stage one and stage two, approximately 89% know their HIV status. This is equivalent to approximately one in ten people living with HIV in the EU/EEA being unaware of their status (11%; range: 2-23%).

Seven of the 45 countries reporting data are currently meeting the 2025 UNAIDS target with 95% or more of all PLHIV knowing their HIV status (Monaco, Kosovo, Iceland, Austria, the United Kingdom, Serbia and Portugal). Of the other 38 countries, 18 are within 10% of the 2025 target (15 West; 3 Centre; 0 East) and 20 are more than 10% away from reaching this target (1 West; 8 Centre; 11 East).

Figure 2. Percentage of all people living with HIV who know their status in 45 countries in Europe and Central Asia, 2022¹



Data availability is fairly limited on the proportion of PLHIV who know their status among key population groups. However, available data suggests that there is considerable variation in the proportion of those who are diagnosed between countries and key population groups (Figure 3).

Twenty-six countries were able to provide data for men who have sex with men (MSM). Of these 26 countries, 381 678 MSM are estimated to be living with HIV, of whom 307 952 (81%; range 1-100%) know their HIV status and 73 726 (19%; range 0-99%) do not. Seven countries reported that 95% or more of MSM who are living with HIV know their HIV status (Bulgaria, Kosovo, Belarus, Austria, the United Kingdom, the Netherlands and Finland). The proportion of those undiagnosed is highest in the East sub-region, where only 26% of MSM living with HIV have been diagnosed.

In the 18 countries able to provide data for people who inject drugs (PWID), 241 297 PWID are estimated to be living with HIV, of whom 154 316 (64%; range 5-100%) are aware of their status and 86 981 (36%; range 0%—

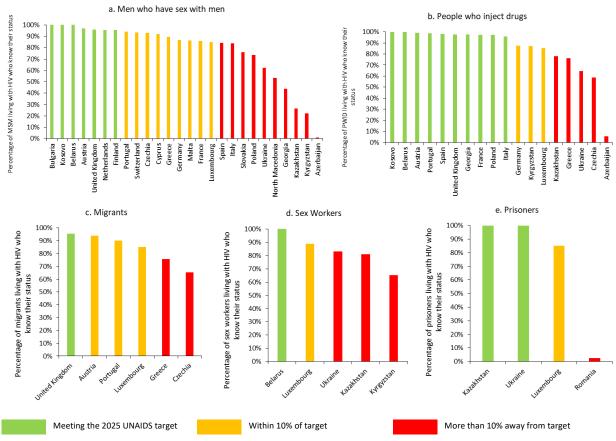
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¹ Latest available data reported by countries in 2022. See Annex 1 for further information on the data provided by countries, including year of data collection.

95%) are not. Nine of the 18 countries reported 95% or more of PWID who are living with HIV know their HIV status.

Data availability is more limited for migrants, sex workers and prisoners. Six countries were able to provide data on the number of migrants living with HIV who know their status, ranging from 65%—96%. Five countries were able to provide data on sex workers, ranging from 65%—100%. Only three countries were able to provide data on prisoners, with the proportion of prisoners living with HIV who know their status ranging from 85–100%.

Figure 3. Percentage of key populations living with HIV who know their status in Europe and Central Asia, 2022



Scaling up testing services should aim to both reduce the number of people who have never been tested for HIV and increase the frequency of testing among people at risk of acquiring HIV. As well as reducing the undiagnosed number, this should also reduce the proportion of PLHIV who are diagnosed late. A diagnosis is defined as late when the CD4 cell count is below 350 per mm³ blood at the time of diagnosis.

In Europe and Central Asia, late diagnosis remains a challenge in most countries (Figure 4). Just over half (54.2%) of all individuals diagnosed with HIV in 2021, where a CD4 count at diagnosis was reported, were classified as late diagnosis [2]. The percentage of late diagnoses varied slightly by sub-region: rates of late diagnosis were highest in the East sub-region, with 55.3% of new diagnoses classed as late, and lowest in the West, with 52.5% of new diagnoses classed as late [2]. Late diagnoses accounted for 52.8% of new infections in the Centre sub-region [2].

Within Europe and Central Asia, those who have acquired HIV through heterosexual sexual contact are most affected by late diagnosis (60%; 63% for men and 56% for women), followed by those who acquired HIV through injecting drug use (48%). Percentages are lowest for men who acquired HIV through sex with men (45%) [2].

Sex beween men

n = 6 259

200 cells/mm³

200 to < 350 cells/mm³

350 to < 500 cells/mm³

≥ 500 cells/mm³

n = 15 449

Injecting drug use

Percentage

Figure 4. New HIV diagnoses, by CD4 cell count per mm³ at diagnosis, by transmission group, Europe and Central Asia, 2021 (n=28 742)¹

Source: European Centre for Disease Prevention and Control/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2022–2021 data.

80

100

Policy, guidelines and strategies

20

0

Testing guidelines support national programme managers and service providers in designing and implementing HIV testing services. They set standards for best practice and inform strategic decision-making regarding the mix of approaches to deliver HIV testing services that will maximise impact.

Forty countries in Europe and Central Asia reported that there is a national policy, strategy or other recommendations from their government on HIV testing (Table 1). Between 2021 and 2022, five countries have reported that they updated their testing guidance. However, 13 of the 40 countries (32.5%) indicated that their testing guidance was over five years old at the time of submission. Guidance published over five years ago may be out-of-date and not reflect the most recent innovations in HIV testing (community-based testing, indicator-guided HIV testing, etc.). Of the countries with guidance over five years old, seven (53.8%) reported plans to revise their guidance within the next three years.

Eleven countries reported they did not have a country-specific national HIV testing policy, strategy or other recommendations from their government. Of these 11 countries, nine (81%) reported that they used guidance from ECDC [5], WHO [6], or from other sources such as professional associations or non-governmental organisations (NGOs). Five countries plan to introduce national HIV testing guidance in the next two years. Annex 2 provides information on testing guidance by country.

Table 1. Number of countries with country-specific national HIV testing guidance and their year of publication, in Europe and Central Asia, by WHO/Europe sub-region

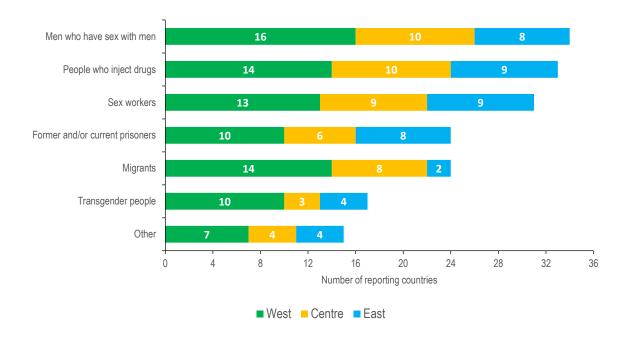
Region	Countries ² (n=40)	Year of publication of national policy/strategy (number of countries)
West	17	2022 (1); 2021 (1); 2020 (2); 2019 (2); 2018 (3); 2017 (2); 2014 (3); 2013 (1); 2011 (1); 2010 (1).
Centre	12	2022 (1); 2021 (1); 2020 (3); 2019 (1); 2018 (1); 2017 (1); 2016 (1); 2012 (1); 2009 (1); 2007 (1).
East	11	2021 (1); 2020 (2); 2019 (1); 2018 (2); 2017 (2); 2012 (2); 2010 (1).

ECDC guidance on HIV and hepatitis testing recommends that HIV tests are offered to key populations that are at an increased risk for HIV [4]. Of the 40 countries with a national HIV testing policy or strategy, 36 (90%) include specific guidance on key populations (Figure 5). The most reported key population mentioned were MSM (34), PWID (33), and sex workers (31). Transgender people and migrants were the least frequently mentioned in countries' national guidelines.

Figure 5. Key populations included in national HIV testing guidance Europe and Central Asia, by WHO sub-region, in 2022 (n=36)

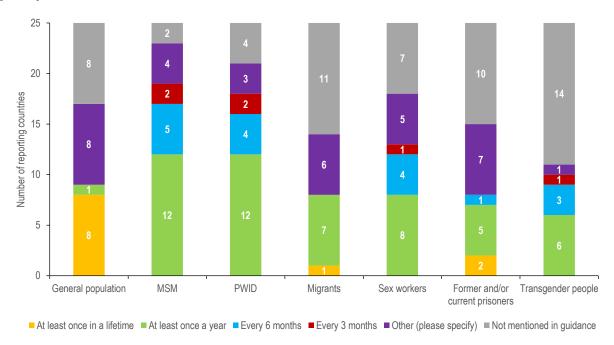
¹ Includes data from 46 countries. Data from Andorra, Bosnia and Herzegovina, Monaco, North Macedonia, Turkmenistan and Uzbekistan excluded due to inconsistent reporting over the previous decade. Data from Portugal not published at country request.

² Countries listed in Annex 2.



In the same guidance, ECDC recommends that key populations should be tested every 6–12 months, depending on local epidemiology and risk assessment [4]. Twenty-five countries reported that they include recommendations on frequency of testing for at least some key populations (Figure 6). Countries were most likely to report recommendations on frequency of testing for MSM and PWID. Countries were least likely to include recommendations on frequency of testing for transgender people and migrants.

Figure 6. Recommendations on frequency of testing, by key population, in Europe and Central Asia $(n=25)^1$



Recommendations on HIV testing modalities are included in the HIV testing guidance for all 40 countries which reported having a national policy, strategy or recommendation (Figure 7).

6

¹ One country, Armenia, reported that their guidelines include recommendations on frequency of testing, however, they did not report on the specific recommendations.

According to guidance from ECDC, the following HIV testing interventions are effective and acceptable to target groups which can in turn increase the offer, uptake and coverage of HIV testing:

- · Routine antenatal testing
- Routine testing in sexual health clinics
- Community-based testing
- Lay provider testing
- Self-testing

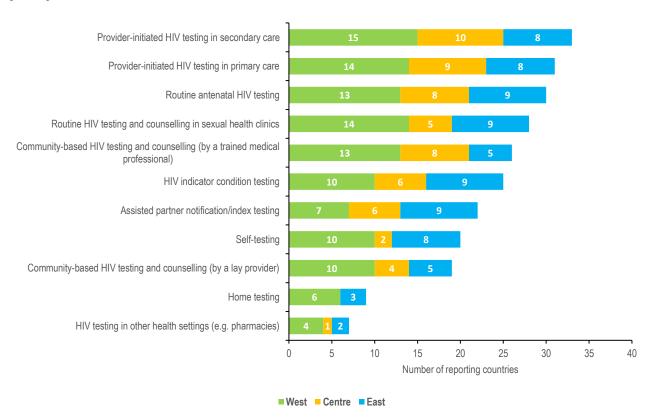
- Self-sampling
- Provider-initiated testing in primary and secondary care
- Testing in other health settings (such as pharmacies)

The guidance also recommends implementing assisted partner notification and HIV indicator condition testing as strategies to focus HIV testing on groups of people at higher risk of acquiring HIV [4].

The most cited testing modalities included: provider-initiated in secondary care (33), provider-initiated in primary care (31), routine antenatal testing (30) and routine HIV testing in sexual health services (28). The least frequently cited testing modalities are HIV testing in other healthcare settings, such as pharmacies (7), home testing (9) and community-based HIV testing by a lay provider (19).

The median number of interventions included in guidance for all 40 countries was six interventions. In the West, the median was seven (range 1-11), in the Centre it was four (range 3-8) and in the East it was seven (range 2-11).

Figure 7. Different testing interventions included in testing guidelines, by WHO sub-region, 2022 (n=40)



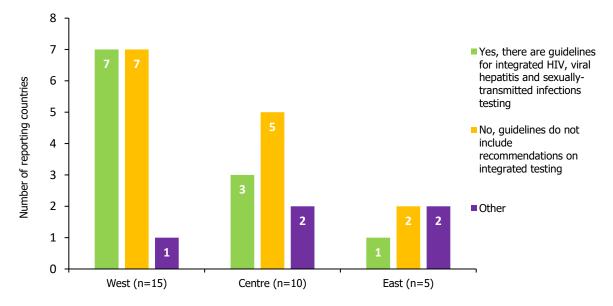
Integrated HIV, STI and viral hepatitis testing

Countries were asked if their national testing guidelines included recommendations for integrated testing for HIV, viral hepatitis and sexually-transmitted infections, in line with the ECDC Public Health guidance on HIV, hepatitis B and C testing in the EU/EEA [4] (Figure 8). Eleven of 30 countries responding reported that their guidance included integrated testing for HIV, viral hepatitis and STIs and 14¹ reported that their guidance did not include any recommendations on integrated testing. Five countries reported 'other'. Of the 14 countries which reported they do not have guidance on integrated testing, five reported plans to include such guidance by 2023.

¹ EU/EEA countries reporting no integrated testing guidance (7): Bulgaria, Denmark, Finland, Greece, Malta, Sweden, Slovenia Non-EU/EEA countries reporting no integrated testing guidance (7): Israel, Kosovo, Moldova, Serbia, Switzerland, Türkiye, Ukraine

In the EU/EEA, eight of 19 countries reported that their guidance included integrated HIV, viral hepatitis and STI testing and seven countries reported that their guidelines did not include any guidance on integrated testing. Four countries reported 'other', including integrated testing only for specific key populations and recommendations to use synergies between HIV, HBV, and HCV testing.

Figure 8. Recommendations on integrated HIV, viral hepatitis, and sexually-transmitted infection testing, in Europe and Central Asia, by WHO European sub-region (n=30)



Recommendations on mandatory testing in prisons

In line with a rights-based approach, mandatory HIV testing is not recommended on the grounds of public health [7]. In total, 40 of 47 countries report that voluntary HIV testing is available in prisons in Europe and Central Asia, with 20 providing opt-in testing and 16 providing routine testing on an opt-out basis. Two countries reported that HIV tests were offered during prison admission processes but did not specify if the tests continued to be available after admission. One country reported testing was available to people in prison if a doctor prescribed it. One country reported that national guidelines recommend offering HIV tests to all prisoners but did not specify if it was on an opt-in or opt-out basis. Four countries reported there was no national data on recommendations for HIV testing in prisons. However, three countries in the region (Belarus, Cyprus, and Malta) continue to report that HIV testing is mandatory for all prisoners.

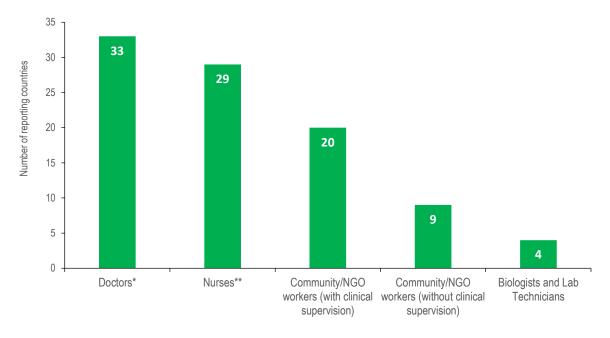
Legal and regulatory barriers

Legal barriers to testing are those enshrined in law, while regulatory barriers are those contained in guidance or common practices [8]. A substantial barrier to testing is the criminalisation of HIV transmission and the activities of the key populations affected by HIV – for example, criminalisation of sex work, drug use, and nondocumented migration – which remains widespread in Europe and Central Asia [9]. Within the range of possible barriers to testing posed by legal or regulatory restrictions, this brief examines the restrictions regarding who can administer or receive an HIV test and the costs associated with HIV testing.

Lay provider testing, which has been recommended by WHO since 2015 [10], supports task-sharing in the health sector and may be more acceptable to marginalised populations. However, restrictions on who can administer an HIV test persist in Europe and Central Asia, ranging from only doctors being able to take blood samples, to a clinician having to be present in the building while testing is taking place [8].

Thirty-three of 45 countries (73%) reported that they have restrictions regarding who can legally carry out an HIV test, while ten (22%) reported no restrictions (Figure 9). Two countries reported they were unsure if restrictions existed. Among the 35 countries which reported that restrictions exist, or they were unsure if restrictions existed, 33 countries reported that doctors were able to administer HIV tests: three countries reported that specialised doctors were able to administer HIV tests and 30 countries reported that any doctor could administer the tests. Twenty-nine countries reported that nurses were able to administer testing, however, seven restricted HIV test administration to specialist nurses, one restricted this to any nurse on a doctor's order and one restricted it to any nurse under clinical supervision. Twenty countries reported that community and NGO workers were able to administer HIV tests with clinical supervision and nine reported that community and NGO workers were able to administer HIV tests without clinical supervision. However, three of the countries that indicated that community and NGO workers were able to administer HIV tests reported that they were restricted to administering/assisting with HIV self-tests or HIV rapid tests. Countries also reported other testing opportunities, including tests administered by laboratory staff in four countries and by midwives in one country.

Figure 9. Professions able to administer HIV tests in countries reporting restrictions on who can provide tests, in Europe and Central Asia (n=35)



^{*} Includes countries which responded: specialized doctors (3), any doctor (30).

Restrictions on who can receive HIV tests often means that HIV testing is not available for those who need it the most. While most countries in Europe and Central Asia (42 of 50; 84%) reported that there were no restrictions on who can receive an HIV test, eight (16%) countries reported that HIV testing is restricted for certain populations (Figure 10). Six countries reported that there is restricted access to HIV testing for undocumented migrants. One of the six countries, Georgia, reported that access to HIV testing was restricted for all migrants, regardless of their formal migration status. Two countries reported that access to HIV testing was restricted for people in prisons.

^{**} Includes countries which responded: any nurse (20), specialist nurse (7), any nurse under clinical supervision (1), nurses on order of doctor (1)

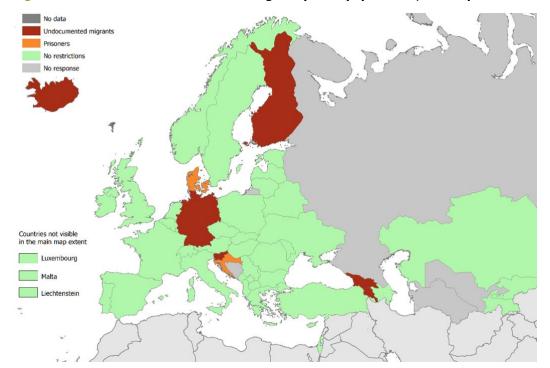
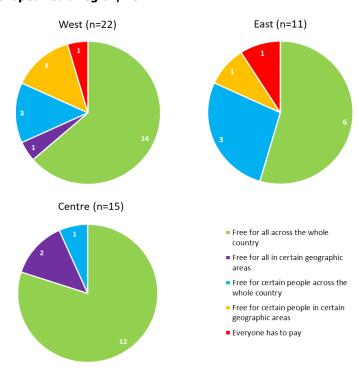


Figure 10. Restrictions on access to testing for specific populations, in Europe and Central Asia (n=8)

Another important barrier to accessing HIV testing is the cost of HIV testing. Charging fees for HIV testing creates barriers to access for those who are unable to afford the fees. Of the 48 countries reporting data on the costs associated with HIV testing, 32 (67%) reported that testing was free for all across the whole country and 16 (33%) reported there were costs associated for testing for some populations or in certain geographic regions. Three countries reported that it was free for people in certain geographic regions, seven countries reported that testing was free for certain populations across the whole country, four reported that testing was free for certain populations in certain geographic areas and two countries reported that everyone has to pay. Figure 11 disaggregates the data by WHO European sub-region.

Figure 11. Countries reporting costs associated with HIV testing in Europe and Central Asia, by WHO European sub-region, 2022



Provision of testing services

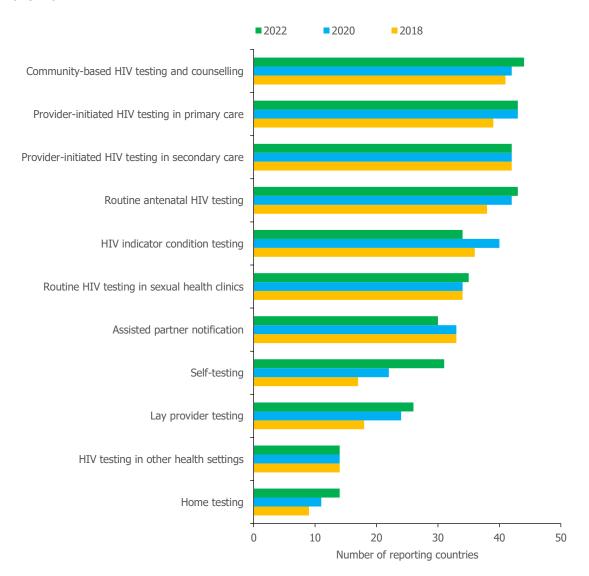
The provision of a range of testing services has improved over time, although data from 2022 suggests that some testing services have been scaled back compared with previous years (Figure 12).

The following services have consistently been among the most frequently reported HIV testing services provided by countries in Europe and Central Asia: community-based HIV testing (44 in 2022), provider-initiated testing in primary and secondary care (43 and 42 in 2022 respectively) and routine antenatal testing (43 in 2022).

The implementation and provision of self-testing services has increased significantly between 2018 and 2022 (82%; from 17 countries in 2018 to 31 countries in 2022). Most types of HIV testing services saw small increases in the level of implementation in Europe and Central Asia between 2020 and 2022, however, two testing modalities saw decreased implementation between 2020 and 2022: assisted partner notification (-9%; from 33 to 30) and HIV indicator condition testing (-15%; from 40 to 34).

Nonetheless, the number of different testing services that are available in 2022 remains greater for most modalities than the level of provision of testing services in 2018 and 2020. Annex 4 provides a breakdown of the countries providing community-based HIV testing services, HIV indicator testing, self-testing, lay-provider testing and hometesting.

Figure 12. Countries implementing different testing services over time, Europe and Central Asia, 2018–2022



Uptake of HIV testing

Testing among key populations at increased risk of acquiring HIV

Ensuring that HIV testing is available and accessible to key populations at increased risk of acquiring HIV is crucial to combatting the HIV epidemic. Therefore, monitoring the uptake of testing among key populations is an important indicator of whether the implementation of testing is successful at targeting those most at risk. However, data on the uptake of HIV testing among key populations are limited, especially for migrants and transgender people (Figure 13).

Figure 13. Data availability for HIV testing uptake among key populations in Europe and Central Asia, by WHO sub-region, 2022



Men who have sex with men

Twenty-one countries reported they had data on the uptake of HIV testing among MSM. The year the reported data were collected ranged from 2017 to 2021. Of the 21 countries reporting data, only 14 were able to provide the percentage of MSM who know their HIV status (knowing whether they are HIV positive OR if they are HIV negative (Figure 14). In the 14 reporting countries, the proportion of MSM who know their HIV status ranged from 9% (Poland; 2021 data) to 81% (Spain; 2017/2018 data). The median proportion of MSM who know their HIV status in Europe and Central Asia is 54%. None of the reporting countries have met the 95% target set by UNAIDS [11].

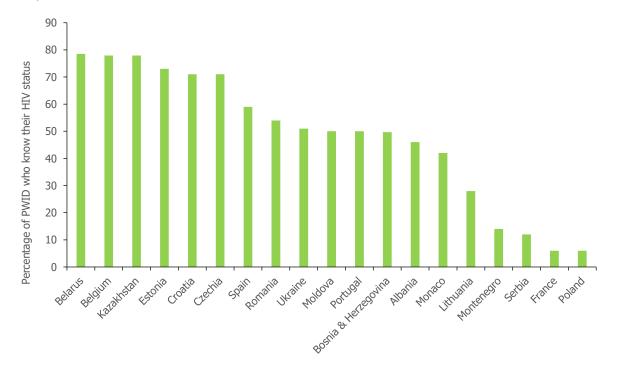
90 Percentage of MSM who know their HIV status 80 70 60 50 40 30 20 10 Smitterland JKraine France Pokudaj Romania Germany Moldova Clogfia Poland CADULE Albania

Figure 14. Percentage of MSM who know their HIV status in Europe and Central Asia, 2021

People who inject drugs

Twenty-three countries reported they had data on the uptake of HIV testing among PWID. The year the reported data were collected ranged from 2018 to 2021. Of the 23 countries reporting data, only 19 were able to provide the percentage of PWID who know their HIV status (Figure 15). In the 19 reporting countries, the proportion of PWID who know their HIV status ranged from 6% (France and Poland) to 79% (Belarus). The median proportion of PWID who know their HIV status in Europe and Central Asia is 50%. None of the reporting countries have met the 95% target set by UNAIDS [11].

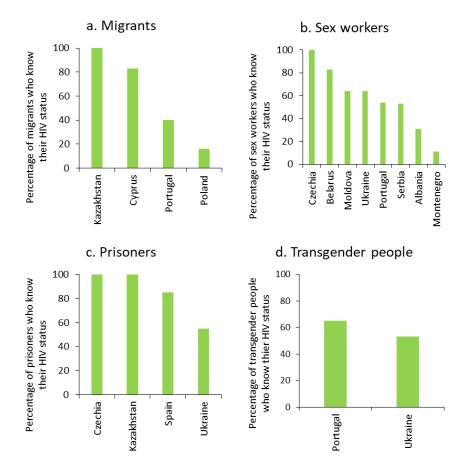
Figure 15. Percentage of people who inject drugs who know their HIV status in Europe and Central Asia, 2021



Other key populations

Data availability among the other key populations (migrants, sex workers, prisoners and transgender people) is very limited (Figure 13 and 16). Among the four countries able to report data for migrants, the median proportion of migrants who know their HIV status is 61.5% (range: 16%–100%). One country, Portugal, was able to report data on the number of undocumented migrants who know their HIV status (30%). Eight countries were able to report on the proportion of sex workers who know their HIV status (range: 11%–100%; median: 59%). Four countries were able to report on the proportion of prisoners who know their HIV status (range: 55%–100%; median: 92.5%). Only two countries were able to provide data on the proportion of transgender people who know their status. Portugal reported that 65% of transgender people know their HIV status and Ukraine reported that 53% of transgender people know their HIV status.

Figure 16. HIV testing uptake among key populations in Europe and Central Asia, 2021



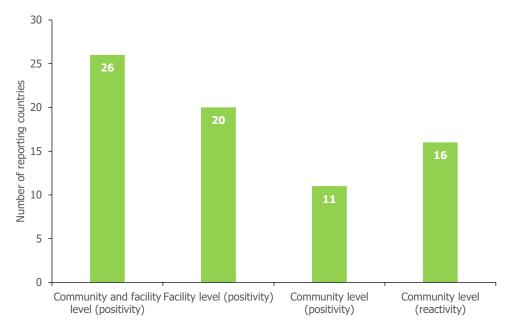
Testing in different settings

Monitoring uptake of HIV testing in different settings enables national health authorities to ensure that services are delivered effectively, while being cognisant of trends in HIV transmission. Positivity data can also help countries determine the effectiveness of testing strategies, evaluate testing services and validate the number of people reported as newly diagnosed through routine reporting systems.

Overall, 34 countries were able to provide data on testing volume, positivity and reactivity at overall, facility-level and community-level HIV testing services (Figure 17). Twenty-six countries were able to provide data for community and facility-level HIV testing overall. Facility level testing services include provider-initiated testing in clinics or emergency settings, antenatal clinics, family planning clinics, voluntary counselling and testing (VCT) within a healthcare setting, along with other facility-level data. Eleven countries were able to provide community level data on testing volume and positivity and 16 countries were able to provide data on community level testing volume and reactivity¹. Community level testing services include mobile testing, VCT not within a healthcare setting, along with other community-based testing services.

¹ 'Reactivity' does not necessarily mean that you are HIV-positive, because false positives can happen. Thus, if the result is reactive, the result is only preliminary and must be verified with a series of confirmatory tests.

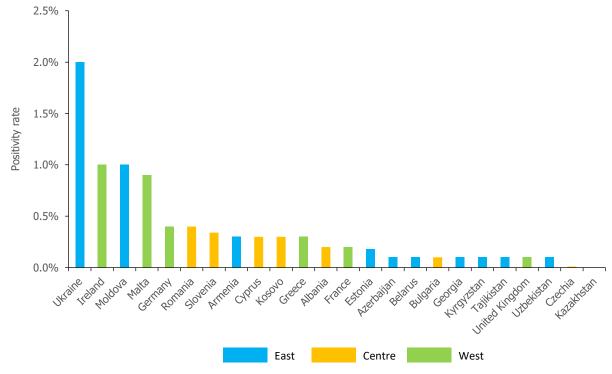
Figure 17. Data availability for testing positivity/reactivity rate based on overall, facility level and community level HIV testing services, in Europe and Central Asia, 2022



Overall facility- and community-level testing services

For overall community and facility level testing services, countries were asked to provide a positivity rate based on the number of tests (Figure 18). The median positivity rate was 0.2% (range: 0.01%–2%). Variation in overall positivity rates is expected as data collection methodologies vary and the data pulls together many implementation types of HIV testing aimed towards different populations.

Figure 18. Positivity rate for community and facility level testing services, in Europe and Central Asia, 2022



Facility level testing services

Eleven countries were able to provide positivity rates for overall facility level testing services (Figure 19). The median positivity rate was 0.2% (range: 0.1%-2%).

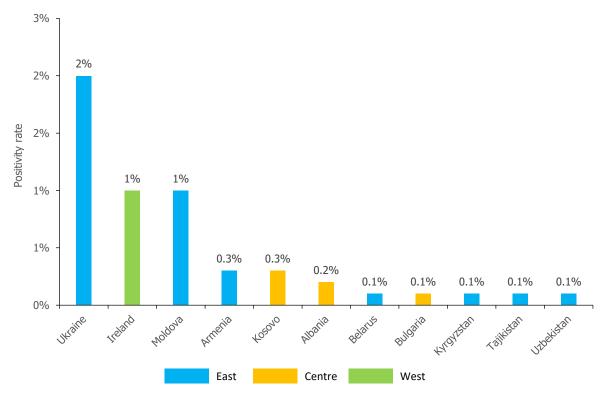


Figure 19. Positivity rate for overall facility level testing services, in Europe and Central Asia, 2022¹

Some countries were able to provide positivity rates for different facility level testing services (Figure 20). Thirteen countries were able to provide positivity rates for provider-initiated testing services. These rates ranged from 0% (Armenia, Estonia, Kazakhstan, Kosovo, and Kyrgyzstan) to 2% (Moldova)).

Twelve countries were able to provide data for positivity rates at facility level VCT testing sites, with rates ranging from 0% (Armenia, Kyrgyzstan and Moldova) to 5% (Ireland).

Fourteen countries were able to provide data for positivity rates at antenatal care clinics, with rates ranging from 0% (Czechia, Estonia, Kazakhstan, Kosovo, Tajikistan and the United Kingdom) to 4% (Moldova).

Ten countries were able to provide data for positivity rates at other facility level testing sites. Rates ranged from 0% (Bulgaria, Kazakhstan, Kyrgyzstan, Tajikistan) to 3% (Ukraine).

Additionally, six countries (Armenia, Kosovo, Kyrgyzstan, Moldova, Tajikistan and Ukraine) reported data on the positivity rates at family planning clinics. All six reported a 0% positivity rate.

16

¹ Data from Greece not included in graph. Greece reported a positivity rate of 94%.

b. Voluntary Counselling and Testing a. Provider Initiated Testing 2% Positivity Rate %4 gt Positivity 3% 1% 1% 1% 0.2% 0.2% c. Antenatal Care Clinics d. Other Facility Level Testing 0.5% 0.4% 0.4% gg 0.3% 3% Positivity Rate 2% Positivity 0.2% 0.2% 0.2% 0.2% 0.1% 0.1% 0.02%

Figure 20. Positivity rates for facility level testing services, in Europe and Central Asia, 2022

Community level testing services

Twelve countries were able to provide data on community level positivity rates for all community level testing, with rates ranging from 3% in Ukraine to 0% in France and Estonia (Figure 21).

Ten countries were able to report the positivity rates for community testing within VCT centres. Rates ranged from 3% to 0%. Mobile community testing services also had a positivity rate between 3% and 0% in the seven countries able to report data. Other community testing services had a positivity rate between 2% and 0% in seven reporting countries.

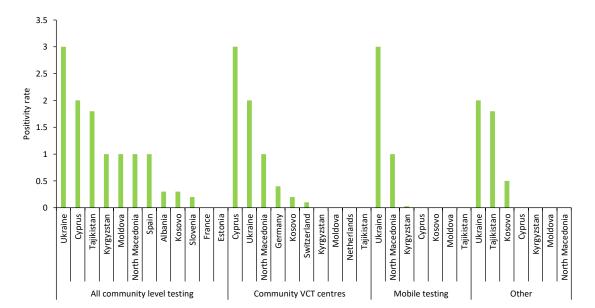


Figure 21. Positivity rates for community level testing services, in Europe and Central Asia, 2022

Additionally, countries were asked to provide reactivity rates for community level testing (Figure 22). Seven countries were able to provide reactivity rates for all community level testing. Reactivity rates ranged from 2% in Cyprus, Ireland, Latvia and Spain to 0.3% in the United Kingdom. Three countries provided data for VCT centres, with reactivity rates ranging from 3% (Cyprus) to 0.4% (Germany). Mobile testing reactivity rates ranged from 1% to 0% in the three countries able to provide data. Ireland reported 5% reactivity in other community settings and Cyprus reported 0% in other community settings.

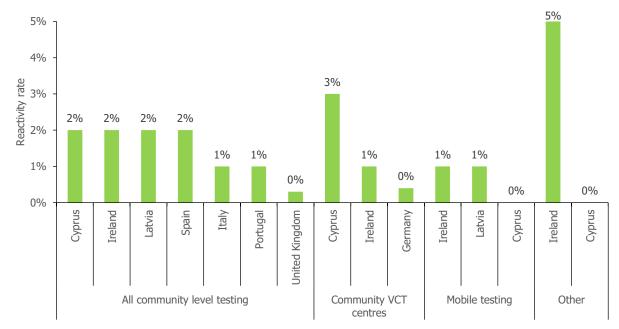


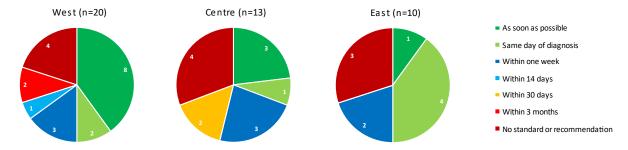
Figure 22. Reactivity rates for community level testing services, in Europe and Central Asia, 2022

Linkage to care

Providing HIV testing services where there is suboptimal linkage to care, including antiretroviral therapy (ART), has limited benefits for those living with HIV. While increasing HIV testing in non-traditional settings is important for widening accessibility, it also increases the likelihood of people not being linked to care, highlighting the need for clear time standards and referral pathways.

Forty-three countries provided data on recommendations on when linkage to care should take place following an HIV diagnosis (Figure 23). Of these 43 countries, seven (16%) recommended linkage to care on the same day of diagnosis, nine (21%) within one to two weeks, four (9%) within one to three months and 12 (28%) recommend linkage to care occur as soon as possible. Eleven (26%) countries had no standard or recommendation for when linkage to care should occur.

Figure 23. Recommendations on when linkage to care should take place following an HIV diagnosis, by WHO sub-region, in 43 countries in Europe and Central Asia, 2022



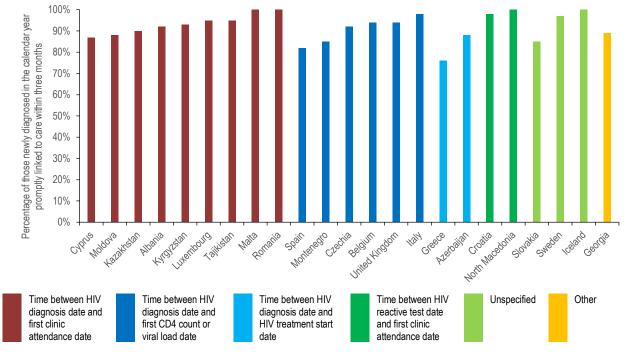
Linkage to care rates are not directly comparable between countries as there is no agreed standard defintion on how to calculate linkage to care. Definitions for linkage to care for both facility-level and community-level HIV testing vary depending on which start and end dates are chosen to calculate the time taken to link to care. First clinic attendance date after diagnosis is considered the gold standard marker for linkage to care, but the choice of definition generally depends on which data are available. Table 2 outlines which definitions are used by different countries.

Table 2. Linkage to care definitions for facility-level and community-level HIV in 43 countries in Europe and Central Asia, 2022

cility-level testing	Number of countries
Time between HIV diagnosis date and first clinic attendance date	15
Time between HIV diagnosis date and HIV treatment start date	2
Time between HIV diagnosis date and first CD4 count or viral load date	7
Linkage to care not calculated for facility-level HIV testing	18
Other	1
mmunity-level testing	Number of countries
Time between HIV reactive test date and first CD4 count or viral load date	1
Time between HIV reactive test date and confirmatory test	2
Time between HIV reactive test date and first clinic attendance date	8
Time between confirmatory test date and first CD4 count or viral load date	2
Time between confirmatory test date and first clinic attendance date	8
Time between confirmatory test date and HIV treatment start date	1
Linkage to care not calculated for community-level HIV testing	20
Other	1

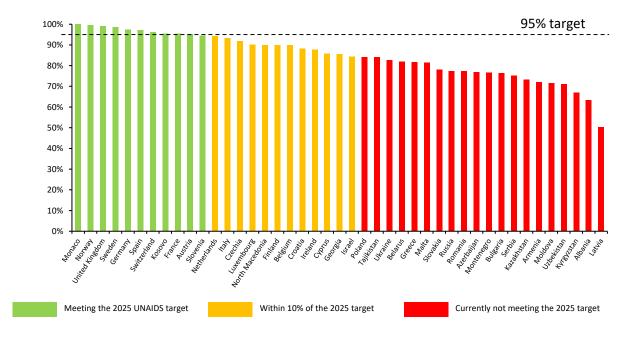
Prompt linkage to care was defined as being within three months from diagnosis [12]. Twenty-three countries were able to provide data on the proportion of those newly diagnosed with HIV in the calendar year who were promptly linked to care, with rates ranging from 76% (Greece) – 100% (Iceland, Malta, North Maccedonia, Romania) (Figure 24).

Figure 24. Proportion of those newly diagnosed with HIV in the calendar year promptly linked to care within three months, by facility-level linkage to care definition, in Europe and Central Asia (n=22)



In the 43 countries that reported data for both stage 2 and stage 3 of the continuum of care within Europe and Central Asia, an estimated 1 873 976 PLHIV have been diagnosed, of whom 1 583 031 (84%; range 50–100%) are reported to be on treatment. Overall, by 2022, ten out of 43 countries met the target of 95% of those diagnosed receiving treatment (France, Germany, Monaco, Norway, Spain, Sweden, Switzerland, the United Kingdom, Slovenia and Kosovo) (Figure 25). Of the remaining countries, 13 countries are within 10% of the 2025 target and 19 countries are more than 10% away from the 2025 target.

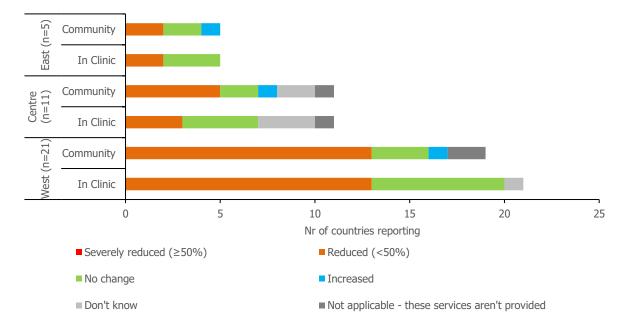
Figure 25. Percentage of all people living with diagnosed HIV who are on treatment in 43 countries of Europe and Central Asia



Impact of COVID-19

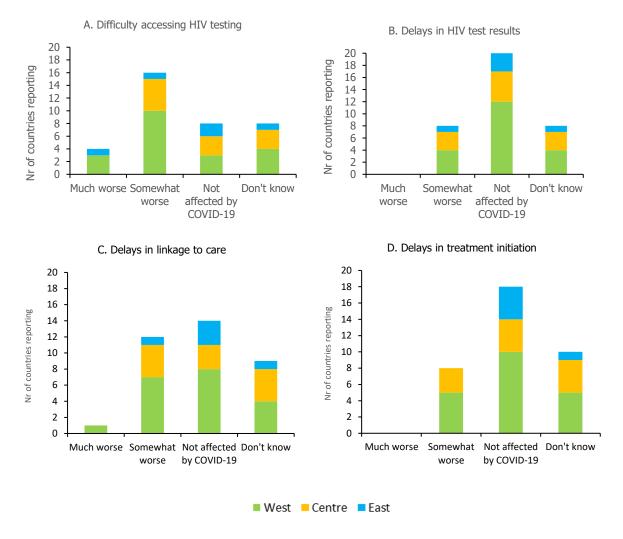
COVID-19 has had wide-reaching impacts on a range of healthcare services in Europe and Central Asia, including the provision of in-clinic and community HIV testing (Figure 26). Two of 37 countries reported that community testing services were severely reduced (\geq 50%) and 20 countries reported that community testing services were reduced (<50%). Three countries reported that community testing increased due to the COVID-19 pandemic. Eighteen countries reported that in-clinic testing was reduced (<50%) due to the COVID-19 pandemic.

Figure 26. The impact of the COVID-19 pandemic on the provision of in-clinic and community HIV tests in Europe and Central Asia, by WHO sub-region, in 2021



The COVID-19 pandemic exacerbated some of the known challenges for people living with or at risk of HIV (Figure 27). The COVID-19 pandemic had the greatest impact on access to HIV testing, with sixteen out of 36 ≥ countries reporting COVID-19 made existing difficulties accessing testing worse and four countries reported that it was made much worse. Delays in test results were reported by eight countries. Linkage to care was also negatively impacted by the pandemic, with twelve countries reporting that linkage to care delays were worse than before the pandemic and one country reporting the delays were much worse. Eight countries reported delays in treatment initiation due to the impact of the COVID-19 pandemic.

Figure 27. The impact of COVID-19 on known challenges for people living with or at risk for HIV in Europe and Central Asia, by WHO sub-region, in 2021



Conclusions and priorities for action

Limitations

Variations in data sources, sample sizes, timeframes and data quality limit the scope for directly comparing data between countries. Although accompanying definitions were provided alongside the questions, in practice, some countries use slightly different definitions, so caution is required when making comparisons.

Countries use different modelling tools for their estimates of the number of people living with HIV. This can impact what data they are able to produce. For example, Spectrum, the tool that 14 countries use to estimate the total number of PLHIV (diagnosed and undiagnosed), does not allow for disaggregation by key population. This helps explain the lower numbers reporting data for stage one of the continuum of care in key populations.

Overall progress

People's knowledge of their HIV status through HIV testing is crucial to the success of the HIV response. Testing is the gateway to HIV prevention, treatment, care and other support services. Despite considerable progress made in reducing HIV transmissions, almost one in five people living with HIV across Europe and Central remain unaware of their HIV status. The available data, while limited, suggests that the equivalent figure for key populations at increased risk of HIV across Europe and Central Asia is higher, especially amongst PWID. Additionally, in Europe and Central Asia, just over half of people diagnosed in 2021 were diagnosed late and face the risk of increased morbidity and early death as a result, as well as further transmission. Therefore, it is essential that testing is scaled up in the WHO Europe region in order to reach the 2025 UNAIDS target of 95% of all PLHIV knowing their status.

Up-to-date, country-specific national HIV testing guidelines are important to maximise the impact of HIV testing services. Forty countries reported that they have guidelines on HIV testing in place, however, a third of these countries indicated their guidance was over five years old. Guidance over five years old may be out of date and not reflect recent innovations in HIV testing (i.e. community-testing, indicator-guided testing, etc.). While nine of the 11 countries reporting no guidance indicated that they used alternative guidance, such as ECDC or WHO guidance, each country will require a context-specific approach depending on HIV prevalence rates and key populations. Therefore, national guidelines tailored to the country context are preferable.

There has been an encouraging increase in the implementation of innovative, community-based testing interventions, however, testing interventions in traditional health settings still have generally higher coverage than home or community-based testing. While the number of countries offering lay provider testing has increased since 2018, the number remains much lower than the number of countries offering community-based testing by a medical professional. This implementation gap is disappointing, as WHO guidelines from 2015 explicitly support testing by trained lay providers to increase access to HIV testing services through community-based approaches. Testing in home and community settings expands opportunities for testing among individuals who may find testing in traditional health settings less accessible or acceptable for various reasons. There is evidently a need to scale up coverage of such testing interventions.

Despite the increasing level of implementation across a range of HIV testing interventions in Europe and Central Asia, legal, regulatory and financial barriers still exist, including restrictions on who can administer and access HIV tests. Thirty-three countries reported restrictions on who can legally carry out an HIV test, with many countries restricting HIV test administration to doctors and nurses. Eight countries reported restrictions on who can access HIV testing, with six countries reporting there is restricted access to HIV testing for undocumented migrants and two countries reporting there is restricted access to HIV testing for prisoners. Financial barriers to HIV testing also persist across the region, with two countries reporting that everyone must pay for HIV testing and 14 countries reporting that testing is only available free in certain geographic areas and/or to certain populations. Removing these barriers will help to increase the accessibility and uptake of HIV testing in the region.

Countries can only ensure that expanded testing services are available and accessible to those at risk for acquiring HIV if they are also monitoring uptake of these services. In particular, it is crucial that data on testing uptake rates can be disaggregated by key populations at risk of acquiring HIV. However, there is limited data availability on testing rates among key populations at increased risk of acquiring HIV, in particular amongst migrants, undocumented migrants and transgender people.

Only 23 countries were able to provide data on linkage to care, which is concerning given that providing testing without effective linkage to care is of limited benefit for those living with HIV. Based on the data reported, rates of linkage to care across the region are high. However, data from the continuum of care suggests that there is a substantial drop-off between PLHIV being diagnosed and then treated. As community-based testing becomes increasingly implemented across the region, it is important that countries develop and strengthen linkage-to-care guidelines and mechanisms to ensure that PLHIV have access to medical guidance and medication.

Priorities for action

National HIV testing guidelines ensure a consistent national approach. Guidelines should incorporate guidance on testing in non-traditional settings, particularly community- and home-based testing interventions, including how to establish clear pathways to care. The guidelines should also include specific recommendations for key populations on testing frequency and how testing should be monitored to establish impact on HIV transmission. Countries without national guidelines are encouraged to develop national guidelines and countries with guidelines over five years old are encouraged to review and if needed update their testing guidelines to reflect recent advances in HIV testing.

- The provision of a range of HIV testing interventions, especially HIV testing interventions outside of traditional settings, should be expanded to ensure increased accessibility for key populations at increased risk of acquiring HIV. This should be accompanied with improved linkage to care and treatment.
- Countries are encouraged to remove legal and regulatory barriers to HIV testing, including restrictions to
 access of HIV testing for specific populations and restrictions on which professions can administer an HIV
 test. Other laws reducing accessibility to testing for key populations, such as criminalisation of sex work,
 should be reconsidered.
- Costs for HIV testing should be reviewed, and countries are encouraged to provide provisions for those who
 are unable to afford HIV testing. This will reduce mortality and morbidity and new HIV infections in the
 future as it increases the accessibility of HIV testing.
- Monitoring the capacity for HIV testing volume and positivity should be increased where possible this should include community-level and facility-level settings. Disaggregated data on key populations should be collected wherever possible.

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Annex 1. Continuum of care for people living with HIV in Europe and Central Asia

WHO Region	Country	PLHIV		Diagnosed		Treated		Virally Suppressed		
		Data source	Year	Data source	Year	Data source	Year	Data source	Year	
West	Andorra									
	Austria	ECDC modelling tool	2020	Cohort data	2020	Cohort data	2020	Cohort data	2020	
	Belgium	Other modelling tool or estimate	2020	Surveillance data	2020	Other data source	2020	Other data source	2020	
	Denmark	Other modelling tool or estimate	2020	Other data source	2021	Surveillance data	2021	Surveillance data	2021	
	Finland	ECDC modelling tool	2021	Surveillance data	2021	Surveillance data	2021	Surveillance data	2021	
	France	Other modelling tool or estimate	2018	Other data source	2018	Other data source	2018	Other data source	2018	
	Germany	Other modelling tool or estimate	2020	Surveillance data	2020	Other data source	2020	Cohort data	2020	
	Greece	ECDC modelling tool	2021	Surveillance data	2021	Surveillance data	2021			
	Iceland	Other modelling tool or estimate	2020	Other data source	2020					
	Ireland	SPECTRUM	2018	Other data source	2018	Other data source	2018	Other data source	2018	
	Israel	Other modelling tool or estimate	2020	Surveillance data	2020	Other data source	2020			
	Italy	Other modelling tool or estimate	2019	Other data source	2019	Other data source	2019	Other data source	2019	
	Liechtenstein									
	Luxembourg	Other modelling tool or estimate	2021	Cohort data	2021	Cohort data	2021	Cohort data	2021	
	Malta	ECDC modelling tool	2021	Surveillance data	2021	Other data source	2021	Surveillance data	2017	
	Monaco	Other modelling tool or estimate	2019	Other data source	2019	Other data source	2019	Other data source	2019	
	Netherlands	ECDC modelling tool	2020	Cohort data	2019	Cohort data	2019	Cohort data	2013	
		•			2021	1		Other data source		
	Norway	Other modelling tool or estimate	2021	Other data source		Other data source	2021	Other data source	2021	
	Portugal	ECDC modelling tool	2019	Surveillance data	2019	011 1 1	0040			
	San Marino	Other modelling tool or estimate	2019	011	2017	Other data source	2019	011	2010	
	Spain	Other modelling tool or estimate	2017	Other data source	2017	Other data source	2019	Other data source	2019	
	Sweden	Other modelling tool or estimate	2021	Other data source	2021	Other data source	2021	Other data source	2021	
	Switzerland	Other modelling tool or estimate	2021	Other data source	2021	Other data source	2021	Cohort data	2021	
	United Kingdom	Other modelling tool or estimate	2020	Surveillance data	2020	Surveillance data	2020	Surveillance data	2020	
Centre	Albania	SPECTRUM	2021	Surveillance data	2021	Surveillance data	2021		2020	
	Bosnia & Herzegovina						2020			
	Bulgaria	SPECTRUM	2021	Cohort data	2021	Cohort data	2021	Cohort data	2021	
	Croatia	SPECTRUM	2020	Surveillance data	2020	Cohort data	2019	Cohort data	2020	
	Cyprus	ECDC modelling tool	2020	Other data source	2020	Other data source	2020	Other data source	2020	
	Czechia	ECDC modelling tool	2021	Surveillance data	2021	Surveillance data	2021	Surveillance data	2021	
	Hungary			Surveillance data	2019					
	Kosovo	ECDC modelling tool	2022	Cohort data	2022	Cohort data	2022	Cohort data	2022	
	Montenegro	SPECTRUM	2021	Surveillance data	2021	Surveillance data	2021	Surveillance data	2021	
	North Macedonia	ECDC modelling tool	2020	Surveillance data	2020	Surveillance data	2020	Surveillance data	2020	
	Poland	SPECTRUM	2020	Other data source	2020	Other data source	2020			
	Romania	SPECTRUM	2021	Surveillance data	2021	Surveillance data	2021	Surveillance data	2021	
	Serbia	SPECTRUM	2019	Surveillance data	2021	Other data source	2021			
	Slovakia	ECDC modelling tool	2018	Surveillance data	2020	Surveillance data	2020	Surveillance data	2020	
	Slovenia	ECDC modelling tool	2022	Surveillance data	2022	Surveillance data	2020	Cohort data	2020	
	Türkiye	2020000		- Curromanoo aata		Carromanoo aata	2020	- Controlled adda	2020	
East	Armenia		2020		2020		2020		2020	
Lust	Azerbaijan		2020		2020		2020		2020	
	Belarus		2020		2020		2020		2020	
	Estonia	Other modelling tool or estimate	2020		2020	Other data source	2020		2020	
		Other modelling tool or estimate		0	0004			0	0004	
	Georgia	SPECTRUM	2021	Surveillance data	2021	Surveillance data	2021	Surveillance data	2021	
	Kazakhstan	ODEOTDU II	2020	011 1.4	2020	0.0	2020	011	2020	
	Kyrgyzstan	SPECTRUM	2021	Other data source	2021	Other data source	2021	Other data source	2021	
	Latvia	ODEOTRUM	0000	Surveillance data	2021	Other data source	2021			
	Lithuania	SPECTRUM	2020	Surveillance data	2021	Surveillance data	2021			
	Moldova	SPECTRUM	2021	Surveillance data	2021	Other data source	2021	Other data source	2021	
	Russia		2020		2020		2020		2020	
	Tajikistan		2020		2020		2020		2020	
	Turkmenistan									
	Ukraine	SPECTRUM	2021	Other data source	2021	Other data source	2021	Other data source	2021	
	Uzbekistan		2020		2020		2020		2020	

An empty box indicates that no data were provided.

Annex 2. Testing guidelines

WHO sub-region	Country	Year published	Revision planned	Plans to introduce	Key populations included in guidance								
				guidelines	MSM	PWID	Migrants	Sex Workers	Prisoners	Transgender	Youth	Pregnant people	Other
West	Andorra			No									
	Austria	2019	No		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
	Belgium			Yes									
	Denmark	2013	No		Yes	Yes	Yes						
	Finland	2010	Yes		Yes	Yes	Yes	Yes	Yes				Yes
	France	2018	Yes		Yes	Yes	Yes	Yes	Yes	Yes			
	Germany			No									
	Greece	2022	Yes		Yes	Yes	Yes	Yes	Yes				Yes
	Iceland			No	1.44	1.00	1111						
	Ireland			Yes									
	Israel	2014	No	1.00	Yes		Yes						
	Italy	2017	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Liechtenstein	2011	No		Yes	Yes	103	Yes	100	Yes	100		
	Luxembourg	2018	Yes		Yes	Yes	Yes	Yes	Yes	Yes			Yes
	Malta	2020	Yes		Yes	Yes	Yes	Yes	Yes	Yes			163
	Monaco	2019	No		165	162	162	162	162	162			
		2019	INO										
	Netherlands	0004	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	No		\ <u>\</u>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ <u>\</u>			\ <u>\</u>	
	Norway	2021	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	
	Portugal	2014	Yes		Yes	Yes	Yes	Yes	Yes	Yes			Yes
	San Marino			No									
	Spain	2014	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Sweden	2017	No		Yes	Yes	Yes	Yes		Yes	Yes		Yes
	Switzerland	2018	Yes		Yes								
	United Kingdom	2020	No		Yes	Yes	Yes	Yes		Yes			Yes
Centre	Albania	2020	Yes		Yes	Yes	Yes	Yes	Yes	Yes			
	Bosnia & Herzegovina												
	Bulgaria	2012	No		Yes	Yes	Yes	Yes	Yes			Yes	
	Croatia	2017	Yes		Yes	Yes	Yes	Yes	. 00			1.00	
	Cyprus	2020	No		100	100	Yes	100					
	Czechia	2016	Yes		Yes	Yes	Yes	Yes	Yes				Yes
	Hungary	2010	103	No	103	103	100	163	100				100
	Kosovo	2018	No	140	Yes	Yes		Yes	Yes	Yes			
	Montenegro	2010	INO	Yes	163	163		163	163	163			
	North Macedonia			Yes									
		2022	Vac	res	Vaa	Vaa	Vac	Vac	Vaa			Vaa	Vaa
	Poland		Yes		Yes	Yes	Yes	Yes	Yes	V		Yes	Yes
	Romania	2021	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
	Serbia	2007	Yes		Yes	Yes		Yes			Yes	Yes	
	Slovakia	2020	Yes		Yes	Yes	Yes	Yes				Yes	Yes
	Slovenia	2009	Yes		Yes	Yes							
	Türkiye	2019	No										
WHO sub- region	Country	Year published	Revision planned	Plans to introduce guidelines	MSM	PWID	Migrants	Sex	Prisoners	led in guidance Transgender	Youth	Pregnant	Other
-	A	2047	NI-	guidelines				workers				people	
East	Armenia	2017	No										
	Azerbaijan	2012	Yes										
	Belarus	2012	Yes		Yes	Yes		Yes	Yes				
	Estonia	2020	Yes		Yes	Yes		Yes	Yes	Yes			Yes
	Georgia	2019	No		Yes	Yes		Yes	Yes	Yes			
	Kazakhstan	2020	Yes		Yes	Yes		Yes	Yes	Yes			Yes
	Kyrgyzstan	2018	Yes		Yes	Yes	Yes	Yes	Yes	Yes			Yes
	Latvia			Yes									
	Lithuania	2010	No		Yes	Yes		Yes	Yes				Yes
	Moldova	2018	Yes		Yes	Yes		Yes					
	Russia							İ					
	Tajikistan	2017	Yes			Yes	Yes	Yes	Yes				
												1	
	Turkmenistan												
		2021	Yes		Yes	Yes		Yes	Yes				

Annex 3. HIV testing uptake among key populations in Europe and Central Asia

Country	MSM*	PWID*	Migrants*	Undocumented migrants*	Sex workers*	Prisoners*	Transgender*
Albania	36 (2019)	46 (2019)	Imgranto	Onaboamontoa migranto	31 (2019)	THOUNDS	Tranogonaci
Andorra	30 (2013)	40 (2013)			31 (2013)		
Armenia							
Austria							
Azerbaijan	70.0	70.5			00.4 (
Belarus	76.2	78.5			83.1 (year not reported)		
Belgium		77.9					
Bosnia & Herzegovina	1	49.7 (year not reported)					
Bulgaria							
Croatia	44 (2018)	71 (2019)					
Cyprus	73 (2021)		83 (2021)				
Czechia		71 (2019)			100 (2021)	100 (2021)	
Denmark							
Estonia		73 (2018)					
Finland							
France	56 (2021)	6 (2019)					
Georgia	<u> </u>	<u> </u>					
Germany	52 (2018)						
Greece	,						
Hungary							
Iceland							
Ireland							
Israel							
Italy		77.0 (400 (0000)			400 (0000)	
Kazakhstan		77.9 (year not reported)	100 (2020)			100 (2020)	
Kosovo							
Kyrgyzstan							
Latvia							
Liechtenstein							
Lithuania		28 (2018)					
Luxembourg							
Malta							
Moldova	48 (2020)	50 (2020)			64 (2020)		
Monaco		42 (2019)					
Montenegro		14 (2020)			11 (2022)		
Netherlands							
North Macedonia							
Norway							
Poland	9 (2021)	6 (2021)	16 (2021)				1
Portugal	56 (2021)	50 (2021)	40 (2021)	30 (2021)	54 (2021)		65 (2021)
Romania	49 (2018)	54 (2019)	- ()		- \/		\/
Russia	.5 (=510)	(==)					
San Marino							
Serbia	52 (2021)	12 (2021)			53 (2021)		
Slovakia	JZ (ZUZ I)	12 (2021)			53 (2021)		
Slovakia							
		50 (2010)				95 (2021)	
Spain		59 (2019)				85 (2021)	
Sweden	70 (00 (0)						
Switzerland	73 (2018)						
Tajikistan							
Türkiye							
Turkmenistan							
Ukraine	72 (2021)	51 (2020)			64 (2021)	55 (2019)	53 (2020)
United Kingdom							
Uzbekistan							

^{*} Percentage of population who know their status (year of data collection)

Annex 4. Countries implementing different testing services, 2022

Figure 4.1. Countries reporting the implementation of community-based HIV testing and counselling services, Europe and Central Asia, 2022

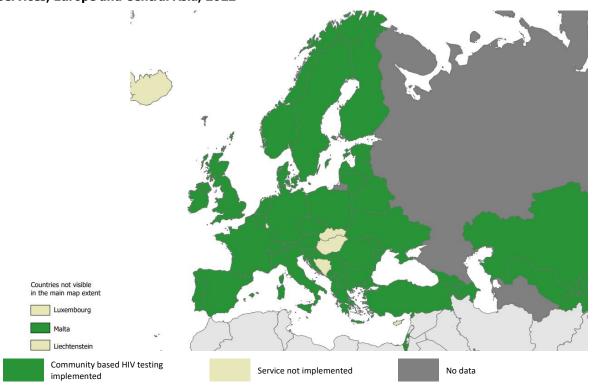


Figure 4.2. Countries reporting the implementation of lay-provider HIV testing and counselling services, Europe and Central Asia, 2022

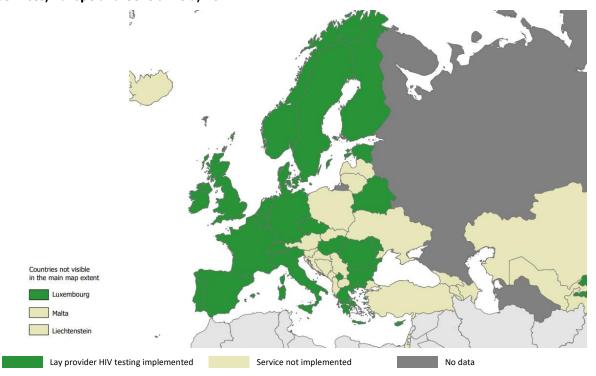


Figure 4.3. Countries reporting the implementation of HIV indicator condition testing, Europe and Central Asia, 2022

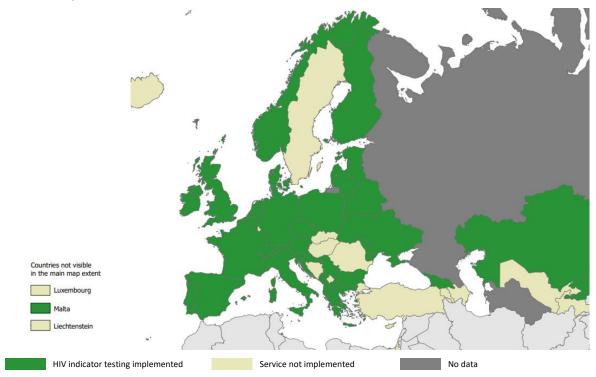


Figure 4.4. Countries reporting the implementation of HIV self-testing, Europe and Central Asia, 2022

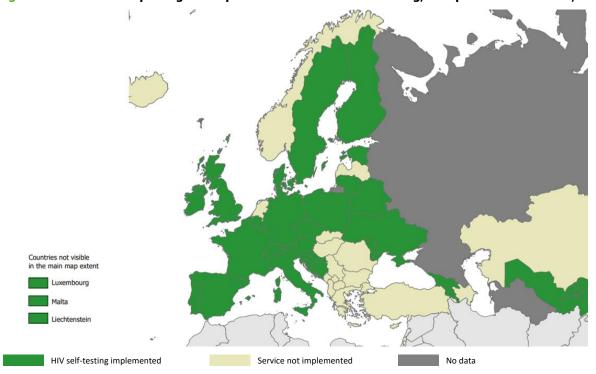
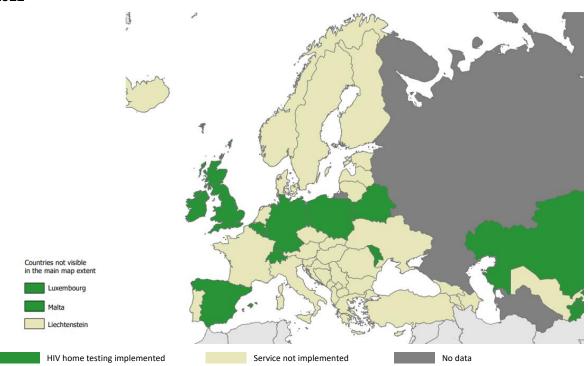


Figure 4.5. Countries reporting the implementation of HIV home testing, Europe and Central Asia, 2022





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