

SPECIAL REPORT



HIV Continuum of care

Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2020 progress report

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This report of the European Centre for Disease Prevention and Control (ECDC) was coordinated by Teymur Noori with support from Jasleen Singh.

This report is one in a series of thematic reports based on information submitted by reporting countries in 2020 on monitoring implementation of the Dublin Declaration on Partnership to Fight HIV/AIDS. Other reports in the series can be found on ECDC's website at: <https://www.ecdc.europa.eu/en/monitoring-implementation-dublin-2020>.

Draft versions of the thematic reports were produced under contract ECDC/2017/007 by Cheryl Gowar, Katy Sharrock, Rosalie Hayes, Alison Brown and Valerie Delpech.

Acknowledgements

ECDC would like to acknowledge the support and guidance provided by members of the Dublin Declaration advisory group. Members of the advisory group include Kristi Ruutel (Estonia), Daniela Rojas Castro (France), Otar Chokoshvili (Georgia), Caroline Hurlley (Ireland), Silke David (Netherlands), Arild Johan Myrberg (Norway), Isabel Aldir (Portugal), Sladjana Barros (Serbia), Irena Klavs (Slovenia), María Vázquez (Spain), Daniel Simões (Coalition Plus), Sini Pasanen (HivFinland), Dorthé Raben, Jordi Casabona (INTEGRATE), Zoran Dominković (Iskorak), Thomas Seyler (EMCDDA), Taavi Erkkola (UNAIDS), Giorgi Kuchukhidze (WHO Regional Office for Europe).

ECDC would also like to thank the following people for providing data through the Dublin Declaration questionnaire: Roland Bani, Arian Boci (Albania); Philipp Bretschneider, Martin Schmidinger (Austria); Esmira Almamadova (Azerbaijan); Inna Karaban, Anna Rusanovich, Svetlana Sergeenko (Belarus); Frederic Denauw, Jessika Deblonde, Dominique Van Beckhoven, Wim Vanden Berghe (Belgium); Mariya Tyufekchieva (Bulgaria); Tatjana Nemeth-Blazic, Josipa Lovorka, Josip Begovac, Sanja Belak Škugor, Dunja Skoko Poljak, Iva Jovović, Zoran Dominković (Croatia); Ioannis Demetriades, Anna Demetriou, Christos Krasidis (Cyprus); Anna Kubatova, Ivo Procházka (Czechia); Heidi Slavin, Josefine Skou Jakobsen, Emmett Minor (Denmark); Kristi Rütel, Anne Murd, Annika Kalinina, Liilia Lõhmus, Liis Lemsalu, Maris Salekešin, Piret Viiklepp, Sigrid Vorobjov, Svetlana Ovsjannikova (Estonia); Henriikki Brummer-Korvenkontio, Kirsi Liitsola, Jukka Ollgren, Pia Kivelä, Sini Pasanen (Finland); Florence Lot, Aminata Sarr (France); Maia Tsereteli, Nino Tsereteli (Georgia); Ulrich Marcus, Silke Klumb, Ursula von Rügen, Dirk Meyer, Binod Mahanty (Germany); Vasilios Raftopoulos (Greece); Maria Dudas (Hungary); Guðrún Sigmundsdóttir, Einar Thor Jonsson (Iceland); Caroline Hurlley, Moira Germaine, Owen Brennan, Derval Igoe, Kate O'Donnell, Melissa Brady, Sarah Jackson (TB), Fiona Lyons, Eamon Keenan, Brian Galvin, Sean Millar, Sinéad Browne, Ronan Kieft, Stephen O'Hare, Adam Shanley, Erin Nugent, Ann Mason, Cillian Flynn, Jess Sears, Rowan Golden (Ireland); Francesco Maraglino, Anna Caraglia, Lella Cosmaro (Italy); Бауыржан Байсеркин, Ганина Л.Ю., Мусина Ж.Ж., Касымбекова С.Ж., Сайрамбекова Г.М. (Kazakhstan); Laura Shehu (Kosovo¹); Aybek Bekbolotov (Kyrgyzstan); Šarlote Konova (Latvia); Irma Caplinskiene, Arunas Kepezinskas (Lithuania); Pierre Weicherding, Sandy Kubaj (Luxembourg); Jackie Melillo (Malta); Svetlana Popovici (Moldova); Alma Cicic, Sanja Sisovic (Montenegro); Silke David, Cor Blom (Netherlands); Arild Johan Myrberg, Harald Lislevand, Robert Whittaker, Øivind Nilsen, Hilde Kløvstad (Norway); Magdalena Rosińska, Marta Niedźwiedzka-Stadnik, Karolina Zakrzewska (Poland); Isabel Aldir, Joana Bettencourt, Ana Fernandes, Maria João Aleixo, Helena Cortes Martins, Cristina Mora, Filipa Barbosa, Ricardo Fernande (Portugal); Mariana Mardaescu, Adrian Abagiu, Marieta Iancu, Sanda Vintilă, Claudiu Șchiopu, Alexandra Mărdărescu, Valentina Ștefan, Fidelie Kalambayi, Geanina Surdu (Romania); Andrea Gaultieri (San Marino); Jan Mikas (Slovakia); Irena Klavs, Miran Šolinc (Slovenia); Julia Del Amo Valero, Ramón Espacio (Spain); Charlotte Bjorkenstam, Malin Falknert (Sweden); Axel J. Schmidt (Switzerland); Алиджон Солиев, Пулод Джамолов (Tajikistan); Emel Özdemir Şahin (Turkey); Ihor Kuzin, Nadiia Semchuk (Ukraine); Adamma Aghaizu, Rosalie Hayes (United Kingdom).

ECDC would like to thank the operational contact points for HIV surveillance from EU/EEA Member States and the national HIV/AIDS surveillance focal points from other countries of the WHO European Region for making available HIV/AIDS surveillance data.

ECDC would like to thank EMCDDA and UNAIDS for harmonising their monitoring systems with ECDC and making available country-reported data for the purposes of monitoring the Dublin Declaration. ECDC would also like to thank the WHO Regional Office for Europe for jointly coordinating HIV surveillance in the WHO European Region.

Suggested citation: European Centre for Disease Prevention and Control. Continuum of HIV care. Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2020 progress report. Stockholm: ECDC; 2021

Stockholm, August 2021

ISBN 978-92-9498-544-6

doi: 10.2900/816839

Catalogue number: TQ-06-21-023-EN-N

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Abbreviations

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
CoC	Continuum of Care
ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EU	European Union
HIV	Human immunodeficiency virus
MSM	Men who have sex with men
PLHIV	People living with HIV
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
TESSy	The European Surveillance System
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

Executive summary

- In 2020, 40 out of 55 countries in Europe and Central Asia provided the latest available data on all four stages of the continuum of HIV care (compared to 34 countries in 2018). A total of 45 countries were able to provide data for at least two consecutive stages of the continuum of HIV care (compared to 42 in 2018).
- In 2020, using data from countries able to provide at least two consecutive stages of the continuum, the overall performance of the European and Central Asian region against the global 90-90-90 targets is 82% of all PLHIV with HIV diagnosed, 67% of those diagnosed with HIV on treatment and 90% of those on treatment virally suppressed. More progress is needed to meet the substantive target of 73% of all PLHIV being virally suppressed, with performance for the overall region at 50% (based on the countries that submitted data for all four stages of the continuum).
- Substantial variation exists for each element of the continuum, both between and within European and Central Asian sub-regions. Overall, the West sub-region has met all three of the global 90-90-90 targets, with 90% of all PLHIV diagnosed, 93% of people living with diagnosed HIV on treatment, and 93% of those on treatment virally suppressed. Overall, the Centre sub-region is performing at 87%, 78% and 81% and the East sub-region is performing at 78%, 50%, and 87% respectively. The West sub-region, performing at 78% overall, has also met the global substantive target of having 73% of all PLHIV virally suppressed, while the Centre and East sub-regions are at 55% and 33% respectively and still have a great deal of overall progress to make.
- Based on information from the 34 countries that reported all four stages of the continuum in both 2018 and 2020, there has been some progress towards meeting the global substantive targets. Overall, for these countries, in 2020, 82% of all PLHIV were diagnosed, 55% of all PLHIV were on treatment and 49% of all PLHIV were virally suppressed. This compares to 80%, 51% and 43% respectively in 2018. Each sub-region also showed improvements in the outcomes for the continuum of care in 2020 compared to 2018. The greatest improvement occurred in the East sub-region in the proportion of all PLHIV who are virally suppressed, with an increase from 26% in 2018 to 33% in 2020 among the 10 countries in the East sub-region able to report data in both years.
The number of people with transmissible levels of virus can be calculated by adding the number of PLHIV who are estimated to be undiagnosed, diagnosed but untreated and treated but not virally suppressed. Using data from the countries that provided all four stages of the continuum, this is estimated to be 1 112 593 PLHIV in those reporting countries, or equivalent to 50% of all PLHIV.
- Of the people living with transmissible levels of virus in 2020, 35% were estimated to be undiagnosed, 54% were estimated to be diagnosed but untreated and 11% were estimated to be on treatment but with an unsuppressed viral load. This indicates that the greatest impact in reducing the number of people with transmissible levels of virus could be achieved through rapid and sustained scale-up of treatment, along with widespread implementation of combination prevention, including further efforts to increase HIV testing.

2020 at a glance²

Region or sub-region	Status	2020 target	2020 result	Global target met?
European and Central Asian Region	Diagnosed (n=45)	90%	82%	Yellow
	On antiretroviral therapy (ART) (n=43)	90%	67%	Red
	Virally suppressed (n=40)	90%	90%	Green
	Viral suppression of all PLHIV (n=40)	73%	50%	Red
West sub-region	Diagnosed (n=21)	90%	90%	Green
	On ART (n=20)	90%	93%	Green
	Virally suppressed (n=18)	90%	93%	Green
	Viral suppression of all PLHIV (n=18)	73%	78%	Green
Centre sub-region	Diagnosed (n=12)	90%	87%	Yellow
	On ART (n=11)	90%	78%	Red
	Virally suppressed (n=11)	90%	81%	Yellow
	Viral suppression of all PLHIV (n=11)	73%	55%	Red
East sub-region	Diagnosed (n=12)	90%	78%	Red
	On ART (n=12)	90%	50%	Red
	Virally suppressed (n=11)	90%	87%	Yellow
	Viral suppression of all PLHIV (n=11)	73%	33%	Red

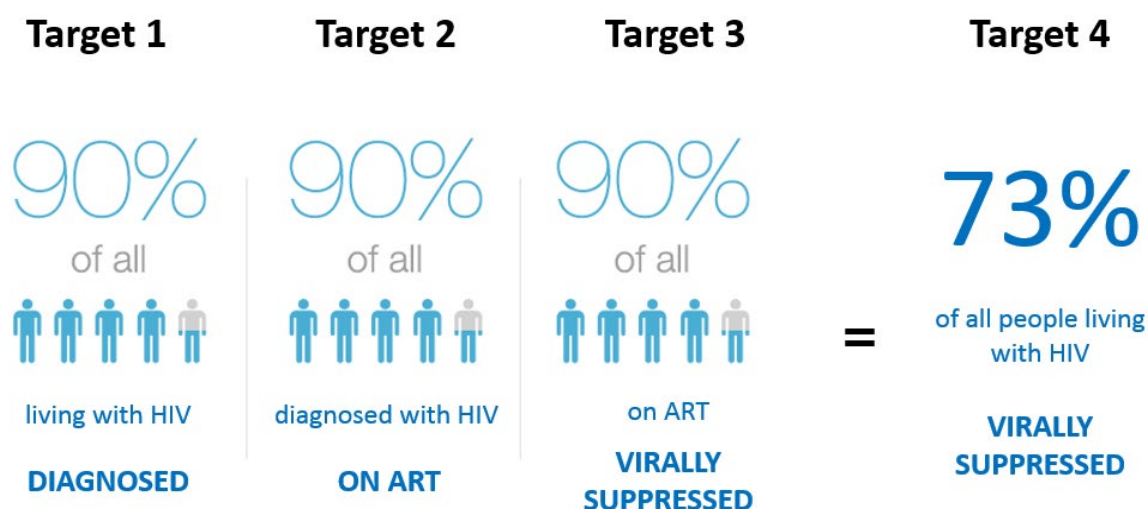
■ Met or exceeded target
 ■ Within 10% of meeting target
 ■ Target not met

² For each stage of the continuum, countries are included where they were able to provide two consecutive stages in order to calculate a percentage to measure against the 90% target ('n' indicates the number of countries that were included in the calculation for each stage.)

Introduction

The 90-90-90 targets were established in 2014 by the Joint United Nations Programme on HIV/AIDS (UNAIDS). The aim was that by 2020 90% of all people living with HIV would be diagnosed, 90% of those diagnosed would be receiving treatment and 90% of those receiving treatment would achieve viral suppression³ (Figure 1). This translates to a target of 73% viral suppression among all people living with HIV (PLHIV). UNAIDS’ modelling suggests that achieving these targets by 2020 will enable the world to meet the Sustainable Development Goal of eliminating the AIDS epidemic by 2030 (SDG 3).

Figure 1. Pictorial explanation of the UNAIDS 90-90-90 targets



ART – antiretroviral therapy

The continuum of HIV care is a conceptual framework that provides a snapshot of critical stages in achieving viral suppression among PLHIV. Achieving a high rate of viral suppression among PLHIV ensures a normal life expectancy, a better quality of life and prevention of onward transmission of HIV. The framework also enables countries to monitor the effectiveness of specific areas of their HIV response. The sequential nature of the stages in the continuum indicates where countries can focus their efforts and which programmes and activities require improvement.

This report focuses on data findings on the continuum of HIV care submitted by countries in Europe and Central Asia for the 2020 round of reporting on implementation of the Dublin Declaration on Partnership to Fight HIV & AIDS in Europe and Central Asia. In this report, the continuum of care is expressed in two ways (Box 1). The ‘global substantive targets’ are defined as the percentages for each stage of the continuum in relation to all PLHIV, making 90-81-73 the target (Figure 2). The global 90-90-90 targets are assessed as percentages of the previous stage of the continuum.

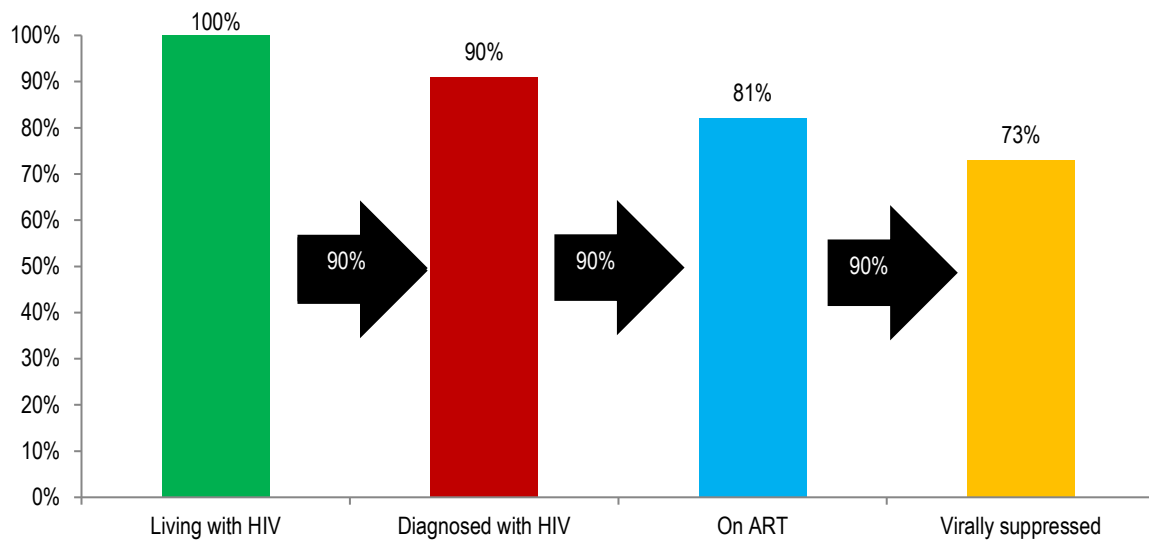
Box 1 – Continuum definition

Global 90-90-90 target: each stage of the continuum is presented as a percentage of the previous stage of the continuum – target 90%-90%-90%

Global substantive target: each stage of the continuum is presented as a percentage of the total number of people living with HIV – target 90%-81%-73%

³ UNAIDS. 90-90-90 An ambitious target to help end the AIDS epidemic. Geneva: UNAIDS; 2014.

Figure 2. Continuum of HIV care as envisaged by the 90-90-90 UNAIDS targets for 2020



Methods

Between February and August 2020, a European Centre for Disease Prevention and Control (ECDC) questionnaire was used to collect data to monitor implementation of the 2004 Dublin Declaration.⁴ The questionnaire was disseminated to the 55 countries that are part of the WHO European Region via an online survey. Countries were asked to report available data for their entire population of PLHIV, as well as key populations including men who have sex with men (MSM), people who inject drugs (PWID), migrants (defined as persons born abroad) and other groups that countries could identify as important in their setting.

The survey asked countries to provide their latest estimates of the number and proportion of people at each stage of a four-stage continuum, as per the published European standard for monitoring the continuum of care.⁵ The definitions for each of the four stages are provided in Table 1.⁶

Table 1. Consensus definitions for monitoring the continuum of HIV care during Dublin Declaration monitoring 2020

Stage 1: Total estimated number of people living with HIV in the country

The total estimated number should be based on an empirical modelling approach, using the [ECDC HIV Modelling Tool](#)⁷, Spectrum⁸ or any other empirical estimate. The estimate should include diagnosed and undiagnosed people.

Stage 2: Number/percentage of above (estimated number of people living with HIV in the country) ever having been diagnosed

The number should include all new HIV or AIDS diagnoses. It should also include those people who are in care and those who have not been linked to care.

Stage 3: Number/percentage of above (estimated number of people living with HIV in the country, ever having been diagnosed) who are currently on antiretroviral treatment

The number should include all people currently on ART, regardless of treatment regimen or treatment interruptions/discontinuation.

Stage 4: Number/percentage of above (estimated number of people living with HIV in the country, ever having been diagnosed or having had antiretroviral treatment) who had VL ≤ 200 copies/ml at last visit (virally suppressed)⁹

The number should include all those who have ever initiated ART, regardless of regimen or treatment interruptions/discontinuation.

In addition to considering the picture for the overall European and Central Asian region, data are presented by WHO sub-region (West, Centre, and East) which broadly groups areas of Europe and Central Asia by geography and epidemic type, as depicted in Figure 1c.

⁴ Both the EU and non-EU versions (including Russian translation) can be accessed on ECDC's website at <https://www.ecdc.europa.eu/en/monitoring-implementation-dublin-2020>

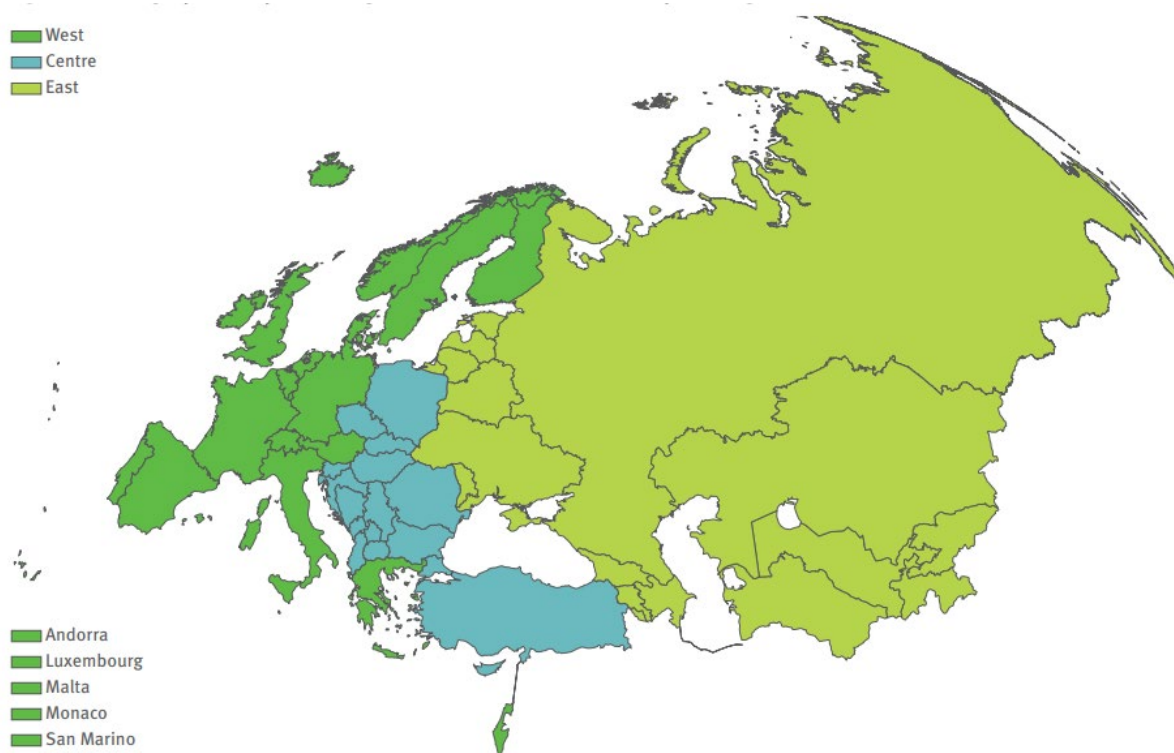
⁵ Gourlay et al 2017, <https://oae.ovid.com/article/00002030-201709240-00002/HTML>

⁶ Countries were asked to report data using these definitions. However, in practice some countries may use slightly different definitions, so caution is required when drawing comparisons between countries.

⁷ ECDC Modelling Tool. <http://ecdc.europa.eu/en/healthtopics/aids/Pages/hiv-modelling-tool.aspx>

⁸ Spectrum is the software used by UNAIDS to prepare annual estimates of the status of the HIV epidemic.

⁹ A viral load threshold for viral suppression of <200 copies/mL was used to allow for changes over time in the lower detection limits of viral load assays. A threshold of 200 copies/mL for population-level monitoring is consistent with recommendations in a systematic review of guidelines produced by IAPAC - www.iapac.org/uploads/JIAPAC-IAPAC-Guidelines-for-Optimizing-the-HIV-Care-Continuum-Supplement-Nov-Dec-2015.pdf and the US Centers for Disease Control and Prevention - www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-care-continuum.pdf

Figure 3. Geographical/epidemiological division of the WHO European Region

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, Kosovo¹⁰, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia, Turkey.

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

Absolute numerical values were collected, and countries were also asked to specify the year to which the estimates related, the methods and data sources for each stage of the continuum. Countries were also asked how they dealt with deaths, out-migration and loss to follow up within their continuum data.

In the 2020 reporting year, ECDC continued the harmonised data collection with UNAIDS agreed in 2018 to ensure compatibility and reduce burden on health authorities. ECDC was responsible for collecting a core set of Global AIDS Monitoring (GAM) indicators through Dublin monitoring for the 30 European Union and European Economic Area (EU/EEA) Member States, meaning there was no separate GAM reporting for these countries. The 25 European and Central Asian countries who are Dublin Declaration signatories but not EU/EEA countries continued to complete GAM through UNAIDS and were therefore asked to complete a shortened ECDC Dublin Declaration questionnaire, with any GAM questions removed. The data collected through these processes were then combined and included in the analysis for this report.

Countries were initially asked to complete the Dublin Declaration survey between mid-February and the end of March 2020, this deadline was later extended to July 2020 and several late submissions were made in August 2020 due to the disruption of the COVID-19 pandemic. Between July and August 2020, the values reported by each country were checked and returned for validation. Subsequent notifications of corrections were used to update the information reported. Validation of data collected through the GAM process was conducted by UNAIDS. Where countries did not report data on the continuum of care in this monitoring round, the latest available data from previous monitoring rounds in 2018 and 2019 was included in the analysis.

¹⁰ This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

We analysed the number of countries that reported: (a) all four stages, (b) no stages, and (c) at least two consecutive stages of the continuum of care nationally and by key population (MSM, PWID, migrants, sex workers and prisoners). Data are presented by WHO sub-region (West, Centre, and East) which broadly groups areas of Europe and Central Asia by geography and epidemic type (Figure 3).

Three main analyses were conducted: 1) analysis against the global 90-90-90 targets; 2) analysis of progress between 2018 and 2020 against the global substantive targets and 3) assessment of the total number of people living with transmissible levels of virus.

In analyses where data from multiple countries were combined, each element of the continuum was summed across countries and analyses were undertaken using the summed totals.

1. Global 90-90-90 targets

Analyses of performance against the global 90-90-90 targets, both overall and for key populations, included data only where at least two consecutive elements of the continuum were provided, as each measure is a percentage of the previous stage of the continuum.

2. Global substantive targets

Analyses of performance against the global substantive targets (Figure 2) only included data where all four stages of the continuum were available because each measure is a proportion of the first stage (estimated number of all PLHIV).

When comparing performance against these targets between 2018 and 2020, analyses only included data where all four stages of the continuum were available for both 2018 and 2020, in order to allow for better comparability over time.

For comparisons between key populations and all PLHIV within countries, analyses were restricted to those countries where relevant data were available.

3. Transmissible levels of virus

To calculate the number of people living with transmissible virus, it was assumed that people remaining undiagnosed and those not receiving treatment would have transmissible virus levels. Numbers in these categories were added to the number of people treated but known not to be virally suppressed to provide an estimated total number of people living with transmissible virus for each country. This measure was only calculated for countries that reported all four stages of the continuum of care.

Results

Data availability

In 2020, responses (full and partial) were submitted from 51 of the 55 European and Central Asian countries to ECDC and UNAIDS [1]. Overall, 50 countries provided data for at least one stage of the continuum and 45 countries provided at least two consecutive stages of the national continuum of care (this compares to 43 and 42 in 2018 respectively). A total of 40 (73%) countries provided data for all four stages of the continuum in 2020 (Table 2), compared to 34 (62%) countries in 2018.

There was an increase in the proportion of countries reporting data for each individual stage (Figure 4). The number of countries providing 'no data' has decreased substantially since 2018.

In 2020, no data was available for any stage of the continuum of care for five countries: Andorra, Bosnia & Herzegovina, Liechtenstein, Turkey and Turkmenistan.¹¹

Annex 1 provides a full overview of which countries were able to provide data for each stage.

Figure 4. Changes in data availability for different stages of the HIV continuum of care in Europe and Central Asia in 2016, 2018 and 2020

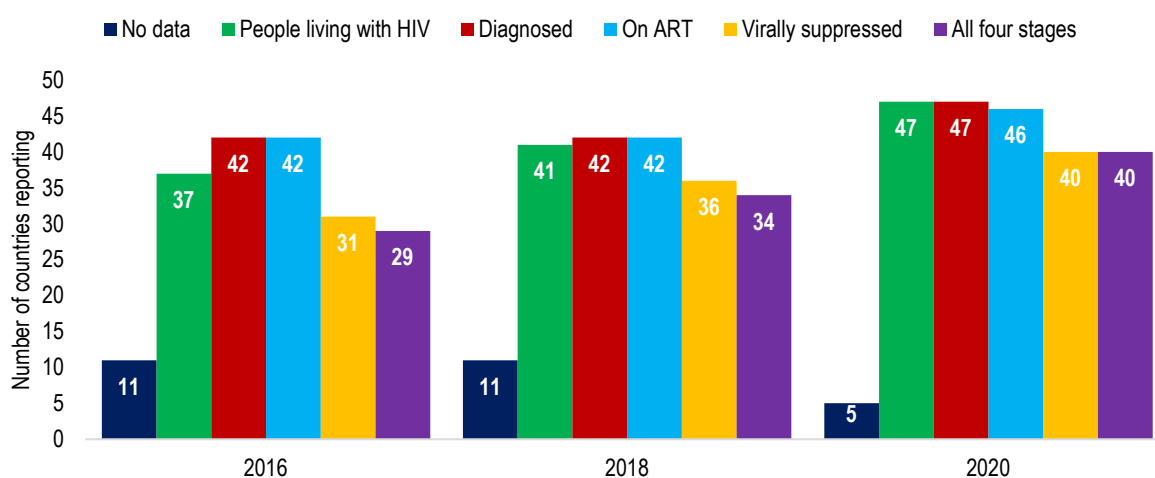


Table 2. Number of countries reporting data on all four stages of the continuum of care in 2016, 2018 and 2020

40 2020	<p>18 West Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom</p> <p>11 Centre Albania, Bulgaria, Croatia, Czechia, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia</p> <p>11 East Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Tajikistan, Ukraine.</p>
34 2018	<p>16 West Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Malta, Monaco, the Netherlands, Portugal, Spain, Sweden, Switzerland, the United Kingdom.</p> <p>8 Centre Albania, Bulgaria, Croatia, Czechia, Montenegro, North Macedonia, Romania, Slovenia.</p> <p>10 East Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Ukraine.</p>
29 2016	<p>15 West Austria, Belgium, Denmark, France, Germany, Greece, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden, Switzerland, the United Kingdom.</p> <p>7 Centre Albania, Bulgaria, Croatia, Hungary, Romania, Montenegro, Serbia.</p> <p>7 East Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan.</p>

¹¹ These countries were asked to report via the GAM reporting tool but only Turkey engaged with the reporting process (although it did not have any continuum of care data to submit).

Data sources

Data sources and methodologies used, as well as the quality of the information collected, by each country are variable and this will impact the ability to compare findings from different countries and regions.

Of the 47 countries that reported the method used to estimate the number of PLHIV (diagnosed and undiagnosed), just over a third (36%, 17) used the UNAIDS Spectrum method, 26% (12) used the ECDC modelling tool and 38% (18) used country-specific or bespoke methods (Table 3).

There were variations across the WHO Region in which data sources were used to produce estimates for people living with HIV, with countries in the Centre and East sub-regions favouring Spectrum estimates while countries in the West sub-region preferred to use the ECDC HIV modelling tool or country-specific methods. Year of reporting also varied, which further limits comparability of country estimates.

Table 3. Data sources for the estimated number of people living with HIV in Europe and Central Asia, reported in 2020

Data source	Number of countries (n=47)	Countries (West, Centre, East)	Year of reported data (number of countries)
Spectrum estimate	17 (36%)	West: Ireland, Italy Centre: Albania, Bulgaria, Montenegro, North Macedonia, Romania, Serbia East: Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Tajikistan, Uzbekistan	2017 (2); 2018 (3); 2019 (12)
ECDC HIV modelling tool	12 (26%)	West: Austria, Denmark, Finland, Greece, Malta, the Netherlands, Portugal Centre: Cyprus, Czechia, Poland, Slovakia, Slovenia	2017 (3); 2018 (4); 2019 (5)
Other modelling tool or estimate	18 (38%)	West: Belgium, France, Germany, Iceland, Israel, Luxembourg, Monaco, Norway, San Marino, Spain, Sweden, Switzerland, United Kingdom Centre: Croatia East: Belarus, Estonia, Georgia, Ukraine	2016 (2); 2017 (2); 2018 (4); 2019 (8); 2020 (2)

Annex 2 provides an overview of the different data sources used for each stage of the continuum. Generally, countries use cohort or surveillance data, although some countries report using another data source. While the quality of data systems will vary somewhat, there are advantages and disadvantages of both cohort and surveillance data. Cohort data tend to be richer in clinical information and enable the linkage of patients over time to allow the outcomes of patients to be followed up. However, they are likely to be restricted to a subset of clinics and may be biased towards clinics that are performing well, which may reduce the representativeness of the data. While surveillance data can also be linked over time to create a patient cohort, accompanying clinical data may be less rich. While surveillance data may be potentially more nationally comprehensive and therefore representative than clinic cohort data, the quality of surveillance systems is variable, including different rates for those lost to follow-up.

Where reported, the national continuum of care related to 2016 for two countries, 2017 for seven countries, 2018 for 11 countries, 2019 for 25 countries and 2020 for two countries. With the exception of three countries, the year of reporting remained consistent between stages of the continuum for each country (Annex 2).¹²

Accounting for out-migration, deaths, and loss to follow-up

The ability to account for out-migration, deaths, and loss to follow-up when calculating each of the stages of the continuum has a significant impact on the final estimates. For example, a country that is not able to account for out-migration or deaths of those diagnosed with HIV will most probably have an overinflated denominator of the total number of persons diagnosed. This may result in a lower proportion of people estimated to be on treatment and potentially virally suppressed.

¹² Spain reported 2017 data for numbers living with and diagnosed with HIV and 2019 data for numbers treated and virally suppressed. The United Kingdom did the same, although it reported 2018 rather than 2017 data. Estonia only reported two stages, with 2017 data for numbers living with HIV and 2019 data for numbers treated.

Table 4 provides details on which countries were able to exclude or partially exclude out-migration, deaths and loss to follow-up in their calculations for the continuum of care. Countries marked with an asterisk were those able to account for the issue in all four stages of the continuum. Annex 3 provides further detail.

A total of six countries were able to exclude out-migration, deaths and loss to follow-up for all four stages of the continuum.

Table 4. Exclusion of out-migration, deaths and loss to follow-up of people living with HIV from continuum data, Europe and Central Asia, reported in 2020¹³

Excluded or partially excluded	Number of countries (n=50)	Countries (West, Centre, East)
Out-migration	25 (50%)	<p>West: Austria*, Belgium*, Denmark*, Finland*, France, Germany*, Iceland, Ireland*, Israel, Luxembourg*, Malta*, the Netherlands*, Norway*, Portugal*, Sweden*, Switzerland*</p> <p>Centre: Albania, Croatia*, Czechia*, Montenegro, North Macedonia*, Poland*, Slovakia*, Slovenia*</p> <p>East: Lithuania*</p>
Deaths	34 (68%)	<p>West: Austria*, Belgium*, Denmark*, Finland*, France, Germany*, Greece, Iceland, Ireland*, Israel, Italy, Luxembourg*, Malta*, the Netherlands*, Norway*, Portugal*, Spain, Sweden*, Switzerland*, the United Kingdom*</p> <p>Centre: Albania*, Croatia*, Cyprus, Czechia*, Hungary, Montenegro, North Macedonia*, Poland*, Romania*, Slovakia*, Slovenia*</p> <p>East: Estonia, Latvia, Lithuania*</p>
Loss to follow-up	21 (44%)	<p>West: Austria, Belgium, Denmark, Finland*, Germany, Greece, Iceland, Ireland, Malta, the Netherlands, Norway*, Sweden, Switzerland*, the United Kingdom*</p> <p>Centre: Albania, Cyprus, Czechia*, Montenegro, Romania*, Slovenia*</p> <p>East: Lithuania*</p>

¹³ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Continuum of HIV care

This section discusses each stage of the continuum of HIV care in more detail. Annex 1 provides a full overview of what data were provided by which countries at each stage, and their performance against the global 90-90-90 targets.

Stage 1. Estimated number of people living with HIV

Based on reported data from 47 countries, an estimated 2 287 179 people are living with HIV (Table 5). Of the eight countries that did not provide estimates on the number of PLHIV, four countries¹⁴ lacked empirical estimates and four countries¹⁵ did not participate in Dublin Declaration/GAM reporting in 2020.

Table 5. Estimated number of people living with HIV: countries in the West, Centre and East sub-regions, reported in 2020¹⁶

West WHO sub-region		Centre WHO sub-region		East WHO sub-region	
Countries	PLHIV	Countries	PLHIV	Countries	PLHIV
Austria	7 480	Albania	1 400	Armenia	3 500
Belgium	18 335	Bulgaria	3 100	Azerbaijan	9 700
Denmark	6 750	Croatia	1 648	Belarus	26 000
Finland	2 924	Cyprus	965	Estonia	6 855
France	172 700	Czechia	3 277	Georgia	9 300
Germany	87 900	Montenegro	368	Kazakhstan	33 427
Greece	15 980	North Macedonia	383	Kyrgyzstan	10 129
Iceland	296	Poland	15 166	Lithuania	3 397
Ireland	7 200	Romania	18 000	Moldova	14 589
Israel	8 039	Serbia	3 200	Russia	998 525
Italy	130 000	Slovakia	1 041	Tajikistan	13 771
Luxembourg	1 176	Slovenia	809	Ukraine	251 168
Malta	453			Uzbekistan	49 676
Monaco	48				
Netherlands	23 300				
Norway	4 455				
Portugal	39 820				
San Marino	71				
Spain	151 387				
Sweden	8 971				
Switzerland	16 700				
United Kingdom	103 800				

¹⁴ Hungary, Kosovo, Turkey (Centre); Latvia (East).

¹⁵ Andorra, Liechtenstein (West); Bosnia & Herzegovina (Centre); Turkmenistan (East).

¹⁶ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Stage 2. Number of people living with diagnosed HIV

In the 45 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 2 280 253 people are living with HIV, 1 880 469 of whom (82%; range 62–100%) have been diagnosed (Table 6). This is equivalent to approximately one in five (18%; range 0–38%) 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 West sub-region.

In the 21 West sub-region countries with data for both stages, an estimated 807 714 people are living with HIV, 725 748 of whom have been diagnosed (90%; range 75–100%). This means that one in ten PLHIV (10%; range 0–16%) in these countries have an undiagnosed HIV infection.

In the 12 Centre sub-region countries with data for both stages, an estimated 49 357 people are living with HIV, 42 816 of whom have been diagnosed (87%; range 64–98%). This means approximately one in eight people living with HIV (13%; 2–36%) in these countries have undiagnosed HIV infection.

In the 12 East sub-region countries with data for both stages, an estimated 1 423 182 people are living with HIV, 1 111 905 of whom have been diagnosed (78%; range 62–86%). This means that approximately one in five PLHIV (22%; range 14–38%) in these countries have undiagnosed HIV infection.

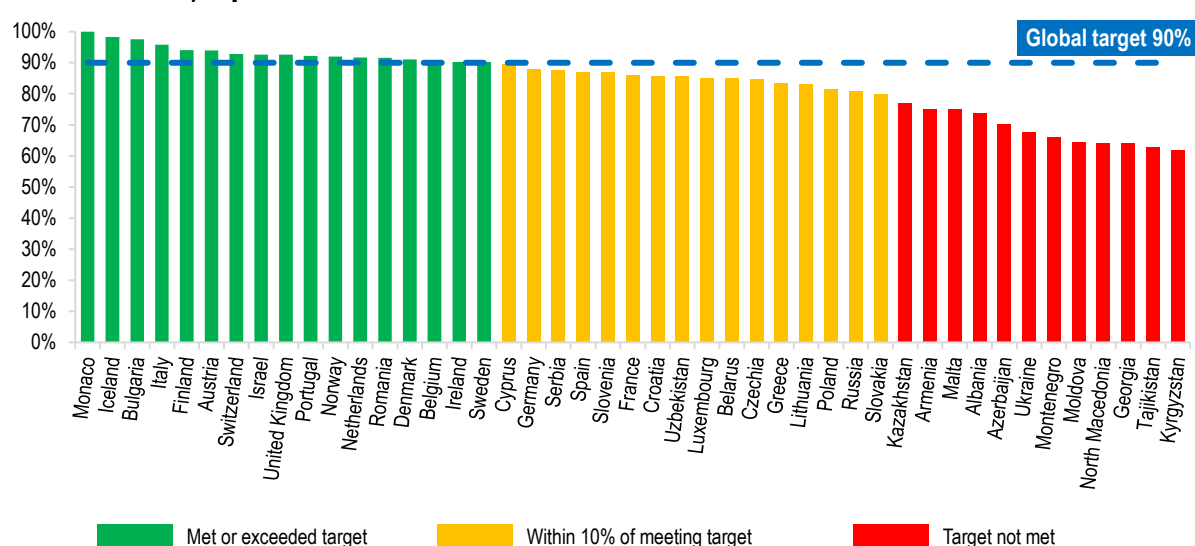
Table 6. Number and percentage of people living with HIV with diagnosed and undiagnosed HIV infection for 45 countries in Europe and Central Asia, reported in 2020¹⁷

Countries	Estimated number of PLHIV (range)	Number of PLHIV diagnosed (range)	% of PLHIV diagnosed (range)	% of PLHIV undiagnosed (range)
West (n=21)	807 714 (48–172 700)	725 748 (48–148746)	90% (75–100%)	10% (0–25%)
Centre (n=12)	49 357 (368–18 000)	42 816 (243–16486)	87% (64–98%)	13% (2–36%)
East (n=12)	1 423 182 (3 397–998 525)	1 111 905 (2700–808823)	78% (62–86%)	22% (14–38%)
All countries (n=45)	2 280 253 (48–998 525)	1 880 469 (48–808823)	82% (62–100%)	18% (0–38%)

A total of 17 of the 45 countries (Austria, Belgium, Bulgaria, Denmark, Finland, Iceland, Ireland, Israel, Italy, Monaco, Norway, the Netherlands, Portugal, Romania, Sweden, Switzerland, and the United Kingdom) have achieved the first of the UNAIDS targets, with 90% or more of all PLHIV knowing their status (Figure 5).

Of the other 28 countries, 16 are within 10% of meeting the target, reporting that 80% or more (range 80–89%) of PLHIV know their status (5 West; 7 Centre; 4 East), and 12 countries are more than 10% away from reaching the target, reporting that fewer than 80% (range 62–77%) of PLHIV know their status (1 West; 3 Centre; 8 East).

Figure 5. Percentage of all people living with HIV who know their status in 45 countries of Europe and Central Asia, reported in 2020¹⁸



¹⁷ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

¹⁸ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Stage 3. Number of people diagnosed who are on treatment

In the 43 countries that reported data for both stage 2 and stage 3 within Europe and Central Asia, an estimated 1 879 315 PLHIV have been diagnosed, of whom 1 259 667 (67%; range 40–100%) are reported to be on treatment (Table 7). Based on available data, around one in three people (33%; range 0–60%) with diagnosed HIV infection in Europe and Central Asia are therefore not currently receiving ART.

In the 20 West sub-region countries that reported data for both stage 2 and stage 3, an estimated 725 457 PLHIV have been diagnosed, 675 915 (93%; range 68–100%) of whom are reported to be on treatment. This means that around one in 14 PLHIV (7%; range 0–32%) who have been diagnosed in these countries are not benefitting from HIV treatment.

In the 11 Centre sub-region countries that reported data for both stages, an estimated 41 953 people living with HIV have been diagnosed, 32 718 (78%; range 48–92%) of whom are reported to be on treatment. This means that one in five people living with HIV (22%; range 8–52%) who have been diagnosed in these countries are not benefitting from HIV treatment.

In the 12 East sub-region countries that reported data for both stages, an estimated 1 111 905 people living with HIV have been diagnosed, 551 034 (50%; range 40–86%) of whom are reported to be on treatment. This means that one in two PLHIV (50%; range 14–57%) who have been diagnosed in these countries are not benefitting from HIV treatment.

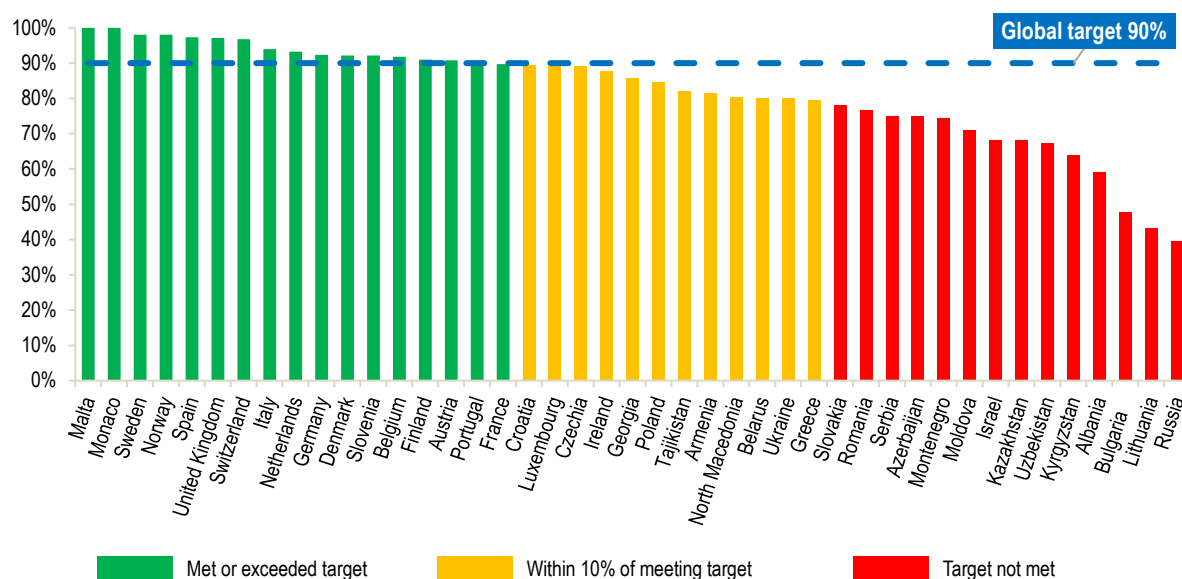
Table 7. Number and percentage of people living with diagnosed HIV who are on treatment for 43 countries in Europe and Central Asia, reported in 2020¹⁹

Countries	Number of PLHIV diagnosed (range)	Number of PLHIV diagnosed on ART (range)	% of PLHIV diagnosed on ART (range)	% of PLHIV diagnosed but currently <u>not</u> on ART (range)
West (n=20)	725 457 (48–148 746)	675 915 (48–133 400)	93% (68–100%)	7% (0–32%)
Centre (n=11)	41 953 (243–16 486)	32 718 (181–12 644)	78% (48–92%)	22% (8–52%)
East (n=12)	1 111 905 (2 700–808 823)	551 034 (1 223–319 613)	50% (40–86%)	50% (14–60%)
All countries (n=43)	1 879 315 (48–808 823)	1 259 667 (48–319 613)	67% (40–100%)	33% (0–60%)

In total, 17 of the 43 countries (Austria, Belgium, Denmark, Finland, France, Germany, Italy, Malta, Monaco, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom) have achieved the second of the UNAIDS targets: 90% of PLHIV know their status and are on treatment (Figure 6).

Of the other 26 countries, 12 are within 10% of meeting the target, reporting that 80% or more (range 80–89%) of PLHIV who know their status are on treatment (3 West; 4 Centre; 5 East), and 14 are more than 10% away from reaching the target, reporting that fewer than 80% (range 40–78%) of PLHIV who know their status are on treatment (1 West; 6 Centre; 7 East).

¹⁹ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Figure 6. Percentage of all people living with diagnosed HIV who are on treatment for 43 countries of Europe and Central Asia, reported in 2020²⁰

Stage 4. Viral suppression among people living with HIV on treatment

In the 40 countries across Europe and Central Asia that reported data for both stage 3 and stage 4, an estimated 1 215 319 PLHIV are on treatment, 1 092 704 of whom (90%; range 64–100%) are virally suppressed (Table 8). One in ten people (10%; range 0–36%) currently on ART in Europe and Central Asia have therefore not achieved viral suppression.

In the 18 West sub-region countries with data for both stages, an estimated 660 210 PLHIV are on treatment, 613 290 (93%; range 76–100%) of whom are virally suppressed. This means that around one in 14 (7%; range 0–24%) currently on ART in these countries are not virally suppressed.

In the 11 Centre sub-region countries with data for both stages, an estimated 32 718 PLHIV are on treatment, 26 594 (81%; range 64–97%) of whom are virally suppressed. Around one in five PLHIV (19%; range 3–36%) currently on ART in these countries are not virally suppressed.

In the 11 East sub-region countries with data for both stages, an estimated 522 391 PLHIV are on treatment, 452 820 of whom (87%; range 73–94%) are virally suppressed. Around one in eight PLHIV (13%; range 6–27%) currently on ART in these countries are not virally suppressed.

Table 8. Number and percentage of people on treatment who are virally suppressed for 40 countries across Europe and Central Asia, reported in 2020²¹

Countries	Number of PLHIV on ART (range)	Number of PLHIV virally suppressed (range)	% of PLHIV on ART who are virally suppressed (range)	% of PLHIV diagnosed on ART who are <u>not</u> virally suppressed (range)
West (n=18)	660 210 (48–133 400)	613 290 (48–126 800)	93% (76–100%)	7% (0–24%)
Centre (n=11)	32 718 (181–12 644)	26 594 (170–10052)	81% (64–97%)	19% (3–36%)
East (n=11)	522 391 (1 233–319 613)	45 820 (920–271 671)	87% (73–94%)	13% (6–27%)
All countries (n=40)	1 215 319 (48–319 613)	1 092 704 (48–271 671)	90% (64–100%)	10% (0–36%)

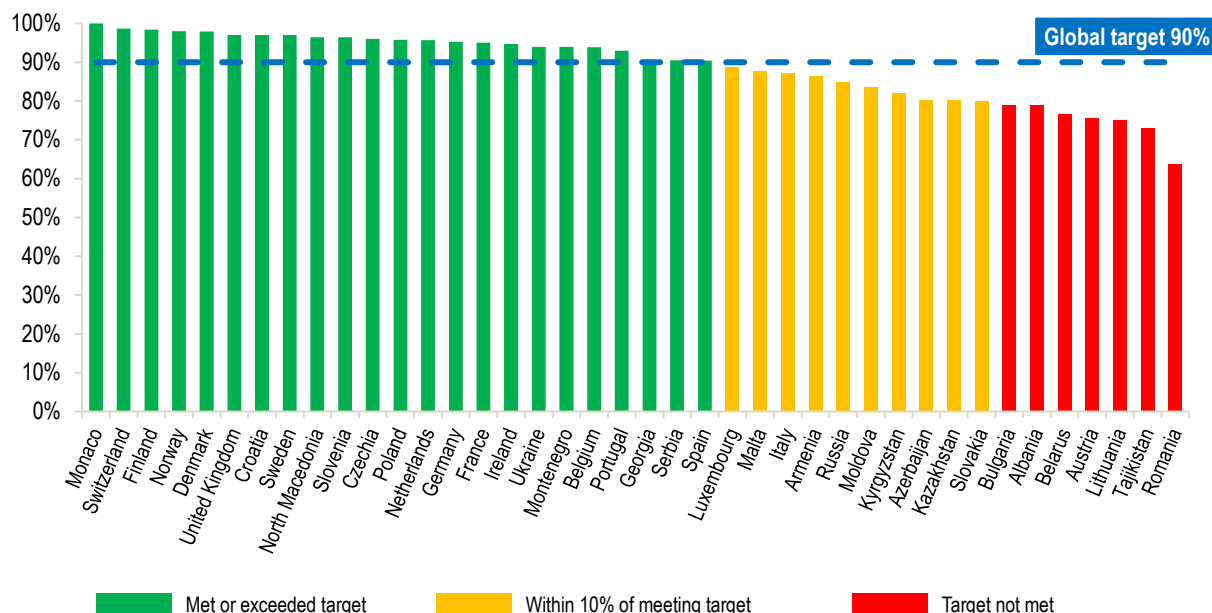
²⁰ Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relates to.

²¹ Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relates to.

In all, 23 of the 40 countries (Belgium, Croatia, Czechia, Denmark, Finland, France, Germany, Georgia, Ireland, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, Ukraine and the United Kingdom) have achieved the third of the UNAIDS targets: 90% of PLHIV who are on treatment are virally suppressed (Figure 7).

Of the other 17 countries, ten are within 10% of meeting the target, reporting that 80% or more (range 80–89%) of PLHIV who are on treatment are virally suppressed, and seven are more than 10% away from reaching the target, reporting that fewer than 80% (range 53–79%) of PLHIV are virally suppressed.

Figure 7. Percentage of people on treatment reaching viral suppression for 40 countries of Europe and Central Asia, reported in 2020²²



Viral suppression among all people living with HIV

As noted above, in 2020, 40 countries (18 West; 11 Centre; 11 East) reported data on all four stages of the continuum of HIV care, compared with 34 countries in 2018 (Table 2 and Figure 4). Based on data reported by these countries for stage 1 and 4, an estimated 2 205 297 people are living with HIV, 1 092 704 (50%; range 27–100%) of whom are virally suppressed (Table 9). This means that half of PLHIV (50%; range 0–73%) in Europe and Central Asia have therefore still not achieved viral suppression.

In the 18 West sub-region countries with data for all four stages, an estimated 783 399 people are living with HIV, 613 290 (78%; range 64–100%) of whom are virally suppressed. This means that around one in five (22%; range 0–36%) PLHIV in these countries are not virally suppressed.

In the 11 Centre sub-region countries with data for all four stages, an estimated 48 392 people are living with HIV, 26 594 (55%; range 37–79%) of whom are virally suppressed. This means that around half (45%; range 21–63%) of the PLHIV in these countries are not virally suppressed.

In the 11 East sub-region countries with data for all four stages, an estimated 1 373 506 people are living with HIV, 452 820 (33%; range 27–55%) of whom are virally suppressed. This means that around two-thirds (67%; range 45–73%) of PLHIV in these countries are not virally suppressed.

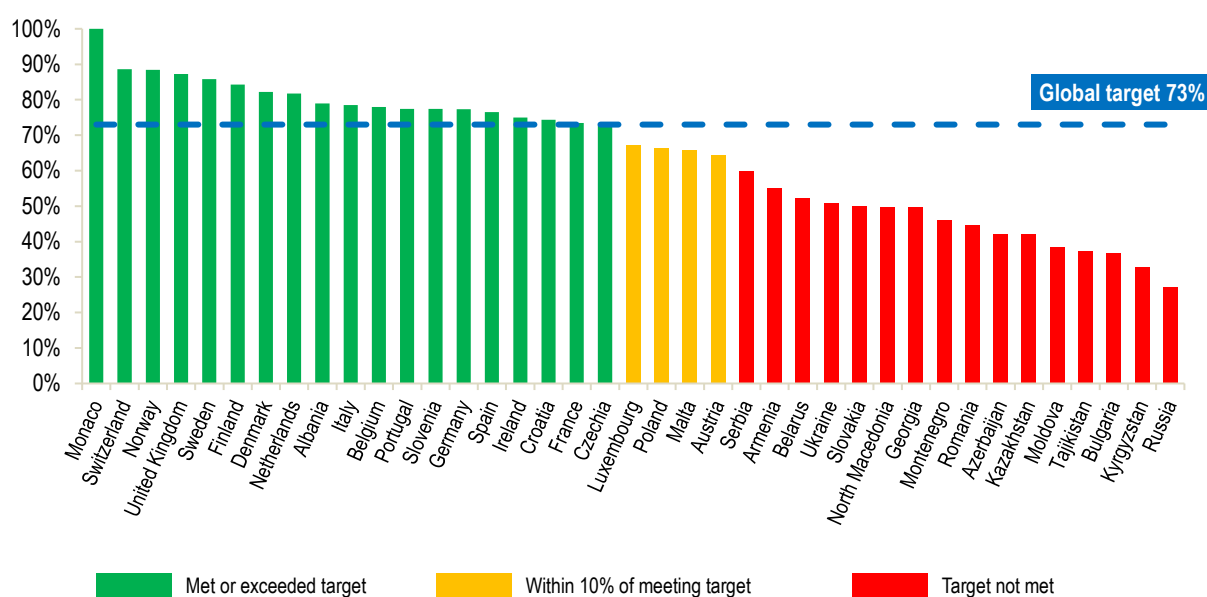
²² Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Table 9. Number and percentage of people living with HIV who are virally suppressed in 40 countries of Europe and Central Asia, reported in 2020²³

Countries	Estimated number of PLHIV (range)	Estimated number of people virally suppressed (range)	% of all PLHIV who are virally suppressed (range)	% of all PLHIV who are not virally suppressed (range)
West (n=18)	783 399 (48-172 700)	613 290 (48-126 800)	78% (64-100%)	22% (0-36%)
Centre (n=11)	48 392 (368-18 000)	26 594 (170-10 052)	55% (37-79%)	45% (21-63%)
East (n=11)	1 373 506 (3 397-998 525)	452 820 (920-271 671)	33% (27-55%)	67% (45-73%)
All countries (n=40)	2 205 297 (48-998 525)	1 092 704 (48-271 671)	50% (27-100%)	50% (0-73%)

Nineteen of these 40 countries (Albania, Belgium, Croatia, Czechia, Denmark, Finland, France, Germany, Ireland, Italy, Monaco, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom) have achieved the UNAIDS substantive target of 73% viral suppression among all people estimated to be living with HIV (Figure 8).

Among the remaining 21 countries, four are within 10% of meeting the target, reporting that 63% or more (range 64-67%) of all estimated PLHIV are virally suppressed (3 West; 1 Centre), and 17 are more than 10% away from meeting the target, reporting that fewer than 63% (range 27-60%) of all estimated PLHIV are virally suppressed (6 Centre; 11 East).

Figure 8. Percentage of all people living with HIV who know their status, are on treatment and are virally suppressed in 40 countries across Europe and Central Asia, reported in 2020²⁴

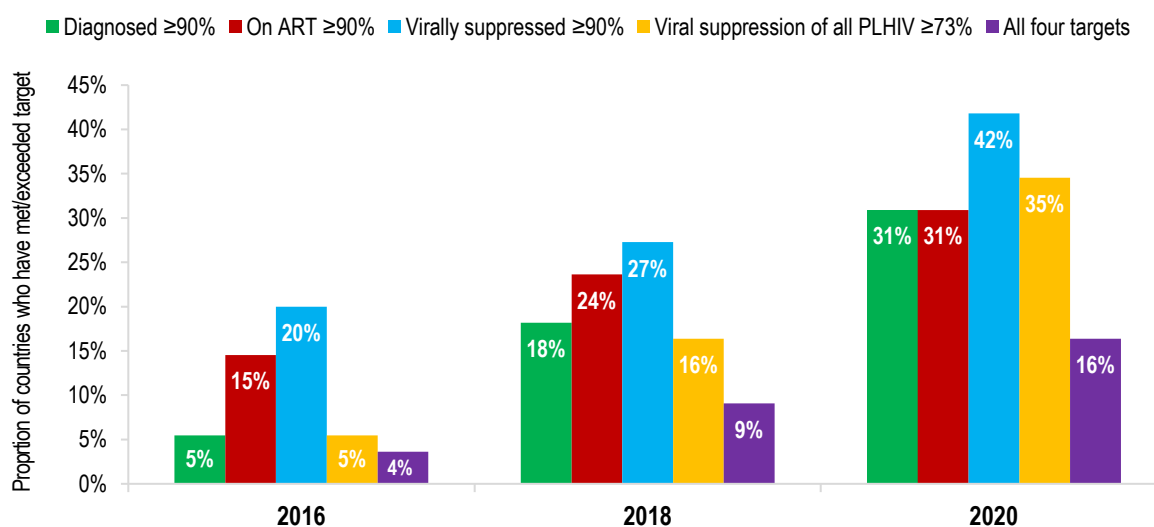
Progress over time

There has been a steady increase in the proportion of countries who have met or exceeded the 90-90-90 targets and overall target of 73% of all PLHIV virally suppressed since 2016. However, only 16% of all countries in the region have met all of the fast-track targets set by UNAIDS for 2020. Annex 4 provides a full overview of what data were provided by which countries at each stage, and their performance against the global targets.

²³ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

²⁴ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Figure 9. Proportion of countries which have met or exceeded global targets in Europe and Central Asia (n=55), reported in 2016, 2018 and 2020



In the 40 countries able to report all four stages of the continuum of HIV care in 2020, 82% of all PLHIV were diagnosed, 55% were treated and 50% were virally suppressed overall against the global substantive targets of 90-81-73 (Figure 10).

For the 34 countries²⁵ reporting all four stages of the continuum of HIV care in both 2018 and 2020, the data showed that in 2020, 82% of all PLHIV were diagnosed, 55% were treated and 49% were virally suppressed. This compares to 80%, 51% and 43% reported in 2018, demonstrating progress since the last reporting round although still far less than needed.²⁶

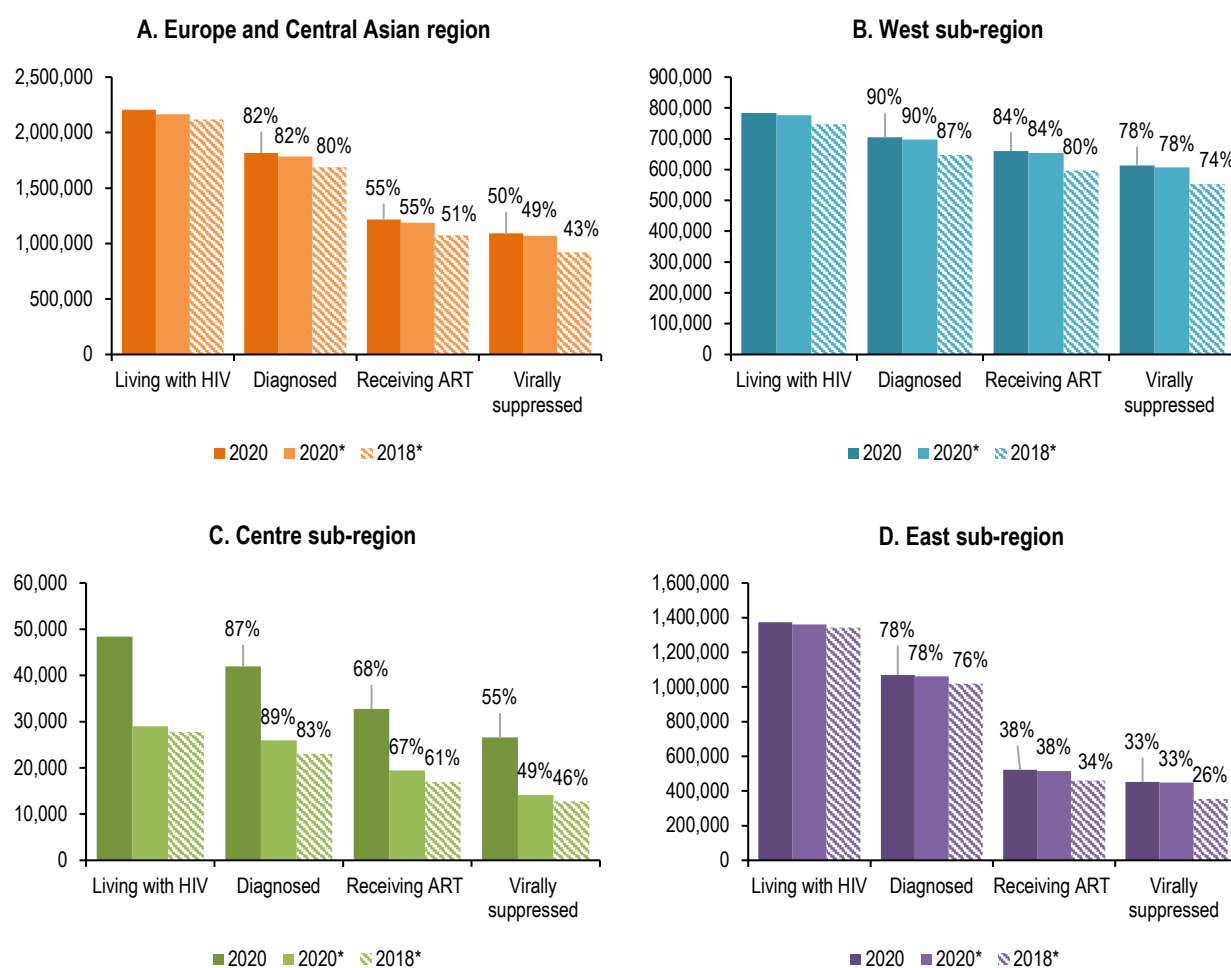
For countries able to report data for both years, the West sub-region reported the highest values across the continuum in 2020, with 78% of all PLHIV virally suppressed (exceeding the UNAIDS substantive target of 73%), and higher than the 74% reported in 2018. In the Centre sub-region, the proportion of PLHIV who were virally suppressed was 49% in 2020, compared to 46% reported in 2018. In the East sub-region, there was improvement in the proportion of PLHIV who are virally suppressed, with the proportion increasing from 26% in 2018 to 33% in 2020.

It is important to note that each sub-region showed improvements in the continuum of care outcomes for 2020 compared to 2018. However, given that 21 of the 55 countries that constitute Europe and Central Asia are not included in these calculations, these results should not be interpreted as representative of the entire region.

²⁵ These countries are Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Malta, Monaco, the Netherlands, Portugal, Spain, Sweden, Switzerland, the United Kingdom from the West sub-region; Albania, Bulgaria, Croatia, the Czech Republic, Montenegro, North Macedonia, Romania and Slovenia from the Centre sub-region; and Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia and Ukraine from the East sub-region.

²⁶ These figures differ from those reported as the overall performance for 2018 in ECDC's 'Continuum of HIV Care: 2018 Progress Report' due to countries that reported in 2018 but not in 2020 being excluded from the analysis.

Figure 10. Continuum of HIV care (substantive), overall and by WHO sub-region, reported in 2020, and comparison between data reported in 2018 and 2020



* Countries providing data for both years
 For all four graphs y-axis shows number of people living with HIV. Figures are based on latest available data at the time of reporting.

Key populations

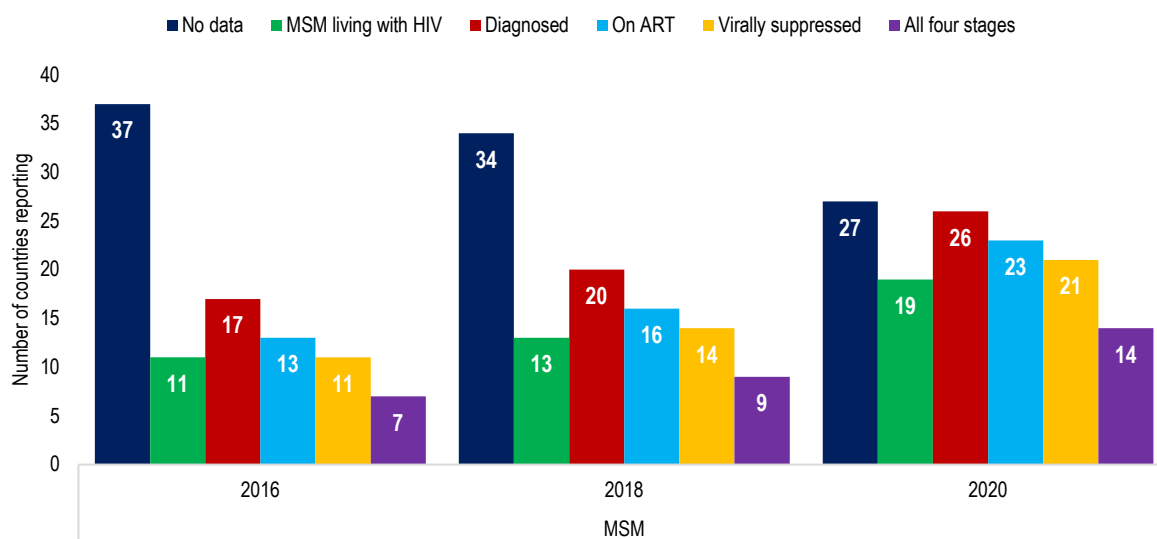
While there are no specific global targets for key populations, HIV remains a concentrated epidemic for the majority of Europe and Central Asia, meaning that these key populations represent most of those affected by HIV in many countries. This section discusses each stage of the continuum of HIV care for key populations in more detail, considering what the data tell us about the current situation in Europe and Central Asia and how this compares with the global targets for people living with HIV. Annexes 5–9 provide a full overview of which data were provided by which countries at each stage, and their performance against the global 90-90-90 and 90-81-73 targets.

Men who have sex with men (MSM)

Data availability

In 2020, all four stages for MSM were reported by 14 countries, compared to nine countries in 2018 and seven in 2016 (Figure 11). At least two stages were reported by 26 countries. Since 2016, there has been a steady increase in the number of countries reporting data on every stage of the continuum of care for MSM living with HIV.

Figure 11. Number of countries reporting data for different stages of the HIV continuum of care for men who have sex with men (MSM), Europe and Central Asia, reported in 2016, 2018 and 2020



90-90-90 and overall viral suppression among MSM living with HIV

In the 17 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 304 152 MSM are living with HIV, 254 646 of whom (84%; range 19–93%) know their status (Figure 12). Six of these 17 countries (6 West) have met or exceeded the global target of 90% of all people living with HIV knowing their status among MSM. Of the other 11 countries, six are within 10% of meeting the target (4 West; 2 Centre) and five are more than 10% away from reaching the target (2 Centre; 3 East).

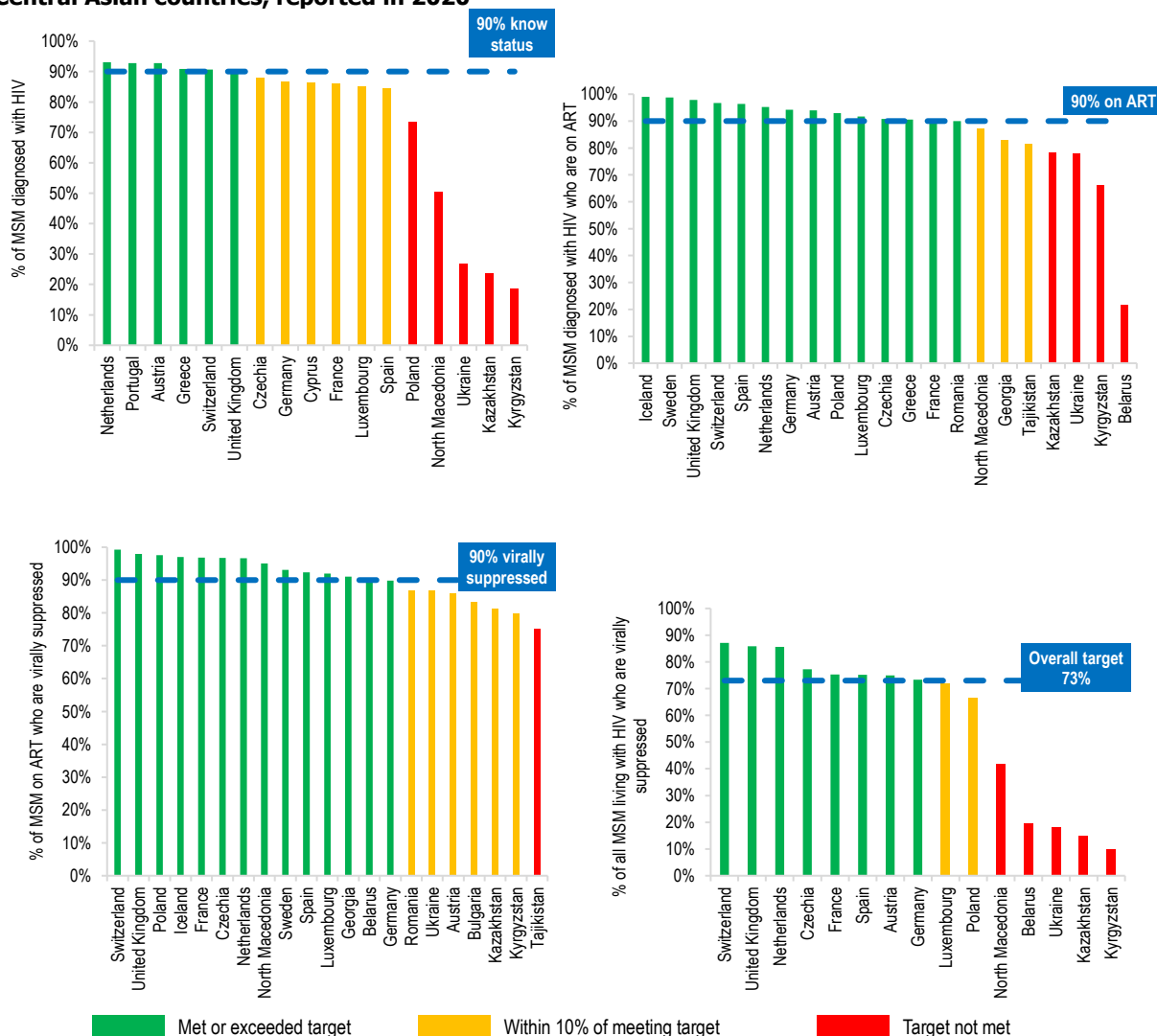
In the 21 countries reporting data for both stage 2 and stage 3, an estimated 254 504 MSM are diagnosed with HIV, 236 264 of whom (93%; range 22–99%) are on ART. Fourteen of these 21 countries (11 West; 3 Centre) have met or exceeded the global target of having 90% of all people diagnosed with HIV on ART among MSM. Of the other seven countries, three are within 10% of meeting the target (1 Centre; 2 East) and four are more than 10% away from reaching the target (4 East).

In the 21 countries reporting data for both stage 3 and stage 4, an estimated 230 620 MSM are on ART, 217 263 of whom (94%; range 75–99%) are virally suppressed. Fourteen of these 21 countries (9 West; 3 Centre; 2 East) have met or exceeded the global target of 90% of all people on ART being virally suppressed among MSM. Of the other seven countries, six are within 10% of meeting the target (1 West; 2 Centre; 3 East) and one is more than 10% away from reaching the target (1 East).

Finally, in the 14 countries reporting data for stage 1 and stage 4, an estimated 286 414 MSM are living with HIV, 211 941 of whom (74%; range 10–87%) are virally suppressed. Eight of these 14 countries (7 West; 1 Centre) have met or exceeded the overall global target of having 73% of all people living with HIV virally suppressed among MSM. Of the other six countries, two are within 10% of meeting the target (1 West; 1 Centre) and four are more than 10% away from reaching the target (1 Centre; 3 East).

A summary of the continuum of care for countries reporting MSM data is provided in Annex 5.

Figure 12. 90-90-90 and overall viral suppression among MSM living with HIV in European and Central Asian countries, reported in 2020²⁷



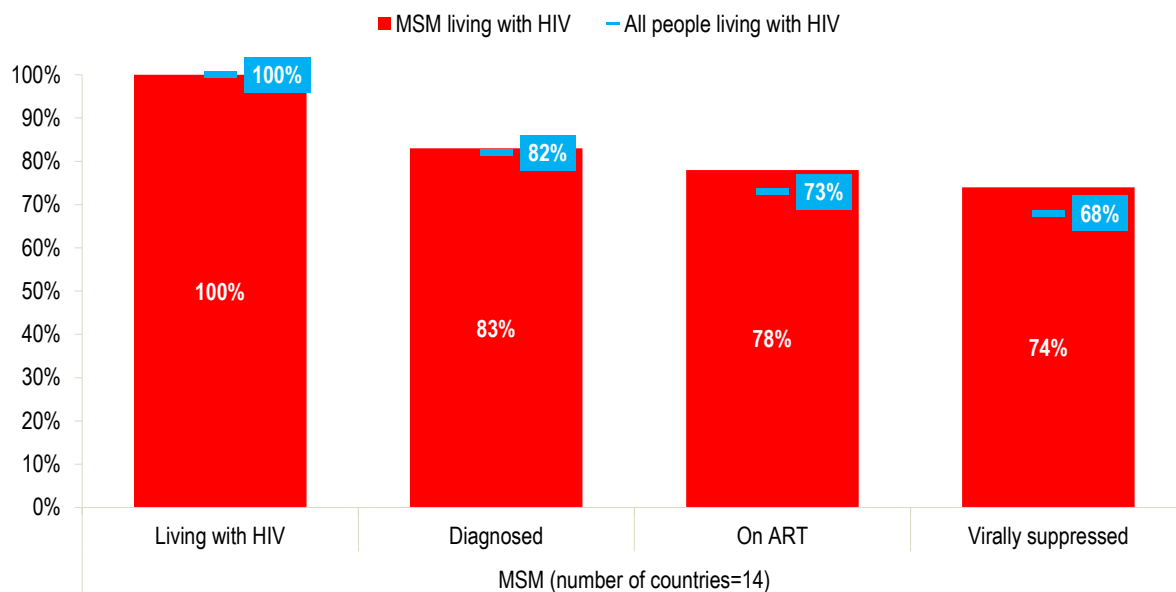
Comparison against the national continuum of care

Among the 14 countries that were able to report data on all four stages of the continuum for MSM in 2020, the proportion of all MSM living with HIV who were diagnosed was 83%, the proportion treated was 78% and the proportion virally suppressed was 74% (Figure 13). The equivalent figures for all PLHIV at the national level (for the 15 countries reporting MSM data) were 82%, 73% and 68% respectively.

Eight of the 14 countries reporting all four stages of the data for MSM were from the West sub-region. Compared to the other countries in the region, a higher proportion of those who were newly diagnosed in the countries of the West sub-region probably acquired their HIV infection through sex between men. Annex 5 summarises the variation in outcomes within regions.

²⁷ Latest available data reported by countries in 2020. See Annex 5 for information on which year the reported data relates to.

Figure 13. Comparison of the continuum of HIV care for MSM against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2020²⁸

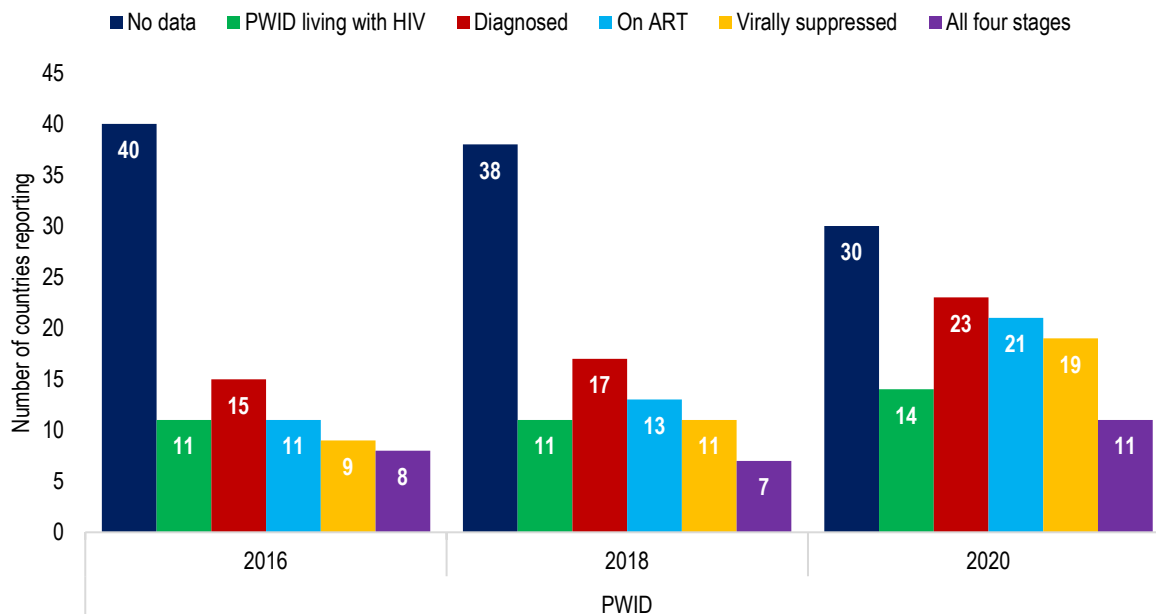


People who inject drugs (PWID)

Data availability

In 2020, all four stages of the continuum of care for PWID were reported by 11 countries, four more than in 2018 (Figure 14). At least two stages were reported by 23 countries. Since 2016, there has been a steady increase in the number of countries reporting data on every stage of the continuum of care for PWID living with HIV.

Figure 14. Number of countries reporting data for different stages of the HIV continuum of care for people who inject drugs (PWID), Europe and Central Asia, reported in 2016, 2018 and 2020



²⁸ Latest available data reported by countries in 2020. See Annex 5 for information on which year the reported data relates to.

90-90-90 and overall viral suppression among PWID living with HIV

In the 11 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 164 231 PWID are living with HIV, 105 898 of whom (64%; range 44–99%) know their status (Figure 15). Six of these 11 countries (5 West; 1 Centre) have met or exceeded the global target of 90% of all people living with HIV knowing their status among PWID. Of the other six countries, four are within 10% of meeting the target (1 West; 1 Centre; 2 East) and two are more than 10% away from reaching the target (1 Centre; 1 East).

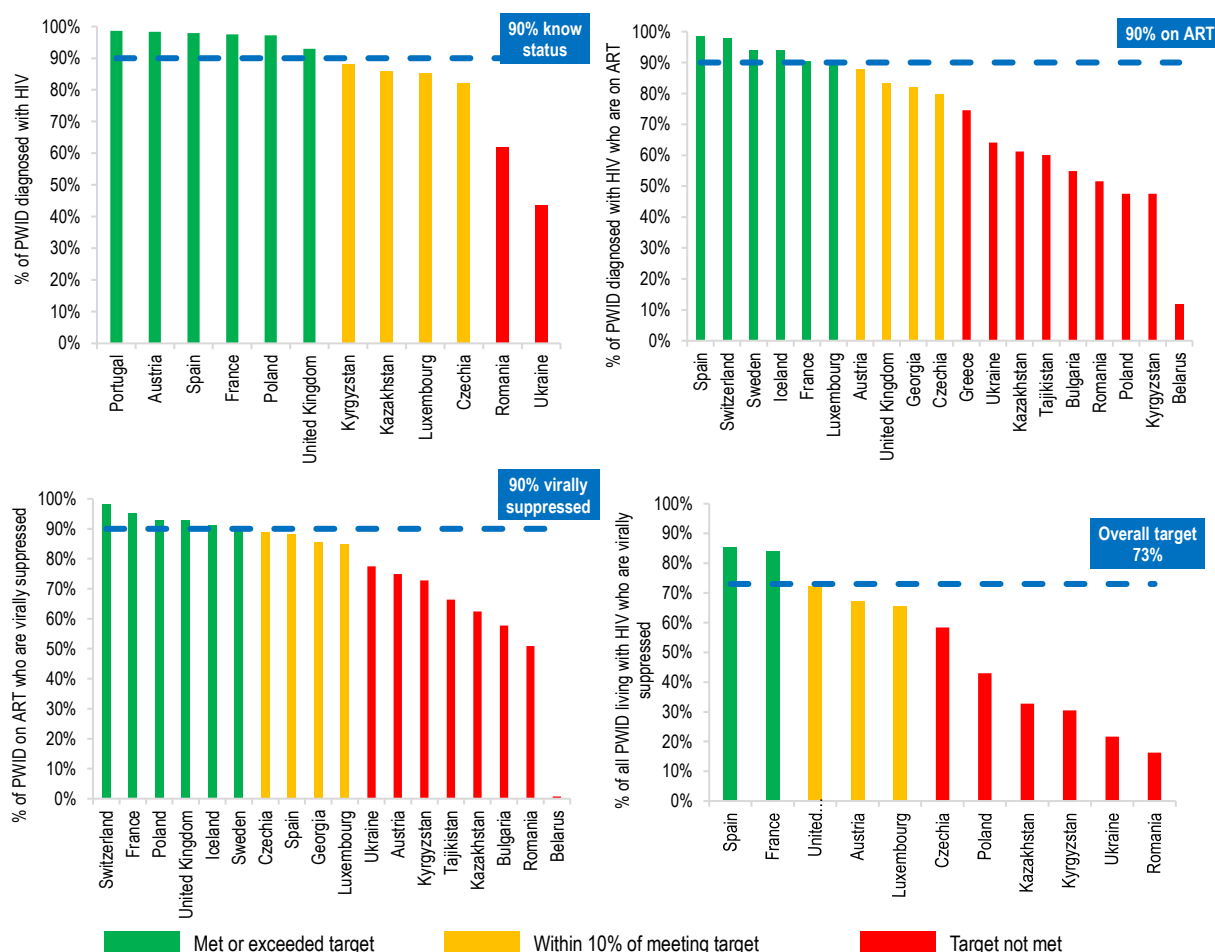
In the 19 countries reporting data for both stage 2 and stage 3, an estimated 113 774 PWID are diagnosed with HIV, 77 851 of whom (68%; range 12–99%) are on ART. Six of these 19 countries (6 West) have met or exceeded the global target of having 90% of all people diagnosed with HIV on ART among PWID. Of the other 13 countries, four are within 10% of meeting the target (2 West; 1 Centre; 1 East) and nine are more than 10% away from reaching the target (1 West; 3 Centre; 5 East).

In the 18 countries reporting data for both stage 3 and stage 4, an estimated 76 534 PWID are on ART, 62 201 of whom (81%; range 1–98%) are virally suppressed. Six of these 18 countries (5 West; 1 Centre) have met or exceeded the global target of having 90% of all people on ART virally suppressed among PWID. Of the other twelve countries, four are within 10% of meeting the target (2 West; 1 Centre; 1 East) and eight are more than 10% away from reaching the target (1 West; 2 Centre; 5 East).

Finally, in the 11 countries reporting data for stage 1 and stage 4, an estimated 154 637 PWID are living with HIV, 58 707 of whom (38%; range 16–85%) are virally suppressed. Two of these 11 countries (2 West) have met or exceeded the overall global target of having 73% of all people living with HIV virally suppressed among PWID. Of the other nine countries, three are within 10% of meeting the target (3 West) and six are more than 10% away from reaching the target (3 Centre; 3 East).

A summary of the continuum of care for countries reporting PWID data is provided in Annex 6.

Figure 15. 90-90-90 and overall viral suppression among PWID living with HIV in European and Central Asian countries, reported in 2020²⁹



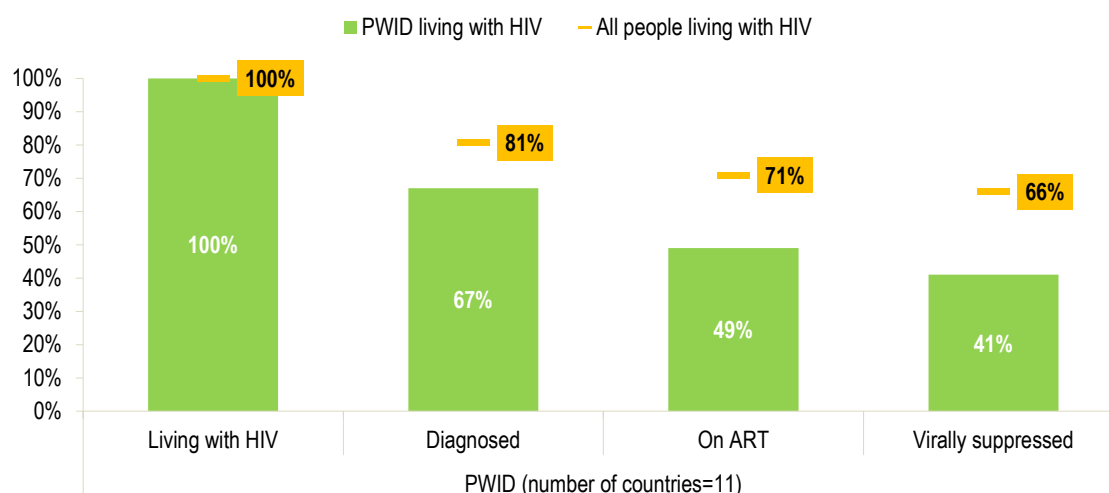
²⁹ Latest available data reported by countries in 2020. See Annex 6 for information on which year the reported data relates to.

Comparison against the national continuum of care

In the 11 countries reporting all four stages, 67% of all PWID living with HIV were reported to be diagnosed, 49% treated and 41% virally suppressed (global substantive targets) (Figure 16). This is substantially lower than the figures reported for all PLHIV at the national level (in the countries able to report PWID data); 81%, 71% and 66% respectively.

In the countries able to report all four stages of data, the West sub-region countries contributed 57% of all PWID reported to be living with HIV in 2020, the East contributed 38% and the Centre sub-region contributed 5%. Annex 6 summarises the variation in outcomes within regions.

Figure 16. Comparison of the continuum of HIV care for PWID against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2020³⁰

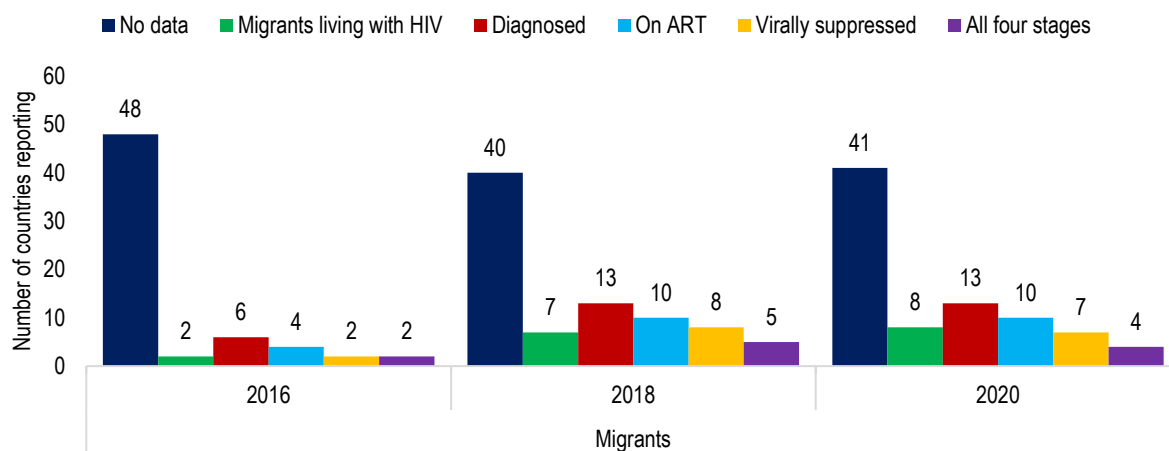


Migrants

Data availability

In 2020, all four stages of the continuum of care for migrants were reported by four countries, one less than in 2018 (Figure 17). At least two stages were reported by 12 countries. Although data availability has improved since 2016, there was not much change between 2018 and 2020. The number of countries able to report data on migrants diagnosed with HIV and migrants on ART has remained the same. There was a slight increase in the number of countries reporting estimates of migrants living with HIV, and a slight decrease in the number of countries reporting data on migrants who are virally suppressed.

Figure 17. Number of countries reporting data for different stages of the HIV continuum of care for migrants, Europe and Central Asia, reported in 2016, 2018 and 2020



³⁰ Latest available data reported by countries in 2020. See Annex 6 for information on which year the reported data relates to.

90-90-90 and overall viral suppression among migrants living with HIV

In the eight countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 54 898 migrants are living with HIV, 47 332 of whom (86%; range 58–94%) know their status (Figure 18). One of these eight countries (1 West) has met or exceeded the global target of 90% of all people living with HIV knowing their status among migrants. Of the other seven countries, four are within 10% of meeting the target (4 West) and three are more than 10% away from reaching the target (1 Centre; 2 West).

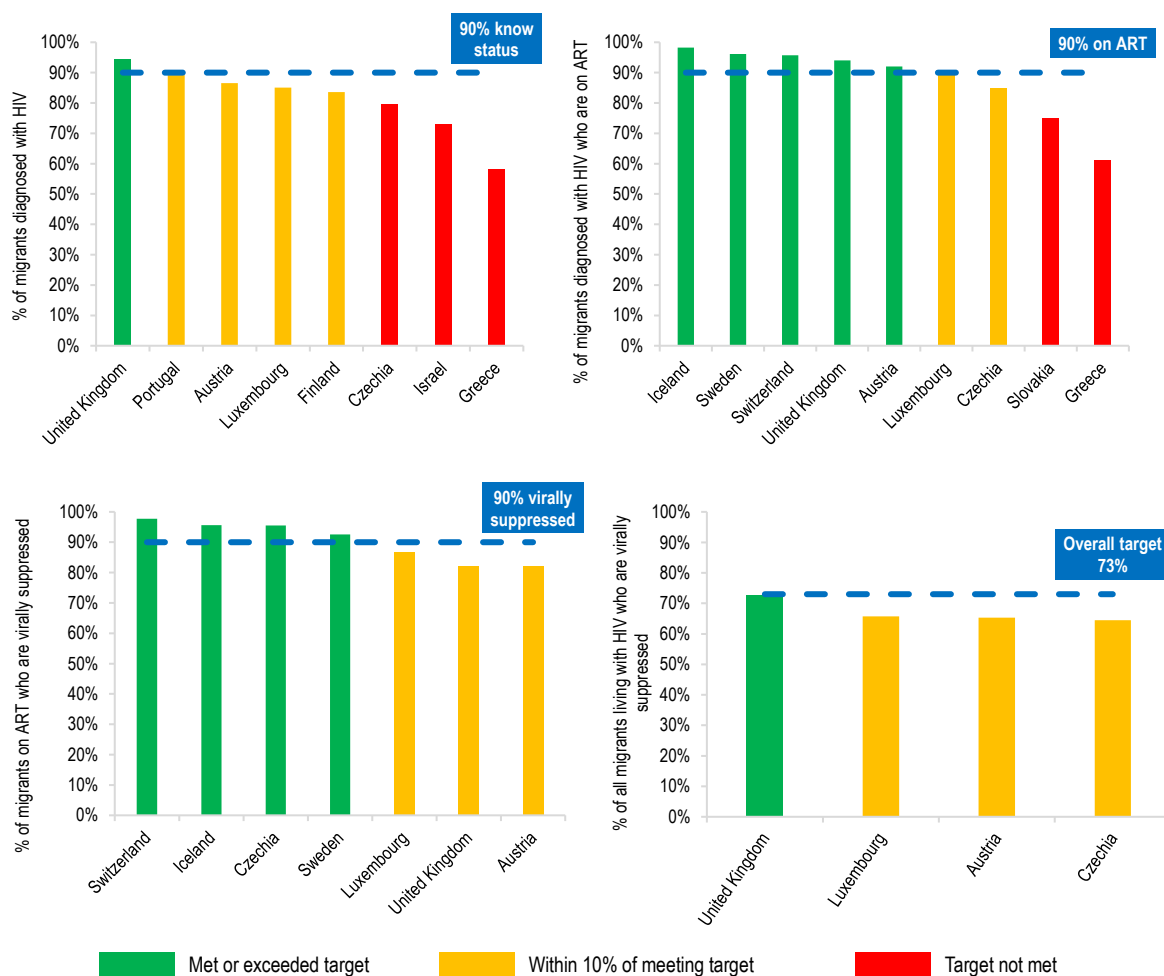
In the nine countries reporting data for both stage 2 and stage 3, an estimated 39 175 migrants are diagnosed with HIV, 35 884 of whom (92%; range 61–98%) are on ART. Five of these nine countries (5 West) have met or exceeded the global target of having 90% of all people diagnosed with HIV on ART among migrants. Of the other four countries, two are within 10% of meeting the target (1 West; 1 Centre) and two are more than 10% away from reaching the target (1 West; 1 Centre).

In the seven countries reporting data for both stage 3 and stage 4, an estimated 34 116 migrants are on ART, 28 938 of whom (85%; range 82–98%) are virally suppressed. Four of these seven countries (3 West; 1 Centre) have met or exceeded the global target of having 90% of all people on ART virally suppressed among migrants. Of the other three countries, all three are within 10% of meeting the target (3 West).

Finally, in the four countries reporting data for stage 1 and stage 4, an estimated 31 480 migrants are living with HIV, 22 585 of whom (72%; range 64–73%) are virally suppressed. One of these four countries (1 West) has met or exceeded the overall global target of having 73% of all people living with HIV virally suppressed among migrants. All of the other three countries are within 10% of meeting the target (2 West; 1 Centre).

A summary of the continuum of care for countries reporting migrant data is provided in Annex 7.

Figure 18. 90-90-90 and overall viral suppression among migrants living with HIV in European and Central Asian countries, reported in 2020³¹



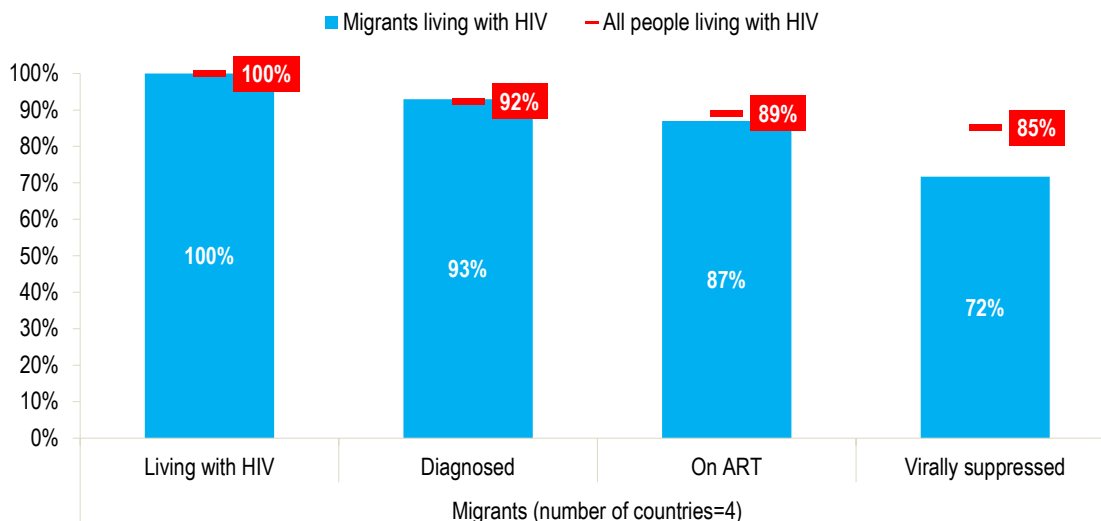
³¹ Latest available data reported by countries in 2020. See Annex 7 for information on which year the reported data relates to.

Comparison against the national continuum of care

In the four countries reporting all four stages, 93% of all migrants living with HIV were reported to be diagnosed, 87% reported to be treated and 72% virally suppressed (global substantive targets). This is similar to the figures reported for 'diagnosed' and 'on ART' for all PLHIV at the national level (in the countries able to report disaggregated data for migrants); 92%, 89% and 85% respectively (Figure 19, Annex 7).

In the countries able to report all four stages of data, the West sub-region countries contributed 97% of all migrants reported to be living with HIV in 2020 and the Centre sub-region contributed 3%.

Figure 19. Comparison of the continuum of HIV care for migrants against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2020³²

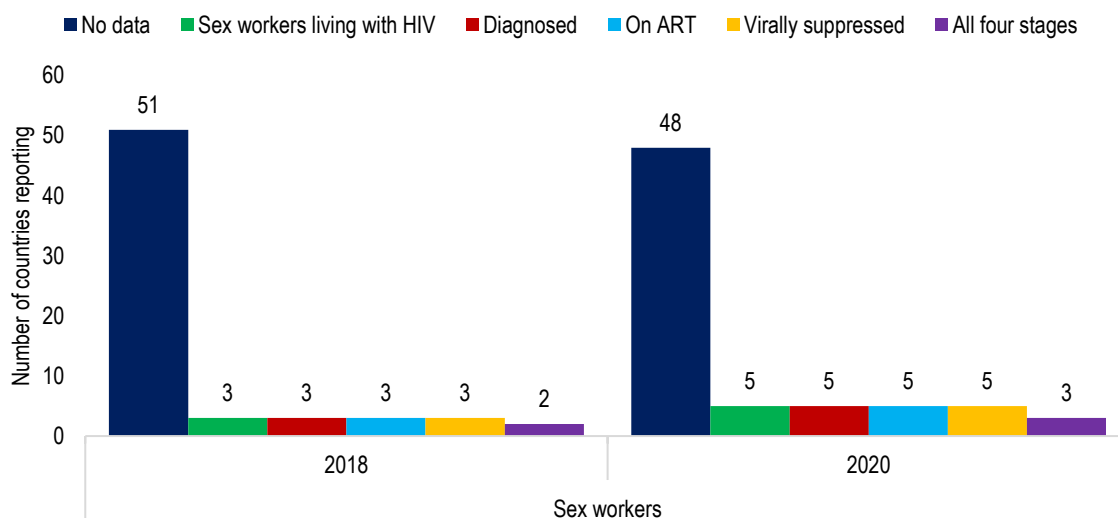


Sex workers

Data availability

In 2020, all four stages of the continuum of care for sex workers were reported by three countries, one more than in 2018 (Figure 20 – disaggregated continuum of care data on sex workers was not collected in 2016). At least two stages were reported by five countries. There has been an increase in the number of countries reporting data on every stage of the continuum of care for sex workers living with HIV between 2018 and 2020.

Figure 20. Number of countries reporting data for different stages of the HIV continuum of care for sex workers, Europe and Central Asia, reported in 2018 and 2020



³² Latest available data reported by countries in 2020. See Annex 7 for information on which year the reported data relates to.

90-90-90 and overall viral suppression among sex workers living with HIV

In the three countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 562 sex workers are living with HIV, 436 of whom (78%; range 44–96%) know their status (Figure 21). One of these three countries (1 East) has met or exceeded the global target of having 90% of all people living with HIV knowing their status among sex workers. Of the other two countries, one is within 10% of meeting the target (1 West) and one is more than 10% away from reaching the target (1 East).

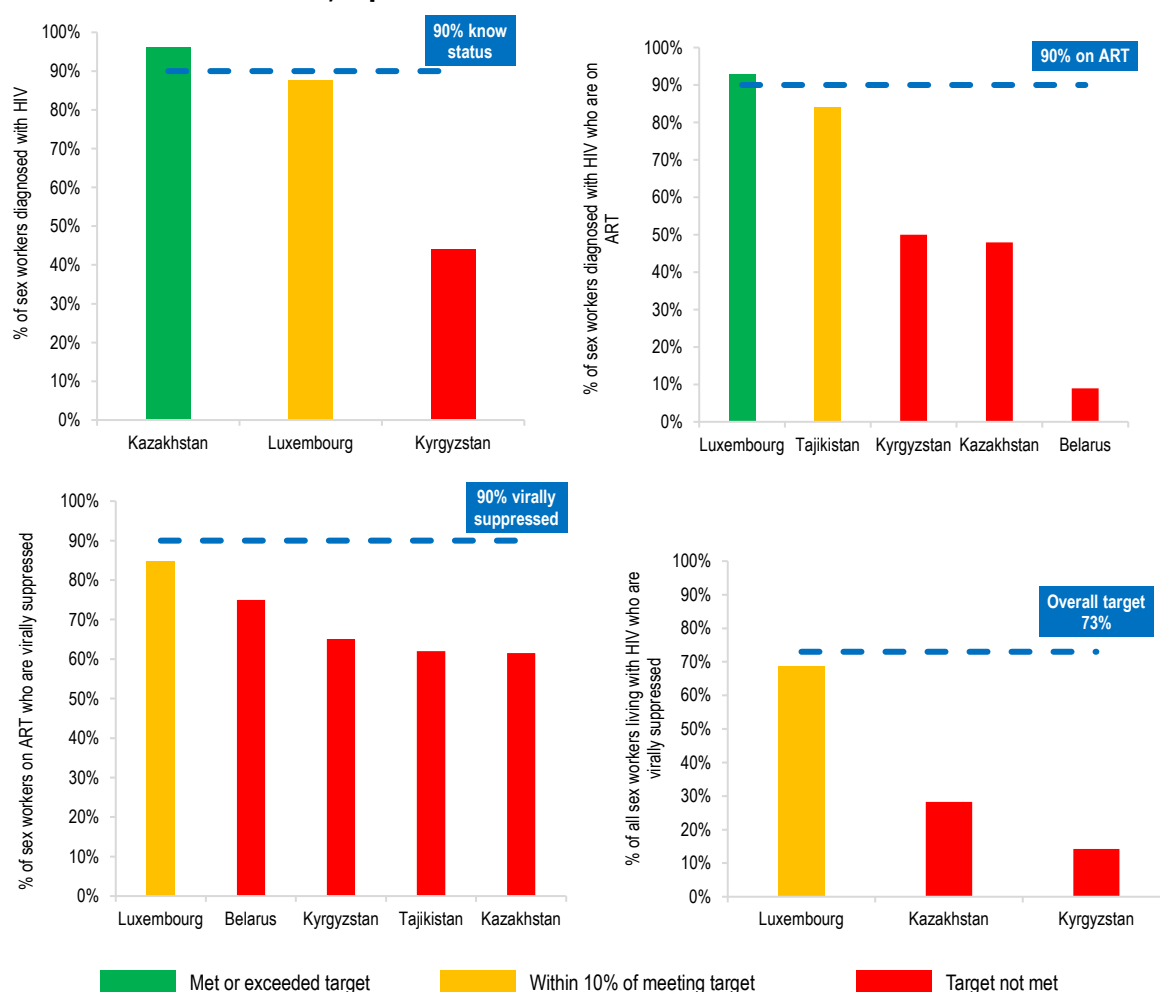
In the five countries reporting data for both stage 2 and stage 3, an estimated 2 833 sex workers are diagnosed with HIV, 554 of whom (20%; range 9–93%) are on ART. One of these five countries (1 West) has met or exceeded the global target of having 90% of all people diagnosed with HIV on ART among sex workers. Of the other four countries, one is within 10% of meeting the target (1 East) and three are more than 10% away from reaching the target (3 East).

In the five countries reporting data for both stage 3 and stage 4, an estimated 554 sex workers are on ART, 373 of whom (67%; range 61–85%) are virally suppressed. None of these five countries have met or exceeded the global target of having 90% of all people on ART virally suppressed among sex workers. One is within 10% of meeting the target (1 West) and four are more than 10% away from reaching the target (4 East).

Finally, in the three countries reporting data for stage 1 and stage 4, an estimated 562 sex workers are living with HIV, 138 of whom (25%; range 14–69%) are virally suppressed. None of these three countries have met or exceeded the overall global target of having 73% of all people living with HIV virally suppressed among sex workers. One is within 10% of meeting the target (1 West) and two are more than 10% away from reaching the target (2 East).

A summary of the continuum of care for countries reporting sex worker data is provided in Annex 8.

Figure 21. 90-90-90 and overall viral suppression among sex workers living with HIV in European and Central Asian countries, reported in 2020³³



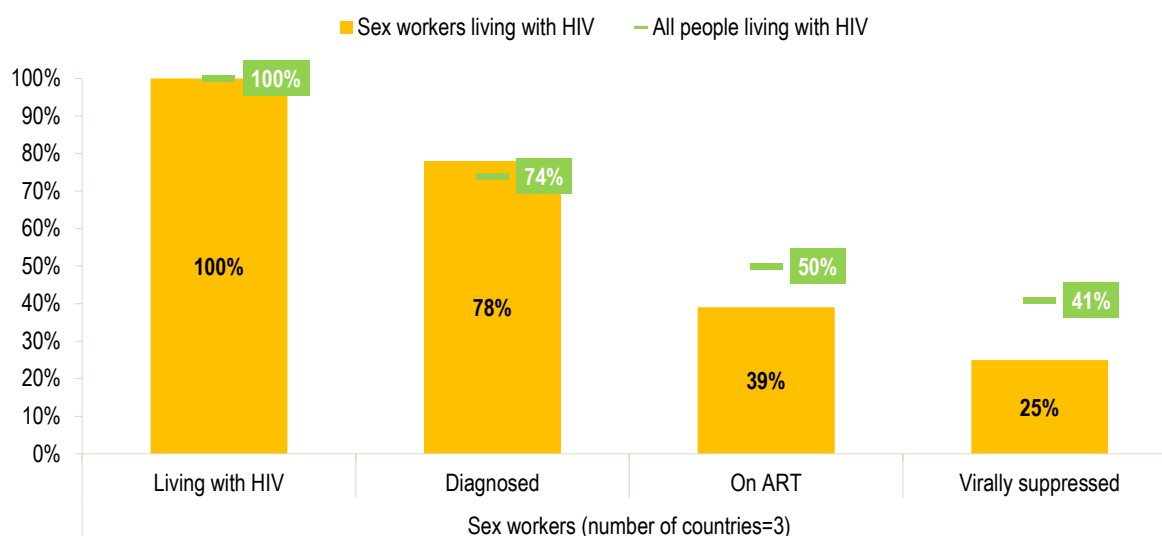
³³ Latest available data reported by countries in 2020. See Annex 8 for information on which year the reported data relates to.

Comparison against the national continuum of care

In the three countries reporting all four stages, 78% of all sex workers living with HIV were reported to be diagnosed, 39% treated and 25% virally suppressed (global substantive targets). This compares favourably against the proportion of diagnoses at the national level (74%) but is substantially worse in terms of treatment (50%) and viral suppression (41%) levels (Figure 22, Annex 8).

In the countries able to report all four stages of data, the East sub-region countries contributed 97% of all sex workers reported to be living with HIV in 2020 and the West sub-region contributed 3%. None of the Centre sub-region countries reported on all four stages of the continuum of care for sex workers.

Figure 22. Comparison of the continuum of HIV care for sex workers against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2020³⁴

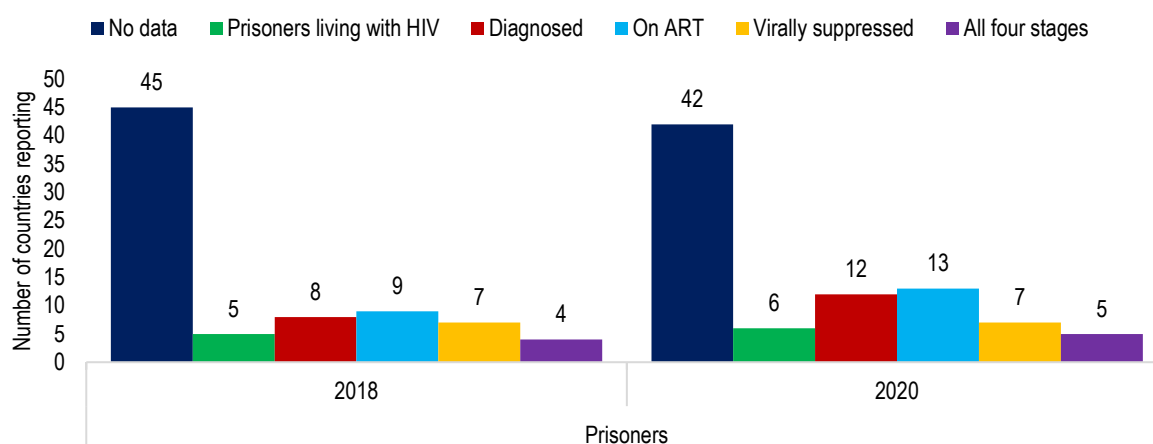


Prisoners

Data availability

In 2020, all four stages of the continuum of care for prisoners were reported by five countries, one more than in 2018 (Figure 23 – disaggregated continuum of care data on prisoners was not collected in 2016). At least two stages were reported by 12 countries. There has been an increase in the number of countries reporting data on every stage of the continuum of care for prisoners living with HIV between 2018 and 2020, with the exception of the number of countries reporting viral suppression data, which has remained the same.

Figure 23. Number of countries reporting data for different stages of the HIV continuum of care for prisoners, Europe and Central Asia, reported in 2018 and 2020



³⁴ Latest available data reported by countries in 2020. See Annex 8 for information on which year the reported data relates to.

90-90-90 and overall viral suppression among prisoners living with HIV

In the six countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 7 668 prisoners are living with HIV and 7 540 (98%; range 80–100%) of them know their status (Figure 24). Four of these six countries (4 East) have met or exceeded the global target of having 90% of all people living with HIV knowing their status among prisoners. Of the other two countries, both are within 10% of meeting the target (1 West; 1 Centre).

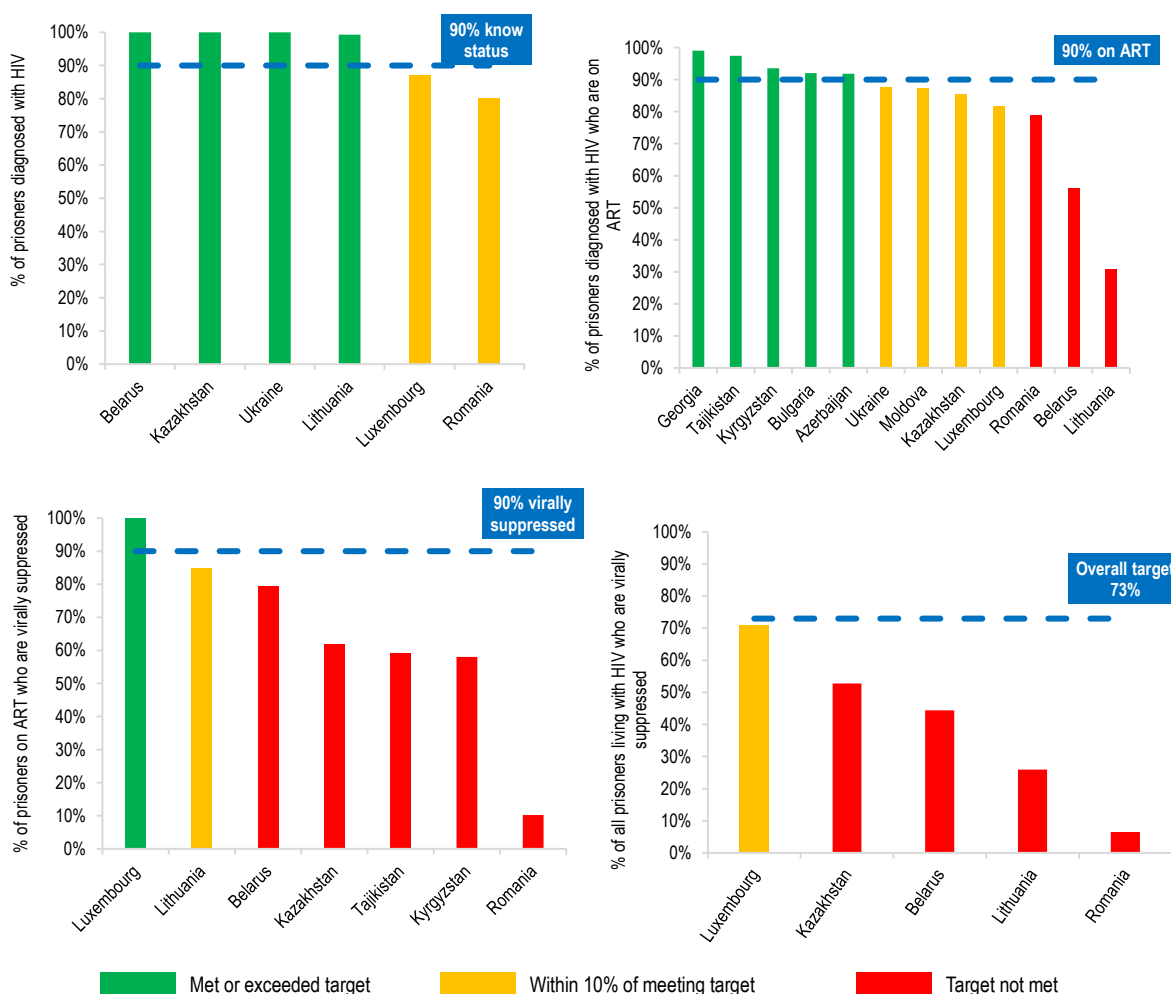
In the 12 countries reporting data for both stage 2 and stage 3, an estimated 8 786 prisoners have been diagnosed with HIV, 6 938 of whom (79%; range 31–99%) are on ART. Five of these 12 countries (1 Centre; 4 East) have met or exceeded the global target of having 90% of all people diagnosed with HIV on ART among prisoners. Of the other seven countries, four are within 10% of meeting the target (4 East) and three are more than 10% away from reaching the target (1 Centre; 2 East).

In the seven countries reporting data for both stage 3 and stage 4, an estimated 2 773 prisoners are on ART, 1 710 of whom (62%; range 10–100%) are virally suppressed. One of these seven countries has met or exceeded the global target of having 90% of all people on ART virally suppressed among prisoners (1 West). One is within 10% of meeting the target (1 East) and five are more than 10% away from reaching the target (1 Centre; 4 East).

Finally, in the five countries reporting data for stage 1 and stage 4, an estimated 3 844 prisoners are living with HIV, 1 519 of whom (40%; range 6–71%) are virally suppressed. None of these four countries have met or exceeded the overall global target of having 73% of all people living with HIV virally suppressed among prisoners. One is within 10% of meeting the target (1 West) and four are more than 10% away from reaching the target (1 Centre; 3 East).

A summary of the continuum of care for countries reporting prisoner data is provided in Annex 9.

Figure 24. 90-90-90 and overall viral suppression among prisoners living with HIV in European and Central Asian countries, reported in 2020³⁵



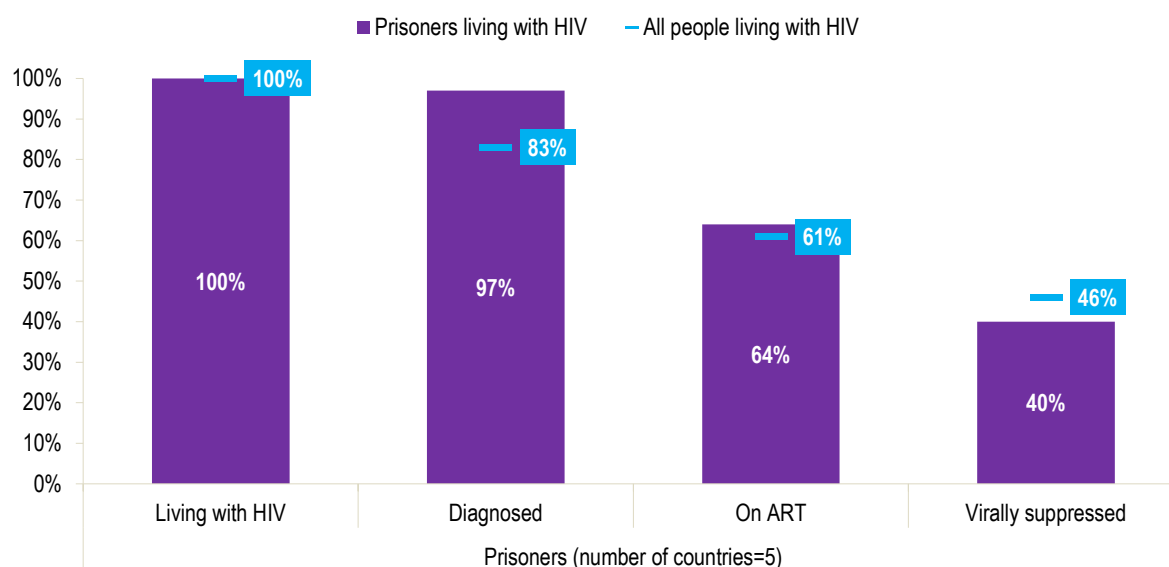
³⁵ Latest available data reported by countries in 2020. See Annex 9 for information on which year the reported data relates to.

Comparison against the national continuum of care

Among the five countries that were able to report data on all four stages of the continuum for prisoners in 2020, the proportion of all prisoners living with HIV who were diagnosed was 97%, the proportion treated was 64% and the proportion virally suppressed was 40% (Figure 25). The equivalent figures for all PLHIV at the national level (for the five countries reporting prisoner data) were 83%, 61% and 46% respectively.

In the countries able to report all four stages of data, the East sub-region countries contributed 83% of all prisoners reported to be living with HIV in 2020, the Centre region contributed 16% and the West sub-region contributed 1%.

Figure 25. Comparison of the continuum of HIV care for prisoners against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2020³⁶



³⁶ Latest available data reported by countries in 2020. See Annex 9 for information on which year the reported data relates to.

The estimated number of people with transmissible levels of HIV virus

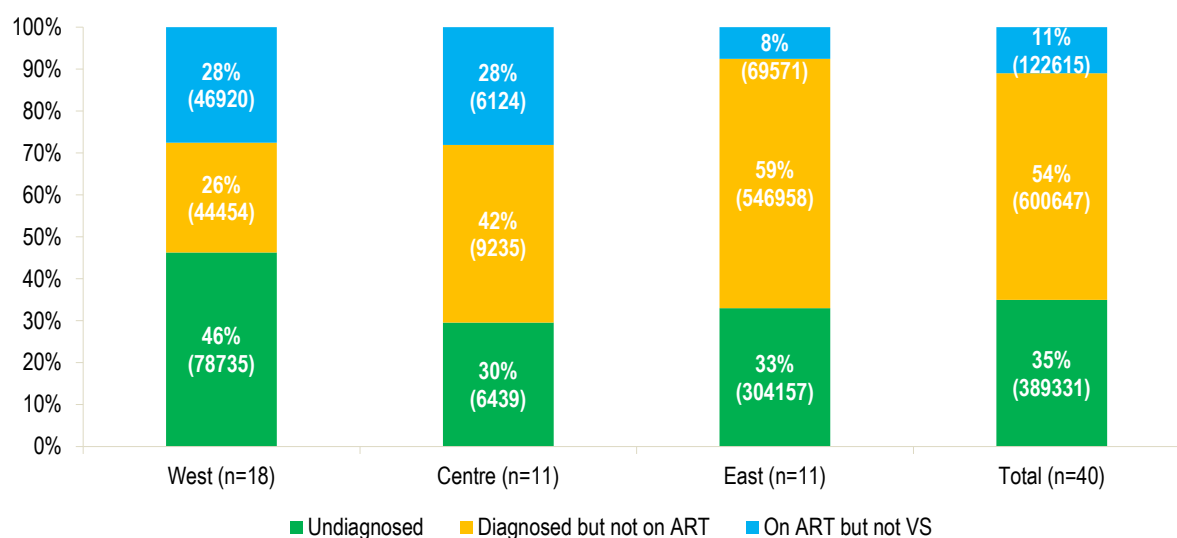
Viral suppression is key to the 90-90-90 model of eliminating the HIV epidemic by 2030. It is well-known that ART is now so effective that those who are treated and have an undetectable viral load (<200 copies/ml) have levels of virus that are untransmittable, even if having sex without condoms [2]. This is sometimes referred to as U=U (undetectable = untransmittable). Understanding the number of people with transmissible levels of virus and whether they are undiagnosed, diagnosed but untreated or treated but not virally suppressed is therefore a useful way of identifying where countries should be focusing their efforts to improve viral suppression outcomes.

The number of people with transmissible levels of virus can be calculated by adding together the number of PLHIV who are estimated to be undiagnosed, diagnosed but untreated, and treated but not virally suppressed. Using data from the countries that provided all four stages of the continuum, this is estimated to be 1 112 593 PLHIV in the reporting countries, equivalent to 50% of all PLHIV. The reality for the overall region is likely to be higher since not all countries could provide data for all four stages of the continuum.

In 2020, country respondents reported that 35% of people living with transmissible levels of virus were estimated to be undiagnosed, 54% were estimated to be diagnosed but untreated and 11% were estimated to be on treatment but have an unsuppressed viral load. This indicates that the greatest impact in reducing the number of people with transmissible levels of virus could be achieved through rapid and sustained scale-up of treatment, along with widespread implementation of combination prevention, including further efforts to increase HIV testing.

Figure 26 shows a breakdown of the number of people with transmissible levels of virus by WHO sub-region. There were clear differences between sub-regions. In the West sub-region, nearly half of those with transmissible levels of virus were estimated to be undiagnosed, while in the East sub-region almost two-thirds were diagnosed but untreated, and the Centre sub-region had similar proportions of those undiagnosed, diagnosed but untreated, and treated but not virally suppressed.

Figure 26. Distribution of people with transmissible levels of virus, by WHO sub-region, and Europe and Central Asia overall, reported in 2020³⁷



It is important to note that at country level, the relationship between the number of people living with transmissible levels of virus and the proportion of all PLHIV with transmissible levels of virus is not linear. In countries in the West sub-region, the relative success of testing policies and treatment access means that there are lower proportions of people with transmissible HIV. However, these low proportions still translate into significant numbers for some countries because they have older epidemics with higher numbers of PLHIV overall (for example, France and Spain).

³⁷ Latest available data reported by countries in 2020. See Annex 2 for information on which year the reported data relates to.

Concluding remarks and priorities for action

Reporting of data

Despite the pressures of the COVID-19 pandemic, it is encouraging that more countries than ever can provide data on all four stages of the continuum of care. The commitment to the gathering, reporting, and sharing of HIV information by public health teams across Europe and Central Asia in the midst of a global pandemic is testament to their dedication to the HIV response.

Nevertheless, the latest round of monitoring demonstrates just how much further progress is needed. The fact there are still five countries with no data reported for any stage of the continuum, in the year in which the 90-90-90 targets are set to be reached, is a concern. A further 10 countries are unable to report on all four stages of the continuum of HIV care, and inability to report on viral suppression is particularly noticeable. Further efforts are needed to ensure that routine viral load monitoring is available to all people living with HIV in care, and that this data is routinely collected at the national level. This is particularly important given the key role of monitoring viral suppression in assessing the effectiveness of HIV testing, treatment, and care, as well as the overall monitoring of viral suppression among all those estimated to be living with HIV. This needs to be monitored closely since one consequence of COVID-19 is likely to be an increase in virtual consultations and fewer face-to-face visits which offer opportunities for CD4 and viral load monitoring.

The minimal data provided on specific key populations is of particular concern. The numbers of countries able to report all four stages for the continuum of care for MSM, PWID, sex workers, and prisoners have increased since previous monitoring rounds, but they remain low. Although the unprecedented circumstances faced by public health authorities this year and the prioritisation of core indicators which did not include continuum data for key populations may have contributed to the sparsity of continuum of care data on key populations, it also reflects an ongoing trend from previous monitoring rounds. Lack of knowledge of outcomes across the continuum of care for specific key populations means countries are less able to target interventions effectively to specific groups. Significant health inequalities can be obscured where outcomes are known only for the overall population of PLHIV. The elimination of AIDS by 2030 will not be possible if the necessary interventions for key populations are neglected.

In 2021, ECDC will conduct another round of data collection in order to have 2020 data on which to report whether the 90-90-90 fast-track targets have been achieved by 2020, as intended. Additional questions on how COVID-19 has impacted HIV services and monitoring will also be included.

Overall progress in the continuum of care

In 2020, the overall performance of the European and Central Asian region against the global 90-90-90 targets was 82% of all PLHIV diagnosed, 67% of those diagnosed with HIV on treatment and 90% of those on treatment virally suppressed. More progress is needed to meet the substantive target of having 73% of all PLHIV virally suppressed, since performance for the overall region is currently still only at 50%.

At the WHO sub-regional level, the West sub-region has achieved all three global 90-90-90 targets, with 90% of all PLHIV diagnosed, 93% of people living with diagnosed HIV on treatment, and 93% of those on treatment virally suppressed. The West sub-region has also exceeded the substantive target of 73%, with 78% of all PLHIV virally suppressed. These achievements should be applauded, but it is important to note that the overall figures mask variation between countries and many have not reached the 90-90-90 targets.

The Centre sub-region is performing at 87%, 78% and 81% respectively, indicating that this region needs to widen access to treatment and promote adherence through the implementation of support services, in addition to scaling up testing and prevention efforts. It is of concern that only 55% of all PLHIV are virally suppressed in the Centre region, meaning that just under one in two PLHIV are at risk of ill-health and can still pass on the virus. Since the Centre sub-region has seen the most rapid increase in the rate of new HIV diagnoses in the WHO European Region (3), this situation should be urgently addressed.

Finally, the East sub-region is performing at 78%, 50%, and 87% respectively, indicating that promoting linkage to care and immediate access to treatment is a particular requirement for this region in its response to the epidemic. As with the Centre region, the low level of PLHIV who are virally suppressed is of concern— with only 33% virally suppressed. This means that around two in three PLHIV in the East sub-region are not benefitting from viral suppression. It should be noted that among all the countries from the East sub-region able to provide all four stages of data, Russia represents 73% of all people living with HIV. When Russia is removed from the overall viral suppression calculation, the region fares somewhat better, with 48% of all people living with HIV virally suppressed, but this is still a long way off target.

Some progress was made towards meeting the global substantive targets of 90-81-73 between 2018 and 2020. For the countries able to submit data for both years, there was improvement across the continuum of care outcomes from 2018 to 2020 in each sub-region. Progress was greatest in the East sub-region, with the proportion of people virally suppressed increasing over the two years from 26% to 33%. This continues the trend from 2016 noted in the 2018 report. However, there is still a substantial drop-off - approximately 20% between each stage in the Centre sub-region and 40% between proportions diagnosed and treated in the East sub-region. Limited access to treatment (and consequently, viral suppression) means higher rates of early and preventable death, serious illness and onward transmission, which fuels the epidemic.

Key populations

In 2019, sex between men was the predominant route of HIV transmission (50.6%) in the EU/EEA and there have been sustained increases in diagnoses among MSM in the Centre and East sub-regions in recent years [3]. It is encouraging that a growing number of countries are able to report on the continuum of care for MSM living with HIV specifically. Moreover, the fact that a substantial proportion have met, or are within 10% of reaching the 90-90-90 targets, particularly in terms of treatment and viral suppression, is promising. It is also encouraging that in those countries which could provide data, continuum of care outcomes for MSM are the same, or very nearly the same as for the overall population of PLHIV. However, less than half of the countries providing data have reached or are within 10% of reaching the overall target of 73% viral suppression among MSM.

People who inject drugs remain a key population disproportionately affected by HIV, particularly in the East sub-region where they accounted for 24% of reported new HIV diagnoses with a known mode of transmission in 2019 (compared to 3% and 4% in the Centre and West, respectively) [3]. Given this distribution of diagnoses across the region, it is important that more countries from the East sub-region begin to report disaggregated data for this key group – currently only half (eight out of 15) of the countries from this sub-region can do so and only four can report all four stages. Continuum of care outcomes for PWID are considerably lower than for people living with HIV overall, highlighting the need for a tailored approach which includes harm reduction in the form of needle and syringe provision and opioid substitution therapy in order to improve outcomes in this key population.

The number of countries able to report disaggregated data for migrants, sex workers, and prisoners remains very low, and few have met the 90-90-90 or 73% overall viral suppression target in these key populations. While outcomes may seem good for these key populations when compared to people living with HIV overall, the figures should be interpreted with caution given the very small number of countries included in the analyses.

It is important that, for all these key populations, accessibility along the entire HIV continuum of care is prioritised by implementing patient-centred services in a non-stigmatising and inclusive environment, preferably with the involvement of civil society. Adoption of a combination prevention approach which includes access to condoms, pre-exposure prophylaxis (PrEP), and frequent testing for those at high-risk, will be the key to reducing the HIV infection rate. High coverage of harm reduction remains important for people who inject drugs, particularly in the East sub-region but also across the other sub-regions where localised HIV outbreaks continue to occur among PWID [4, 5]. Expanding accessibility of testing through different testing modes, such as lay-provider testing and self-testing, is particularly important in countries which have previously been identified as having a limited range of testing modes available [6]. Prompt linkage to treatment, and support for adherence and retention in care should be implemented to improve rates of viral suppression. Evidence-based national policies and strategies will be crucial to the successful implementation and scaling-up of these approaches.

Limitations

Although countries were asked to report data using the definitions agreed by the Dublin Declaration Advisory Group, in practice some countries use slightly different definitions, so caution is required when drawing comparisons. There are also variations in year of data reported, data sources, timeframes, analysis and quality which limit the scope for directly comparing data between countries.

There are still considerable amounts of missing data which makes it difficult to generalise findings for the entire European and Central Asian region, especially for key populations. Since more effective services and monitoring are often correlated, countries with better outcomes are more likely to report data – meaning the overall picture provided by the evidence in this report is probably an overestimation of the performance of the region.

There is evidence to indicate that in some countries in the East sub-region, misclassification of new HIV diagnoses as heterosexually-acquired may obscure the reality of HIV incidence among MSM and PWID [7, 8]. This means that estimates for key populations should be interpreted with caution where stigmatisation of homosexuality and injecting drug use is highly prevalent.

Conclusion

Overall, few countries have reached the fast-track 90-90-90 targets since they were first set in 2014. According to UNAIDS' modelling, reaching these targets by 2020 is a necessary condition for meeting the Sustainable Development Goal of eliminating the AIDS epidemic by 2030. With only 16% of countries in the region having met or exceeded the targets of 90% diagnosed, 90% on ART, 90% virally suppressed and 73% of all PLHIV virally suppressed, it is clear that the region is lagging significantly behind in its efforts to achieve SDG 3 by 2030.

Each country will need to examine its own continuum of care data against outcomes for other countries and sub-regions and consider how to maintain and increase rates of progress. Significant variation exists within the sub-regions which group countries with similar contexts and epidemics. This shows that there are policy and implementation issues which need to be addressed. It is essential that a full combination prevention strategy is implemented, incorporating improved multifaceted testing strategies; effective linkage to care; adherence and retention support, and a policy of treatment on diagnosis, all in the context of a human rights-based supportive environment for those affected by and living with HIV. Only a strategy of this type will deliver improvements in performance across the continuum of care.

References

1. Joint United Nations Programme on HIV/AIDS (UNAIDS). 2020 Global AIDS Update - Seizing the moment - Tackling entrenched inequalities to end epidemics. Geneva: UNAIDS; 2020.
2. Rodger AJ, Cambiano V, Bruun T, Vernazza P, Collins S, Degen O, et al. Risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy (PARTNER): final results of a multicentre, prospective, observational study. *The Lancet*. 2019;393(10189):2428-38.
3. European Centre for Disease Prevention and Control (ECDC)/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2020 – 2019 data. Copenhagen: WHO Regional Office for Europe; 2020.
4. Des Jarlais DC, Sypsa V, Feelemyer J, Abagiu AO, Arendt V, Broz D, et al. HIV outbreaks among people who inject drugs in Europe, North America, and Israel. *The Lancet HIV*. 2020;7(6):e434-e42.
5. McAuley A, Palmateer NE, Goldberg DJ, Trayner KMA, Shepherd SJ, Gunson RN, et al. Re-emergence of HIV related to injecting drug use despite a comprehensive harm reduction environment: a cross-sectional analysis. *The Lancet HIV*. 2019;6(5):e315-e24.
6. European Centre for Disease Prevention and Control (ECDC). HIV testing - monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2018 progress report. Stockholm: ECDC; 2019.
7. Dumchev K, Kornilova M, Kulchynska R, Azarskova M, Vitek C. Improved ascertainment of modes of HIV transmission in Ukraine indicates importance of drug injecting and homosexual risk. *BMC Public Health*. 2020;20(1):1288.
8. Čakalo J-I, Božičević I, Vitek C, Mandel JS, Salyuk T, Rutherford GW. Misclassification of Men with Reported HIV Infection in Ukraine. *AIDS and Behavior*. 2015;19(10):1938-40.

Annex 1. Continuum of care for people living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	All PLHIV	Diagnosed	Treated	Virally suppressed	90-90-90 targets			90-81-73 targets		
						% of PLHIV who are diagnosed	% of diagnosed PLHIV who are on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed
West	Andorra										
	Austria	7480	7029	6380	4821	94%	91%	76%	94%	85%	64%
	Belgium	18335	16594	15238	14299	91%	92%	94%	91%	83%	78%
	Denmark	6750	6150	5670	5550	91%	92%	98%	91%	84%	82%
	Finland	2924	2750	2503	2464	94%	91%	98%	94%	86%	84%
	France	172700	148746	133400	126800	86%	90%	95%	86%	77%	73%
	Germany	87900	77300	71400	68000	88%	92%	95%	88%	81%	77%
	Greece	15980	13345	10618		84%	80%		84%	66%	
	Iceland	296	291			98%			98%		
	Ireland	7200	6500	5700	5400	90%	88%	95%	90%	79%	75%
	Israel	8039	7448	5087		93%	68%		93%	63%	
	Italy	130000	124500	117000	102000	96%	94%	87%	96%	90%	78%
	Liechtenstein										
	Luxembourg	1176	1000	892	792	85%	89%	89%	85%	76%	67%
	Malta	453	340	340	298	75%	100%	88%	75%	75%	66%
	Monaco	48	48	48	48	100%	100%	100%	100%	100%	100%
	Netherlands	23300	21360	19913	19046	92%	93%	96%	92%	85%	82%
	Norway	4455	4100	4020	3938	92%	98%	98%	92%	90%	88%
	Portugal	39820	36734	33163	30842	92%	90%	93%	92%	83%	77%
	San Marino	71		71						100%	
	Spain	151387	131774	128216	115907	87%	97%	90%	87%	85%	77%
Sweden	8971	8097	7943	7702	90%	98%	97%	90%	89%	86%	
Switzerland	16700	15500	15000	14800	93%	97%	99%	93%	90%	89%	
United Kingdom	103800	96142	93384	90583	93%	97%	97%	93%	90%	87%	
Sub-total	783399	704664	660210	613290	90%	93%	93%	90%	84%	78%	
Centre	Albania	1400	1034	611	323	74%	59%	79%	74%	44%	23%
	Bosnia & Herzegovina										
	Bulgaria	3100	3026	1445	1140	98%	48%	79%	98%	47%	37%
	Croatia	1648	1414	1263	1225	86%	89%	97%	86%	77%	74%
	Cyprus	965	863			89%			89%		
	Czechia	3277	2782	2481	2383	85%	89%	96%	85%	76%	73%
	Hungary		3615								
	Kosovo			36							
Montenegro	368	243	181	170	66%	74%	94%	66%	49%	46%	

WHO Region	Country	All PLHIV	Diagnosed	Treated	Virally suppressed	90-90-90 targets			90-81-73 targets		
						% of PLHIV who are diagnosed	% of diagnosed PLHIV who are on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed
	North Macedonia	383	246	198	191	64%	80%	96%	64%	52%	50%
	Poland	15166	12385	10496	10052	82%	85%	96%	82%	69%	66%
	Romania	18000	16486	12644	8064	92%	77%	64%	92%	70%	45%
	Serbia	3200	2800	2100	1900	88%	75%	90%	88%	66%	59%
	Slovakia	1041	833	650	520	80%	78%	80%	80%	62%	50%
	Slovenia	809	704	649	626	87%	92%	96%	87%	80%	77%
	Turkey										
	Sub-total	48392	41953	32718	26594	87%	78%	81%	87%	68%	55%
East	Armenia	3500	2700	2200	1900	75%	81%	86%	75%	63%	54%
	Azerbaijan	9700	6800	5100	4100	70%	75%	80%	70%	53%	42%
	Belarus	26000	22084	17714	13575	85%	80%	77%	85%	68%	52%
	Estonia	6855		4482						65%	
	Georgia	9300	5954	5098	4621	64%	86%	91%	64%	55%	50%
	Kazakhstan	33427	25753	17535	14080	77%	68%	80%	77%	52%	42%
	Kyrgyzstan	10129	6458	4058	3328	62%	64%	82%	62%	40%	33%
	Latvia		5836								
	Lithuania	3397	2827	1223	920	83%	43%	75%	83%	36%	27%
	Moldova	14589	9407	6690	5602	64%	71%	84%	64%	46%	38%
	Russia	998525	808823	319613	271671	81%	40%	85%	81%	32%	27%
	Tajikistan	13771	8756	7055	5152	63%	82%	73%	63%	51%	37%
	Turkmenistan										
	Ukraine	251168	169787	136105	127871	68%	80%	94%	68%	54%	51%
	Uzbekistan	49676	42556	28643		86%	67%		86%	58%	
	Sub-total	1373506	1069349	522391	452820	78%	50%	87%	78%	38%	33%
Total	2205297	1815966	1215319	1092704	82%	67%	90%	82%	55%	50%	

* Sub-totals and totals for numbers and 90-81-73 only include countries where all four stages of the continuum of care were reported. Sub-totals and totals for 90-90-90 targets include countries where the relevant two consecutive stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

Annex 2. Continuum of care for people living with HIV in Europe and Central Asia: year of data and data sources, reported in 2020

WHO Region	Country	PLHIV		Diagnosed		Treated		Virally suppressed	
		End date of reporting period:	Data source	End date of reporting period:	Data source	End date of reporting period:	Data source	End date of reporting period:	Data source
West	Andorra								
	Austria	31/12/2017	ECDC modelling tool	31/12/2018	Cohort data	31/12/2018	Cohort data	31/12/2018	Cohort data
	Belgium	31/12/2017	Other modelling tool or estimate	31/12/2018	Surveillance data	31/12/2018	Other data source	31/12/2018	Other data source
	Denmark	31/12/2018	ECDC modelling tool	31/12/2019	Cohort data	31/12/2019	Cohort data	31/12/2019	Cohort data
	Finland	31/12/2018	ECDC modelling tool	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Surveillance data
	France	31/12/2018	Other modelling tool or estimate	31/12/2016	Other data source	31/12/2016	Other data source	31/12/2016	Other data source
	Germany	31/12/2018	Other modelling tool or estimate	31/12/2018	Surveillance data	31/12/2018	Other data source	31/12/2018	Cohort data
	Greece	31/12/2019	ECDC modelling tool	31/12/2019	Surveillance data	31/12/2019	Surveillance data		
	Iceland	11/06/2020	Other modelling tool or estimate	11/06/2020	Other data source				
	Ireland	31/12/2018	SPECTRUM estimate	31/12/2018	Other data source	31/12/2018	Other data source	31/12/2018	Other data source
	Israel	31/12/2016	Other modelling tool or estimate	31/12/2016	Surveillance data	31/12/2016	Other data source		
	Italy	31/12/2019	SPECTRUM estimate	31/12/2018	Other data source	31/12/2018	Other data source	31/12/2018	Other data source
	Liechtenstein								
	Luxembourg	31/12/2019	Other modelling tool or estimate	31/12/2018	Cohort data	31/12/2018	Cohort data	31/12/2018	Cohort data
	Malta	31/12/2019	ECDC modelling tool	31/12/2017	Surveillance data	31/12/2017	Other data source	31/12/2017	Surveillance data
	Monaco	31/12/2019	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Netherlands	31/12/2019	ECDC modelling tool	31/12/2018	Cohort data	31/12/2018	Cohort data	31/12/2018	Cohort data
	Norway	31/12/2019	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Portugal	31/12/2019	ECDC modelling tool	31/12/2017	Surveillance data	31/12/2017	Other data source	31/12/2017	Cohort data
	San Marino	31/12/2019	Other modelling tool or estimate			31/12/2019	Other data source		
Spain	31/12/2017	Other modelling tool or estimate	31/12/2017	Other data source	31/12/2019	Other data source	31/12/2019	Other data source	
Sweden	31/12/2019	Other modelling tool or estimate	30/06/2020	Other data source	30/06/2020	Other data source	30/06/2020	Other data source	
Switzerland	31/12/2019	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Cohort data	
United Kingdom	30/06/2020	Other modelling tool or estimate	31/12/2018	Surveillance data	31/12/2018	Surveillance data	31/12/2019	Surveillance data	
Centre	Albania	31/12/2016	SPECTRUM estimate	31/12/2019	Surveillance data	31/12/2019	Other data source	31/12/2019	Other data source
	Bosnia & Herzegovina								
	Bulgaria	31/12/2018	SPECTRUM estimate	31/12/2018	SPECTRUM estimate	31/12/2018	SPECTRUM estimate	31/12/2018	SPECTRUM estimate
	Croatia	21/12/2018	Other modelling tool or estimate	31/12/2019	Surveillance data	31/12/2019	Cohort data	31/12/2019	Cohort data
	Cyprus	31/12/2018	ECDC modelling tool	31/12/2018	Other data source				
	Czechia	31/12/2018	ECDC modelling tool	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Surveillance data

WHO Region	Country	PLHIV		Diagnosed		Treated		Virally suppressed	
		End date of reporting period:	Data source	End date of reporting period:	Data source	End date of reporting period:	Data source	End date of reporting period:	Data source
	Hungary			31/12/2019	Surveillance data				
	Kosovo					31/12/2019	Other data source		
	Montenegro	31/12/2019	SPECTRUM estimate	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Surveillance data
	North Macedonia	31/12/2019	SPECTRUM estimate	31/12/2017	Surveillance data	31/12/2017	Surveillance data	31/12/2017	Surveillance data
	Poland	31/12/2019	ECDC modelling tool	31/12/2017	Other data source	31/12/2017	Other data source	31/12/2017	Other data source
	Romania	31/12/2019	SPECTRUM estimate	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Surveillance data
	Serbia	31/12/2019	SPECTRUM estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Slovakia	31/12/2019	ECDC modelling tool	31/12/2018	Surveillance data	31/12/2018	Surveillance data	31/12/2018	Surveillance data
	Slovenia	31/12/2019	ECDC modelling tool	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Cohort data
	Turkey								
East	Armenia	31/12/2017	SPECTRUM estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Azerbaijan	31/12/2017	SPECTRUM estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Belarus	31/12/2017	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Estonia	31/12/2017	Other modelling tool or estimate			31/12/2019	Other data source		
	Georgia	31/12/2018	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Kazakhstan	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate
	Kyrgyzstan	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate
	Latvia			31/12/2019	Surveillance data				
	Lithuania	31/12/2019	SPECTRUM estimate	31/12/2019	Surveillance data	31/12/2019	Surveillance data	31/12/2019	Surveillance data
	Moldova	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate
	Russia	31/12/2019	SPECTRUM estimate	31/12/2017	Surveillance data	31/12/2017	Surveillance data	31/12/2017	Surveillance data
	Tajikistan	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate
	Turkmenistan								
	Ukraine	31/12/2018	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
Uzbekistan	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate	31/12/2019	SPECTRUM estimate			

Annex 3. Continuum of care for people living with HIV in Europe and Central Asia reported in 2020: exclusion of out-migration, deaths, and loss to follow-up

WHO Region	Country	Out-migration				Deaths				Loss to follow-up			
		All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed
West	Andorra												
	Austria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
	Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Partially	Yes
	Denmark	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially
	Finland	Partially	Partially	Yes	Yes	Partially	Partially	Yes	Yes	Partially	Partially	Yes	Yes
	France	No	No	Yes	Yes	No	No	Yes	Yes				
	Germany	Partially	Partially	Yes	Yes	Partially	Partially	Yes	Yes	Partially	Partially	No	Yes
	Greece	No	No	No		Partially	Partially	Partially		Partially	Partially	Partially	
	Iceland	Yes	Yes			Yes	Yes			Yes	Yes		
	Ireland	Partially	Partially	Yes	Yes	Partially	Partially	Yes	Yes	No	No	Yes	Yes
	Israel	Partially	Partially	Partially		Yes	Yes	Yes					
	Italy	No	Don't know	Don't know	Don't know	Yes	Don't know	Don't know	Don't know	Other	Other	Other	Other
	Liechtenstein												
	Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
	Malta	Partially	Partially	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Partially	
	Monaco												
	Netherlands	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Partially	Partially	Yes	Other
	Norway	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially
	Portugal	Partially	Partially	Partially	Partially	Yes	Yes	Yes	Yes	No	No		
	San Marino												
Spain	No	No	No	No	Yes	Yes	No	No	Other	Other	Other	Other	
Sweden	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Switzerland	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	
United Kingdom	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Centre	Albania	Don't know	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
	Bosnia & Herzegovina												
	Bulgaria	No	No	No	No	No	No	No	No	No	No	No	No
	Croatia	Partially	Partially	Yes	Partially	Partially	Partially	Yes	Yes	No	No	No	No
	Cyprus	No	No			Yes	Yes			Partially	Partially		
	Czechia	Partially	Partially	Partially	Partially	Yes	Yes	Yes	Yes	Partially	Partially	Partially	Partially
	Hungary		No				Yes				No		
	Kosovo												
	Montenegro		No	Yes	Yes		Yes	Yes	Yes		No	Yes	Yes
	North Macedonia	Partially	Partially	Yes	Yes	Yes	Partially	Yes	Yes				
	Poland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
	Romania	No	No	No	No	Yes	Yes	Yes	Yes	Partially	Partially	Partially	Partially
	Serbia												
	Slovakia	Partially	Partially	Partially	Partially	Yes	Yes	Yes	Yes				
	Slovenia	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially	Partially
Turkey													
East	Armenia												
	Azerbaijan												
	Belarus												
	Estonia	No				Yes				No			
	Georgia												
	Kazakhstan												
	Kyrgyzstan												
Latvia		No				Yes				Other			

WHO Region	Country	Out-migration				Deaths				Loss to follow-up			
		All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed
	Lithuania	Partially	Partially	Partially	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Moldova												
	Russia												
	Tajikistan												
	Turkmenistan												
	Ukraine												
	Uzbekistan												

Annex 4. Continuum of care for people living with HIV in Europe and Central Asia: number of people and global substantive targets reported in 2018 and 2020

WHO Region	Country	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed
West	Andorra		68	68											
	Austria	7079	6537	6145	5223	92%	87%	74%	7480	7029	6380	4821	94%	85%	64%
	Belgium	18758	15885	13763	12759	85%	73%	68%	18335	16594	15238	14299	91%	83%	78%
	Denmark	6000	5500	5300	5200	92%	88%	87%	6750	6150	5670	5550	91%	84%	82%
	Finland	3880	3401			88%			2924	2750	2503	2464	94%	86%	84%
	France	156600	132400	120700	116600	85%	77%	74%	172700	148746	133400	126800	86%	77%	73%
	Germany	86100	74800	68800	65500	87%	80%	76%	87900	77300	71400	68000	88%	81%	77%
	Greece	16665	13866	9594		83%	58%		15980	13345	10618		84%	66%	
	Iceland								296	291			98%		
	Ireland	7205	6276	5227	4986	87%	73%	69%	7200	6500	5700	5400	90%	79%	75%
	Israel	8039	7448	5087		93%	63%		8039	7448	5087		93%	63%	
	Italy	130000	114400	100000	87000	88%	77%	67%	130000	124500	117000	102000	96%	90%	78%
	Liechtenstein														
	Luxembourg	1081	919	812	751	85%	75%	69%	1176	1000	892	792	85%	76%	67%
	Malta	453	340	340	298	75%	75%	66%	453	340	340	298	75%	75%	66%
	Monaco	47	47	47	47	100%	100%	100%	48	48	48	48	100%	100%	100%
	Netherlands	22900	20264	18599	17580	88%	81%	77%	23300	21360	19913	19046	92%	85%	82%
	Norway								4455	4100	4020	3938	92%	90%	88%
	Portugal	38959	35709	31000	28007	92%	80%	72%	39820	36734	33163	30842	92%	83%	77%
	San Marino								71		71			100%	
	Spain	146000	120000	116408	103000	82%	80%	71%	151387	131774	128216	115907	87%	85%	77%
Sweden	8320	7489	7261	6930	90%	87%	83%	8971	8097	7943	7702	90%	89%	86%	
Switzerland	16600	15000	14400	13900	90%	87%	84%	16700	15500	15000	14800	93%	90%	89%	
United Kingdom	101400	91987	88089	85446	91%	87%	84%	103800	96142	93384	90583	93%	90%	87%	
Sub-total	747502	647553	596891	553227	87%	80%	74%	776020	697814	653687	606888	90%	84%	78%	
Centre	Albania	1300	891	568	312	69%	44%	24%	1400	1034	611	323	74%	44%	23%
	Bosnia & Herzegovina														
	Bulgaria	2862	2410	1198	689	84%	42%	24%	3100	3026	1445	1140	98%	47%	37%
	Croatia	1533	1077	919	822	70%	60%	54%	1648	1414	1263	1225	86%	77%	74%
	Cyprus								965	863			89%		
	Czechia	3230	2533	1800	1660	78%	56%	51%	3277	2782	2481	2383	85%	76%	73%
	Hungary									3615					

WHO Region	Country	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed	
	Kosovo				15						36					
	Montenegro	437	201	140	121	46%	32%	28%	368	243	181	170	66%	49%	46%	
	North Macedonia	383	246	198	191	64%	52%	50%	383	246	198	191	64%	52%	50%	
	Poland								15166	12385	10496	10052	82%	69%	66%	
	Romania	17000	15009	11570	8409	88%	68%	49%	18000	16486	12644	8064	92%	70%	45%	
	Serbia	2700	2441	1724		90%	64%		3200	2800	2100	1900	88%	66%	59%	
	Slovakia	995	756	540		76%	54%		1041	833	650	520	80%	62%	50%	
	Slovenia	987	670	533	530	68%	54%	54%	809	704	649	626	87%	80%	77%	
	Turkey															
	Sub-total	27732	23037	16926	12734	83%	61%	46%	28985	25935	19472	14122	89%	67%	49%	
East	Armenia	3400	2265	1530	1304	67%	45%	38%	3500	2700	2200	1900	75%	63%	54%	
	Azerbaijan	8003	5661	4207	1778	71%	53%	22%	9700	6800	5100	4100	70%	53%	42%	
	Belarus	26120	19231	11242	7253	74%	43%	28%	26000	22084	17714	13575	85%	68%	52%	
	Estonia	7900		4109			52%		6855		4482			65%		
	Georgia	10500	5090	4144	3383	48%	39%	32%	9300	5954	5098	4621	64%	55%	50%	
	Kazakhstan	26000	20841	11482	6338	80%	44%	24%	33427	25753	17535	14080	77%	52%	42%	
	Kyrgyzstan	8500	5805	3237	1995	68%	38%	23%	10129	6458	4058	3328	62%	40%	33%	
	Latvia									5836						
	Lithuania	2761	2601	780	609	94%	28%	22%	3397	2827	1223	920	83%	36%	27%	
	Moldova	15132	11887	5162	3324	79%	34%	22%	14589	9407	6690	5602	64%	46%	38%	
	Russia	998525	808823	319613	271671	81%	32%	27%	998525	808823	319613	271671	81%	32%	27%	
	Tajikistan	15000	7516	4942		50%	33%		13771	8756	7055	5152	63%	51%	37%	
	Turkmenistan															
	Ukraine	244000	136378	98237	57010	56%	40%	23%	251168	169787	136105	127871	68%	54%	51%	
	Uzbekistan		21364	20281	17530				49676	42556	28643		86%	58%		
Sub-total	1342941	1018582	459634	354665	76%	34%	26%	1359735	1060593	515336	447668	78%	38%	33%		
Total	2118175	1689172	1073451	920626	80%	51%	43%	2164740	1784342	1188495	1068678	82%	55%	49%		

* Sub-total and totals only include countries where all four stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

Annex 5. Continuum of care for MSM living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	Year	Number of MSMLHIV	Number of MSMLHIV who are diagnosed	Number of MSMLHIV who are receiving ART	Number of MSMLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of MSMLHIV who are diagnosed	% of diagnosed MSMLHIV who are on ART	% on ART who are virally suppressed	% of MSMLHIV who are diagnosed	% of MSMLHIV who are on ART	% of MSMLHIV who are virally suppressed
West	Andorra											
	Austria	2016	2920	2709	2546	2190	93%	94%	86%	93%	87%	75%
	Belgium											
	Denmark											
	Finland											
	France	2016 ³⁸	64900	55800	50500	48900	86%	91%	97%	86%	78%	75%
	Germany	2018	60000	52000	49000	44000	87%	94%	90%	87%	82%	73%
	Greece	2019	7606	6908	6257		91%	91%		91%	82%	
	Iceland	2018		103	102	99		99%	97%			
	Ireland											
	Israel											
	Italy											
	Liechtenstein											
	Luxembourg	2018 ³⁹	465	396	363	334	85%	92%	92%	85%	78%	72%
	Malta	2019			302							
	Monaco											
	Netherlands	2018	14200	13219	12587	12160	93%	95%	97%	93%	89%	86%
	Norway											
	Portugal	2018	9684	8987			93%			93%		
	San Marino											
Spain	2019 ⁴⁰	61292	51718	49856	46067	84%	96%	92%	84%	81%	75%	
Sweden	2017		2319	2291	2134		99%	93%				
Switzerland	2018	7500	6800	6580	6530	91%	97%	99%	91%	88%	87%	
United Kingdom	2018	49800	44575	43605	42733	90%	98%	98%	90%	88%	86%	
Centre	Albania											
	Bosnia & Herzegovina											
	Bulgaria	2018			613	510			83%			
	Croatia											
	Cyprus	2017	448	387			86%			86%		
Czechia	2019	2326	2044	1856	1796	88%	91%	97%	88%	80%	77%	

³⁸ Data for MSM diagnosed with HIV is from 2014.

³⁹ Data for MSM diagnosed with HIV is from 2017.

⁴⁰ Data for estimate of MSM living with HIV and MSM diagnosed with HIV is from 2017.

WHO Region	Country	Year	Number of MSMLHIV	Number of MSMLHIV who are diagnosed	Number of MSMLHIV who are receiving ART	Number of MSMLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of MSMLHIV who are diagnosed	% of diagnosed MSMLHIV who are on ART	% on ART who are virally suppressed	% of MSMLHIV who are diagnosed	% of MSMLHIV who are on ART	% of MSMLHIV who are virally suppressed
	Hungary	2019		2029								
	Kosovo											
	Montenegro											
	North Macedonia	2017 ⁴¹	321	162	141	134	50%	87%	95%	50%	44%	42%
	Poland	2017	6601	4851	4509	4400	73%	93%	98%	73%	68%	67%
	Romania	2018		1297	1167	1014		90%	87%			
	Serbia											
	Slovakia											
	Slovenia											
	Turkey											
East	Armenia											
	Azerbaijan											
	Belarus	2017		4621	1000	900		22%	90%		22%	19%
	Estonia											
	Georgia	2019		833	691	629		83%	91%			
	Kazakhstan	2019	3720	876	684	556	24%	78%	81%	24%	18%	15%
	Kyrgyzstan	2019	1121	210	139	111	19%	66%	80%	19%	12%	10%
	Latvia											
	Lithuania											
	Moldova	2019	442									
	Russia											
	Tajikistan	2019		59	48	36		81%	75%			
	Turkmenistan											
	Ukraine	2019	11248	3004	2342	2030	27%	78%	87%	27%	21%	18%
Uzbekistan												
Total			286414	238364	224708	211941	84%	93%	94%	83%	78%	74%

* Totals for numbers and 90-81-73 only include countries where all four stages of the continuum of care were reported. Totals for 90-90-90 targets include countries where the relevant two consecutive stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

⁴¹ Data for estimate of MSM living with HIV is from 2016.

Annex 6. Continuum of care for PWID living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	Year	Number of PWIDLHIV	Number of PWIDLHIV who are diagnosed	Number of PWIDLHIV who are receiving ART	Number of PWIDLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of PWIDLHIV who are diagnosed	% of diagnosed PWIDLHIV who are on ART	% on ART who are virally suppressed	% of PWIDLHIV who are diagnosed	% of PWIDLHIV who are on ART	% of PWIDLHIV who are virally suppressed
West	Andorra											
	Austria	2016	997	980	877	657	98%	89%	75%	98%	88%	66%
	Belgium											
	Denmark											
	Finland											
	France	2016	11900	11600	10500	10000	97%	91%	95%	97%	88%	84%
	Germany											
	Greece	2019		1766	1317			75%				
	Iceland	2018		49	46	42		94%	91%			
	Ireland											
	Israel											
	Italy											
	Liechtenstein											
	Luxembourg	2018	130	111	100	85	85%	90%	85%	85%	77%	65%
	Malta	2019			11							
	Monaco											
	Netherlands											
	Norway											
	Portugal	2018	9577	9443			99%			99%		
	San Marino											
Spain	2019 ⁴²	21282	20848	20556	18131	98%	99%	88%	98%	97%	85%	
Sweden	2017		397	373	336		94%	90%				
Switzerland	2018		997	975	957		98%	98%				
United Kingdom	2018	2300	1864	1784	1659	93%	96%	93%	81%	78%	72%	
Centre	Albania											
	Bosnia & Herzegovina											
	Bulgaria	2018		237	130	75		55%	58%			
	Croatia											
	Cyprus											
	Czech Republic	2019	96	79	63	56	82%	80%	89%	82%	66%	58%

⁴² Data for estimate of PWID living with HIV and PWID diagnosed with HIV is from 2017.

WHO Region	Country	Year	Number of PWIDLHIV	Number of PWIDLHIV who are diagnosed	Number of PWIDLHIV who are receiving ART	Number of PWIDLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of PWIDLHIV who are diagnosed	% of diagnosed PWIDLHIV who are on ART	% on ART who are virally suppressed	% of PWIDLHIV who are diagnosed	% of PWIDLHIV who are on ART	% of PWIDLHIV who are virally suppressed
	Hungary	2019		28								
	Kosovo											
	Montenegro											
	North Macedonia											
	Poland	2017	5528	5373	2555	2376	97%	48%	93%	97%	46%	43%
	Romania	2018	2034	1261	650	331	62%	52%	51%	62%	32%	16%
	Serbia											
	Slovakia											
	Slovenia											
	Turkey											
East	Armenia											
	Azerbaijan											
	Belarus	2017		10033	1185	9		12%	1%		12%	0.1%
	Estonia											
	Georgia	2019		1817	1490	1275		82%	86%			
	Kazakhstan	2019 ⁴³	11500	9873	6043	3771	86%	61%	62%	86%	53%	33%
	Kyrgyzstan	2019	2401	2118	1007	733	88%	48%	73%	88%	42%	31%
	Latvia											
	Lithuania											
	Moldova	2019	3270									
	Russia											
	Tajikistan	2019		2006	1206	800		60%	66%			
	Turkmenistan											
	Ukraine	2019	96486	42073	26994	20908	44%	64%	77%	44%	28%	22%
Uzbekistan												
Total			154670	106230	72314	58716	64%	68%	81%	69%	47%	38%

* Totals for numbers and 90-81-73 only include countries where all four stages of the continuum of care were reported. Totals for 90-90-90 targets include countries where the relevant two consecutive stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

⁴³ Data for estimate of PWID living with HIV is from 2018.

Annex 7. Continuum of care for migrants living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	Year	Number of MLHIV	Number of MLHIV who are diagnosed	Number of MLHIV who are receiving ART	Number of MLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of MLHIV who are diagnosed	% of diagnosed MLHIV who are on ART	% on ART who are virally suppressed	% of MLHIV who are diagnosed	% of MLHIV who are on ART	% of MLHIV who are virally suppressed
West	Andorra											
	Austria	2016	2744	2376	2186	1792	87%	92%	82%	87%	80%	65%
	Belgium											
	Denmark											
	Finland	2017	1632	1364			84%			84%		
	France											
	Germany	2017		13000								
	Greece	2019	4932	2863	1753		58%	61%		58%	36%	
	Iceland	2018		117	115	110		98%	96%			
	Ireland											
	Israel	2016	4147	5413			73%			73%		
	Italy											
	Liechtenstein											
	Luxembourg	2018	843	717	638	554	85%	89%	87%	85%	76%	66%
	Malta	2019			147							
	Monaco											
	Netherlands											
	Norway											
	Portugal	2017	9439	8421			89%			89%		
	San Marino											
Spain												
Sweden	2017		4692	4510	4175		96%	93%				
Switzerland	2018		2212	2117	2068		96%	98%				
United Kingdom	2017	27100	25548	24015	19728	94%	94%	97%	94%	89%	73%	
Centre	Albania											
	Bosnia & Herzegovina											
	Bulgaria											
	Croatia											
	Cyprus											
	Czechia	2019	793	630	535	511	79%	85%	96%	79%	67%	64%
	Hungary											
	Kosovo											
	Montenegro											

WHO Region	Country	Year	Number of MLHIV	Number of MLHIV who are diagnosed	Number of MLHIV who are receiving ART	Number of MLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of MLHIV who are diagnosed	% of diagnosed MLHIV who are on ART	% on ART who are virally suppressed	% of MLHIV who are diagnosed	% of MLHIV who are on ART	% of MLHIV who are virally suppressed
	North Macedonia											
	Poland											
	Romania											
	Serbia											
	Slovakia	2017		20	15			75%				
	Slovenia											
	Turkey											
East	Armenia											
	Azerbaijan											
	Belarus											
	Estonia											
	Georgia											
	Kazakhstan											
	Kyrgyzstan											
	Latvia											
	Lithuania											
	Moldova											
	Russia											
	Tajikistan											
	Turkmenistan											
	Ukraine											
Uzbekistan												
	Total		31480	29271	27374	22585	86%	92%	85%	93%	87%	72%

* Totals for numbers and 90-81-73 only include countries where all four stages of the continuum of care were reported. Totals for 90-90-90 targets include countries where the relevant two consecutive stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

Annex 8. Continuum of care for sex workers living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	Year	Number of SWLHIV	Number of SWLHIV who are diagnosed	Number of SWLHIV who are receiving ART	Number of SWLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of SWLHIV who are diagnosed	% of diagnosed SWLHIV who are on ART	% on ART who are virally suppressed	% of SWLHIV who are diagnosed	% of SWLHIV who are on ART	% of SWLHIV who are virally suppressed
West	Andorra											
	Austria											
	Belgium											
	Denmark											
	Finland											
	France											
	Germany											
	Greece											
	Iceland											
	Ireland											
	Israel											
	Italy											
	Liechtenstein											
	Luxembourg	2018	16	14	13	11	88%	93%	85%	88%	81%	69%
	Malta											
	Monaco											
	Netherlands											
	Norway											
	Portugal											
	San Marino											
Spain												
Sweden												
Switzerland												
United Kingdom												
Centre	Albania											
	Bosnia & Herzegovina											
	Bulgaria											
	Croatia											
	Cyprus											
	Czechia											
	Hungary											
	Kosovo											
	Montenegro											
	North Macedonia											

WHO Region	Country	Year	Number of SWLHIV	Number of SWLHIV who are diagnosed	Number of SWLHIV who are receiving ART	Number of SWLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of SWLHIV who are diagnosed	% of diagnosed SWLHIV who are on ART	% on ART who are virally suppressed	% of SWLHIV who are diagnosed	% of SWLHIV who are on ART	% of SWLHIV who are virally suppressed
	Poland											
	Romania											
	Serbia											
	Slovakia											
	Slovenia											
	Turkey											
East	Armenia											
	Azerbaijan											
	Belarus	2017		2234	200	150		9%	75%			
	Estonia											
	Georgia											
	Kazakhstan	2019	350	336	161	99	96%	48%	61%	96%	46%	28%
	Kyrgyzstan	2019	196	86	43	28	44%	50%	65%	44%	22%	14%
	Latvia											
	Lithuania											
	Moldova	2019	364									
	Russia											
	Tajikistan	2019		163	137	85		84%	62%			
	Turkmenistan											
	Ukraine	2019	9338									
Uzbekistan												
Total			562	436	217	138	78%	20%	67%	78%	39%	25%

* Totals for numbers and 90-81-73 only include countries where all four stages of the continuum of care were reported. Totals for 90-90-90 targets include countries where the relevant two consecutive stages of the continuum of care were reported.

Colour coding: green indicates that the target has been met or exceeded, amber that the country is within 10% of meeting the target and red that the target is not met.

Annex 9. Continuum of care for prisoners living with HIV in Europe and Central Asia: number of people and targets reported, 2020

WHO Region	Country	Year	Number of PLHIV	Number of PLHIV who are diagnosed	Number of PLHIV who are receiving ART	Number of PLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of PLHIV who are diagnosed	% of diagnosed PLHIV who are on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed
West	Andorra											
	Austria											
	Belgium											
	Denmark											
	Finland											
	France											
	Germany											
	Greece											
	Iceland											
	Ireland											
	Israel											
	Italy											
	Liechtenstein											
	Luxembourg	2018 ⁴⁴	31	27	22	22	87%	81%	100%	87%	71%	71%
	Malta											
	Monaco											
	Netherlands											
	Norway											
	Portugal											
	San Marino											
Spain												
Sweden												
Switzerland												
United Kingdom												
Centre	Albania											
	Bosnia & Herzegovina											
	Bulgaria	2018		63	58			92%				
	Croatia											
	Cyprus											
	Czechia											
	Hungary											

⁴⁴ Data on prisoners diagnosed with HIV is from 2017.

WHO Region	Country	Year	Number of PLHIV	Number of PLHIV who are diagnosed	Number of PLHIV who are receiving ART	Number of PLHIV who are virally suppressed	90-90-90 targets			90-81-73 targets		
							% of PLHIV who are diagnosed	% of diagnosed PLHIV who are on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV who are virally suppressed
	Kosovo											
	Montenegro											
	North Macedonia											
	Poland											
	Romania	2018 ⁴⁵	617	495	390	40	80%	79%	10%	80%	63%	6%
	Serbia											
	Slovakia											
	Slovenia											
	Turkey											
East	Armenia											
	Azerbaijan	2019		417	383			92%				
	Belarus	2017	1800	1800	1008	800	100%	56%	79%	100%	56%	44%
	Estonia											
	Georgia	2019		98	97			99%				
	Kazakhstan	2019	1096	1096	935	579	100%	85%	62%	100%	85%	53%
	Kyrgyzstan	2019		186	174	101		94%	58%			
	Latvia											
	Lithuania	2017	300	298	92	78	99%	31%	85%	99%	31%	26%
	Moldova	2019		326	284			87%				
	Russia											
	Tajikistan	2019		156	152	90		97%	59%			
	Turkmenistan											
Ukraine	2019	3824	3824	3343		100%	87%		100%	87%		
Uzbekistan												
Total			3844	3716	2447	1519	98%	79%	62%	97%	64%	40%

⁴⁵ Data for estimate of prisoners living with HIV is from 2017.

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