

**SPECIAL** REPORT



# HIV Continuum of care

Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2021 progress report

**ECDC SPECIAL REPORT**

## **Continuum of HIV care**

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

This report is one in a series of thematic reports based on information submitted by reporting countries in 2021 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>.

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<sup>1</sup> 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.

# Contents

Abbreviations .....	v
Executive summary .....	1
2021 at a glance .....	2
Introduction .....	3
Methods .....	5
Results .....	7
Data availability .....	7
Data sources .....	8
Accounting for out-migration, deaths, and loss to follow up .....	9
Continuum of HIV care .....	10
Stage 1. Estimated number of people living with HIV .....	10
Stage 2. Number of people living with diagnosed HIV .....	11
Stage 3. Number of people diagnosed who are on treatment .....	12
Stage 4. Viral suppression among people living with HIV on treatment .....	13
Viral suppression among all people living with HIV .....	14
Progress over time .....	15
Key populations .....	18
Men who have sex with men (MSM) .....	18
People who inject drugs (PWID) .....	20
Migrants .....	22
Sex workers .....	24
Prisoners .....	26
The estimated number of people with transmissible levels of HIV virus .....	29
Concluding remarks and priorities for action .....	30
Reporting of data .....	30
Overall progress in the continuum of care .....	30
Key populations .....	31
Transmissible levels of virus .....	31
Limitations .....	32
Conclusion .....	32
References .....	33
Annexes .....	34

# Figures

Figure 1. Pictorial demonstration of the UNAIDS 90-90-90 .....	3
Figure 2. Continuum of HIV care as envisaged by the 90-90-90 UNAIDS targets by 2020 .....	4
Figure 3. Geographical/epidemiological division of the WHO European Region .....	4
Figure 4. Data availability for different stages of the HIV continuum of care in Europe and Central Asia in reporting years 2016, 2018, 2020 and 2021 .....	7
Figure 5. Percentage of all PLHIV who know their status in 47 countries of Europe and Central Asia, reported by 2021 .....	12
Figure 6. Percentage of all people living with diagnosed HIV who are on treatment in 46 countries of Europe and Central Asia, reported by 2021 .....	13
Figure 7. Percentage of people on treatment reaching viral suppression in 40 countries of Europe and Central Asia, reported by 2021 .....	14
Figure 8. Percentage of all PLHIV who know their status, are on treatment and are virally suppressed in 40 countries across Europe and Central Asia, reported by 2021 .....	15
Figure 9. Number of countries which have met or exceeded global targets in Europe and Central Asia, reported by 2018, 2020 and 2021 .....	16
Figure 10. Continuum of HIV care (substantive), overall and by WHO sub-region, comparison between data reported by 2018, 2020 and 2021 .....	17
Figure 11. Number of countries reporting data for different stages of the HIV continuum of care for MSM, Europe and Central Asia, reported by 2018, 2020 2021 .....	18
Figure 12. 90-90-90 and overall viral suppression among MSM living with HIV in European and Central Asian countries, reported by 2021 .....	19
Figure 13. Comparison of the continuum of HIV care for MSM against the national continuum of all people living with HIV, Europe and Central Asia, reported by 2021 .....	20
Figure 14. Number of countries reporting data for different stages of the HIV continuum of care for PWID, Europe and Central Asia, reported by 2018, 2020 and 2021 .....	20

Figure 15. 90-90-90 and overall viral suppression among PWID living with HIV in European and Central Asian countries, reported by 2021 .....	21
Figure 16. Comparison of the continuum of HIV care for PWID against the national continuum for all PLHIV, Europe and Central Asia, reported by 2021.....	22
Figure 17. Number of countries reporting data for different stages of the HIV continuum of care for migrants, Europe and Central Asia, reported by 2018, 2020 and 2021 .....	22
Figure 18. 90-90-90 and overall viral suppression among migrants living with HIV in European and Central Asian countries, reported by 2021 .....	23
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 by 2021 .....	24
Figure 20. Number of countries reporting data for different stages of the HIV continuum of care for sex workers, Europe and Central Asia, reported by 2018, 2020 and 2021 .....	24
Figure 21. 90-90-90 and overall viral suppression among sex workers living with HIV in European and Central Asian countries, reported by 2021 .....	25
Figure 22. Comparison of the continuum of HIV care for sex workers against the national continuum for all PLHIV, Europe and Central Asia (excluding Belarus), reported by 2021 .....	26
Figure 23. Number of countries reporting data for different stages of the HIV continuum of care for prisoners, Europe and Central Asia, reported by 2018, 2020 and 2021 .....	26
Figure 24. 90-90-90 and overall viral suppression among prisoners living with HIV in European and Central Asian countries, reported by 2021 .....	27
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 by 2021 .....	28
Figure 26. Distribution of people with transmissible levels of virus, by WHO sub-region, and Europe and Central Asia overall, reported by 2021.....	29

## Tables

Table 1. Consensus definitions for monitoring the continuum of HIV care during Dublin Declaration monitoring 2020 ...	5
Table 2. Number of countries reporting data on all four stages of the continuum of care in reporting years 2016, 2018, 2020 and 2021 .....	8
Table 3. Data sources for the estimated number of PLHIV in Europe and Central Asia, reported in 2021.....	8
Table 4. Exclusion of out-migration, deaths and loss to follow up of PLHIV from continuum data, Europe and Central Asia, reported in 2021 .....	9
Table 5. Estimated number of PLHIV: countries in the West, Centre and East sub-regions, reported by 2021 .....	10
Table 6. Number and percentage of PLHIV with diagnosed and undiagnosed HIV infection in 47 countries in Europe and Central Asia, reported by 2021.....	11
Table 7. Number and percentage of PLHIV who are on treatment in 46 countries in Europe and Central Asia, reported by 2021 .....	12
Table 8. Number and percentage of people in treatment who are virally suppressed in 40 countries across Europe and Central Asia, reported by 2021.....	13
Table 9. Number and percentage of PLHIV who are virally suppressed in 40 countries of Europe and Central Asia, reported by 2021 .....	15

## 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

- By 2021, 48 of 55 countries in Europe and Central Asia provided data on at least one stage of the continuum of HIV care (compared to 40 countries in 2018). A total of 47 countries were able to provide data for at least two consecutive stages of the continuum (compared to 45 in 2020) and 40 countries provided data on all four stages.
- By 2021, the overall performance of the European and Central Asian region against the global 90-90-90 targets was 82% of all PLHIV diagnosed, 85% of those diagnosed with HIV on treatment and 92% of those on treatment who are virally suppressed. Overall, 64% of all people living with HIV are virally suppressed, which falls short of the target of 73% of all PLHIV being virally suppressed.
- Substantial variation exists for each element of the continuum, both between and within European and Central Asian sub-regions. Overall, the West sub-region met all of the global 90-90-90 targets, with 90% of all PLHIV diagnosed, 95% of people living with diagnosed HIV on treatment, and 93% of those on treatment virally suppressed. The equivalent figures for the Centre sub-region were 85%, 77% and 64% and for the East sub-region 77%, 78%, and 93% respectively. At 79%, the West sub-region met the global substantive target of having 73% of all PLHIV virally suppressed, while the Centre and East sub-regions still have a great deal of progress to make, with all PLHIV virally suppressed at 42% and 56% respectively. Each sub-region showed improvement in the outcomes for the continuum of care in 2020 compared to 2018. Among countries that reported all four stages of the continuum for all years, the proportion of all PLHIV who are virally suppressed increased from 23% by 2018 to 33% by 2020, and to 56% by 2021 among the countries able to report data for all 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 40 countries that provided for all four stages of the continuum, by 2021 this was estimated to be 821 069 PLHIV in those reporting countries, or the equivalent of 36% of all PLHIV.
- The EU/EEA as a whole achieved two of the three 90-90-90 targets by 2020 (88% of people living with HIV were diagnosed, 93% diagnosed started treatment and 91% of those on treatment were virally suppressed).
- Of the people living with transmissible levels of virus in 2021, 51% were estimated to be undiagnosed, 35% were estimated to be diagnosed but untreated and 14% were estimated to be on treatment but have an unsuppressed viral load. This indicates that an equivalent impact in reducing the number of people with transmissible levels of virus could be achieved through rapid and sustained scale-up of treatment and care, as could be achieved by continuing efforts to reduce the undiagnosed population through testing.
- An increasing number of countries can provide population-level data. While outcomes for MSM and migrants are broadly in line with national outcomes for all PLHIV (including only like-for-like countries), outcomes for people who inject drugs and sex workers were lower on average when compared to the overall national picture.

## 2021 at a glance<sup>2</sup>

Region or sub-region	Status (number of reporting countries)	2020 target	2021 result	Global target met?
European and Central Asian Region	Diagnosed (n=47)	90%	82%	Within 10% of meeting target
	On antiretroviral therapy (ART) (n=47)	90%	85%	Within 10% of meeting target
	Virally suppressed (n=47)	90%	92%	Met or exceeded target
	Viral suppression of all PLHIV (n=40)	73%	64%	Within 10% of meeting target
West sub-region	Diagnosed (n=21)	90%	90%	Met or exceeded target
	On ART (n=21)	90%	95%	Met or exceeded target
	Virally suppressed (n=21)	90%	93%	Met or exceeded target
	Viral suppression of all PLHIV (n=19)	73%	79%	Met or exceeded target
Centre sub-region	Diagnosed (n=12)	90%	85%	Within 10% of meeting target
	On ART (n=13)	90%	77%	More than 10% of meeting target
	Virally suppressed (n=13)	90%	64%	More than 10% of meeting target
	Viral suppression of all PLHIV (n=9)	73%	42%	More than 10% of meeting target
East sub-region	Diagnosed (n=12)	90%	77%	More than 10% of meeting target
	On ART (n=12)	90%	78%	More than 10% of meeting target
	Virally suppressed (n=12)	90%	93%	Met or exceeded target
	Viral suppression of all PLHIV (n=11)	73%	56%	More than 10% of meeting target
EU/EEA	Diagnosed (n=28)	90%	88%	Within 10% of meeting target
	On antiretroviral therapy (ART) (n=28)	90%	93%	Met or exceeded target
	Virally suppressed (n=22)	90%	91%	Met or exceeded target
	Viral suppression of all PLHIV (n=22)	73%	76%	Met or exceeded target

■ Met or exceeded target
 ■ Within 10% of meeting target
 ■ More than 10% of meeting target

<sup>2</sup> 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 being 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 have achieved viral suppression<sup>3</sup> (Figure 1). This translates to a target of 73% viral suppression among all people living with HIV (PLHIV). UNAIDS' modelling suggested that achieving these targets by 2020 would enable the world to meet the Sustainable Development Goal of eliminating the AIDS epidemic by 2030 (SDG 3).

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 2021 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 of 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.

The data relates to 2020, during the COVID-19 pandemic, which has affected the data and analysis in two ways. Firstly, patient access to HIV testing services, care and treatment may have been reduced compared to previous years due to lockdown restrictions and people self-isolating. Secondly, many public health authority staff across the region were transferred to COVID-19 duties which reduced capacity to collate and report data.

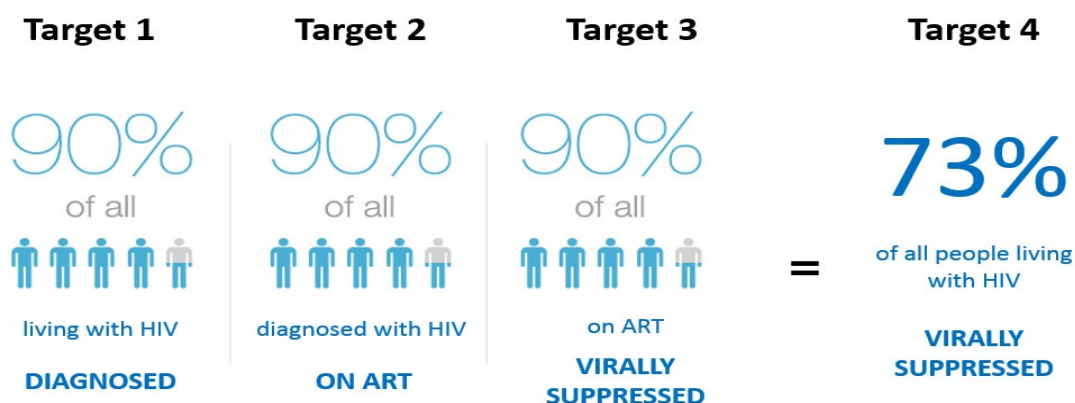
This report shows that Europe and Central Asia did not meet the 90-90-90 goals by 2021. While the West sub-region has met the 90-90-90 targets, and improvement has been made - particularly in the East sub-region - the region is still a long way from achieving these goals. Despite the enormous upheaval created by the COVID-19 pandemic, it is vital that progress on the HIV response is sustained and increased through renewed commitment to achieving SDG 3.

### Definition of continuum

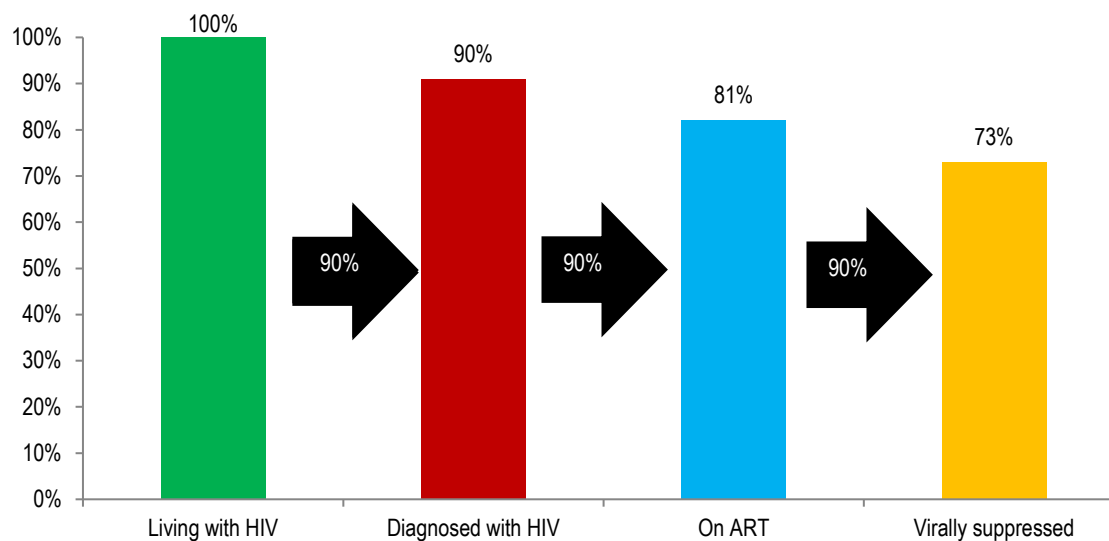
**Global 90-90-90 target:** each stage of the continuum is presented as a percentage of the previous stage of the continuum – target 90%-90%-90%.

**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%.

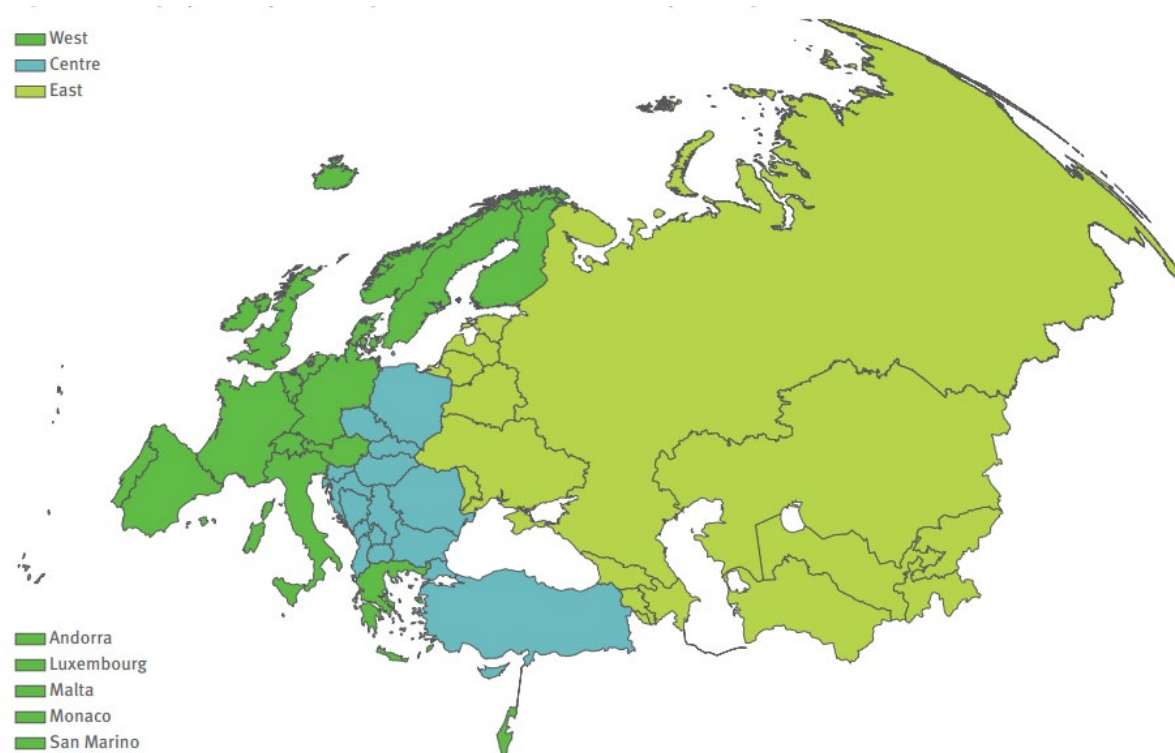
**Figure 1. Pictorial demonstration of the UNAIDS 90-90-90**



<sup>3</sup> 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**

As well as considering the picture for the overall European and Central Asian region, data are presented by WHO sub-region (West, Centre, and East), broadly grouping areas of Europe and Central Asia by geography and epidemic type, as depicted in Figure 3.

**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, Kosovo, 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.

## Methods

Between February and September 2021, a European Centre for Disease Prevention and Control (ECDC) questionnaire was used to collect data to monitor implementation of the 2004 Dublin Declaration<sup>4</sup>. 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. They were also asked if they could provide information for the following populations: men who have sex with men (MSM), people who inject drugs (PWID), migrants (defined as persons born abroad), prisoners and sex workers, and any other group countries identified 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<sup>5</sup>. The definitions for each of the four stages are provided in Table 1<sup>6</sup>.

**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](#)<sup>7</sup>, Spectrum 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, irrespective 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 initiated antiretroviral treatment) who had VL ≤200 copies/ml at last visit (virally suppressed)<sup>8</sup>

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

Absolute numerical values were collected, and countries were 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 2021 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 fill out 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.

<sup>4</sup> 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>

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

<sup>6</sup> Countries were asked to report data using these definitions, however, in practice some countries may use slightly different definitions, therefore caution is required when drawing comparisons between countries.

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

<sup>8</sup> 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](http://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](http://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-care-continuum.pdf)

Countries were initially asked to complete the Dublin Declaration survey between mid-February and the end of June 2021, and several late submissions were made up until October 2021 due to the disruption of the COVID-19 pandemic. Between July and August 2021, the values reported by each country that had submitted data by this time were checked and returned for validation. Late data was validated as it was submitted. 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, 2019 and 2020 was included in this analysis.

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).

Four main analyses were conducted: 1) analysis against the global 90-90-90 targets; 2) analysis of progress between 2018 and 2021 against the global substantive targets; 3) analysis of the continuum of care for key populations and comparison against national outcomes in like for like countries and 4) 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, only included data 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 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

Finally, 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 in order to provide an estimated total number of people living with transmissible virus for each country. This estimate was only calculated for countries that reported all four stages of the continuum of care.

# Results

## Data availability

In the reporting year 2021, responses (full and partial) were submitted from 51 of the 55 European and Central Asian countries to ECDC and UNAIDS, with 48 of these countries providing at least one stage of the continuum. For each stage and country, data were taken from the most recent year available according to country reports (excluding countries who only provided data from 2016). Full information is provided in Annex 2, however, it should be noted that, where reported, the national continuum of care relates to the year 2020 for 22 countries, to 2019 for ten countries and to 2018 for three countries. Data were taken from multiple reporting years for 13 countries.

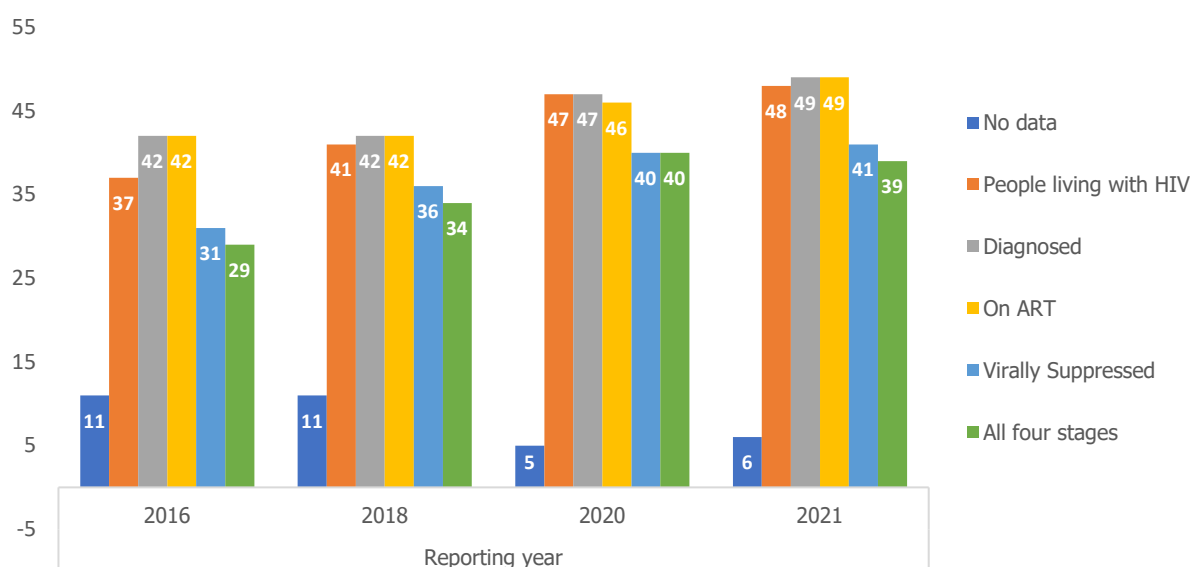
Overall, for the reporting year 2021, 48 countries provided data for at least one stage of the continuum and 47 countries provided at least two consecutive stages of the national continuum of care. A total of 40 (73%) countries provided data for all four stages of the continuum in 2021 (Table 2), the same as in reporting year 2020. By way of comparison, the number of countries providing data for all four stages was 34 (62%) in 2018 and 29 in 2016.

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

In the reporting year 2021, no data was available for any stage of the continuum of care for six countries: Andorra, Kosovo, Liechtenstein, San Marino, Turkey and Turkmenistan.

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

**Figure 4. Data availability for different stages of the HIV continuum of care in Europe and Central Asia in reporting years 2016, 2018, 2020 and 2021**



**Table 2. Number of countries reporting data on all four stages of the continuum of care in reporting years 2016, 2018, 2020 and 2021**

<b>39</b> 2021	<p><b>19 West</b> Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Monaco, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom.</p> <p><b>9 Centre</b> Albania, Bulgaria, Croatia, Czechia, Montenegro, North Macedonia, Romania, Slovakia and Slovenia.</p> <p><b>12 East</b> Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan.</p>
<b>40</b> 2020	<p><b>18 West</b> Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.</p> <p><b>11 Centre</b> Albania, Bulgaria, Croatia, Czechia, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia and Slovenia.</p> <p><b>11 East</b> Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Tajikistan and Ukraine.</p>
<b>34</b> 2018	<p><b>16 West</b> Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Malta, Monaco, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom.</p> <p><b>8 Centre</b> Albania, Bulgaria, Croatia, Czechia, Montenegro, North Macedonia, Romania and Slovenia.</p> <p><b>10 East</b> Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia and Ukraine.</p>
<b>29</b> 2016	<p><b>15 West</b> Austria, Belgium, Denmark, France, Germany, Greece, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom.</p> <p><b>7 Centre</b> Albania, Bulgaria, Croatia, Hungary, Romania, Montenegro and Serbia.</p> <p><b>7 East</b> Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova and Tajikistan.</p>

## Data sources

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

In the reporting year 2021, 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, 23% (11) used the ECDC modelling tool and 40% (19) used country-specific or bespoke methods (Table 3).

There were variations across the WHO European 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 2021**

Data source	Number of countries (n=47)	Countries (West, Centre, East)	Year of reported data (Number of countries)
Spectrum estimate	17 (36%)	<p><b>West:</b> Ireland, Italy.</p> <p><b>Centre:</b> Albania, Bulgaria, Montenegro, North Macedonia, Romania, Serbia.</p> <p><b>East:</b> Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Russia, Tajikistan, Uzbekistan.</p>	2018 (2); 2019 (2), 2020(11) missing information (2)
ECDC HIV modelling tool	11 (23%)	<p><b>West:</b> Austria, Finland, Greece, Malta, the Netherlands, Portugal.</p> <p><b>Centre:</b> Cyprus, Czechia, Poland, Slovakia, Slovenia.</p>	2017 (2) 2019 (3), 2020 (6)
Other modelling tool or estimate	19 (40%)	<p><b>West:</b> Belgium, Denmark, France, Germany, Iceland, Israel, Luxembourg, Monaco, Norway, San Marino, Spain, Sweden, Switzerland, United Kingdom.</p> <p><b>Centre:</b> Croatia.</p> <p><b>East:</b> Belarus, Estonia, Georgia, Ukraine.</p>	2016 (1); 2017 (3); 2018 (1); 2019 (6); 2020 (8)

Annex 2 provides an overview of the different data sources used for each stage of the continuum. In general, countries use cohort or surveillance data, with some countries reporting 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 patient outcomes 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 there is the potential for surveillance data to be 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.

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

When calculating each of the stages of the continuum, the ability to account for out-migration, deaths and loss to follow-up 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 diagnosed. This may result in a lower proportion of people estimated to be on treatment and potentially virally suppressed.

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 2021<sup>9</sup>**

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

\*These countries are able to report all four stages of the continuum.

<sup>9</sup> Latest available data reported by countries in 2021. See Annex 2 for information on which year reported data relate 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 2 343 885 people are living with HIV (Table 5). Of the eight countries that did not provide estimates on the number of PLHIV, two countries<sup>10</sup> lacked empirical estimates and six countries<sup>11</sup> did not participate in Dublin Declaration/GAM reporting in 2021.

**Table 5. Estimated number of people living with HIV: countries in the West, Centre and East sub-regions, reported in 2021<sup>12</sup>**

West WHO sub-region		Centre WHO sub-region		East WHO sub-region	
Countries	PLHIV	Countries	PLHIV	Countries	PLHIV
Austria	7 655	Albania	1 433	Armenia	4 771
Belgium	19 090	Bulgaria	3 690	Azerbaijan	9 937
Denmark	6 700	Croatia	1 700	Belarus	28 315
Finland	3 265	Cyprus	1 293	Estonia	6 855
France	178 700	Czechia	3 503	Georgia	8 358
Germany	90 700	Hungary	7 205	Kazakhstan	35 201
Greece	16 743	Montenegro	392	Kyrgyzstan	9 222
Iceland	296	North Macedonia	404	Lithuania	3 558
Ireland	7 200	Poland	18 923	Moldova	14 474
Israel	8 039	Romania	19 415	Russia	1 000 000
Italy	137 000	Serbia	3 341	Tajikistan	14 246
Luxembourg	1 315	Slovakia	1 041	Ukraine	257 548
Malta	740	Slovenia	806	Uzbekistan	57 555
Monaco	48				
Netherlands	23 700				
Norway	4 455				
Portugal	41 889				
Spain	151 387				
Sweden	8 971				
Switzerland	17 100				
United Kingdom	105 248				

<sup>10</sup> Bosnia and Latvia

<sup>11</sup> Andorra, Kosovo, Liechtenstein, San Marino, Turkey and Turkmenistan

<sup>12</sup> Latest available data reported by countries in 2021. See Annex 2 for information on which year reported data relate to.



## Stage 2. Number of people living with diagnosed HIV

In the 47 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 2 343 427 people are living with HIV, 1 911 489 of whom (82%; range 50–100%) have been diagnosed (Table 6). This is equivalent to approximately one in five (18%; range 0–50%) 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 the countries of the East sub-region and lowest in those of the West sub-region. These data differ to the overall results presented in the '2021 at a glance' table since the results in the table only include data where all four stages are reported.

In the 21 West sub-region countries with data for both stages, an estimated 830 241 people are living with HIV, 743 836 whom have been diagnosed (89%; range 75–100%). This means that one in ten PLHIV (11%; range 0–25%) in these countries have an undiagnosed HIV infection.

In the 13 Centre sub-region countries with data for both stages, an estimated 63 146 people are living with HIV, 50 726 of whom have been diagnosed (80%; range 50–91%). This means approximately one in six people living with HIV (20%; 9–50%) in these countries have an undiagnosed HIV infection.

In the 13 East sub-region countries with data for both stages, an estimated 1 450 040 people are living with HIV, 1 116 927 of whom have been diagnosed (77%; range 66–87%). This means that approximately one in five PLHIV (23%; range 13–34%) in these countries have undiagnosed HIV infection.

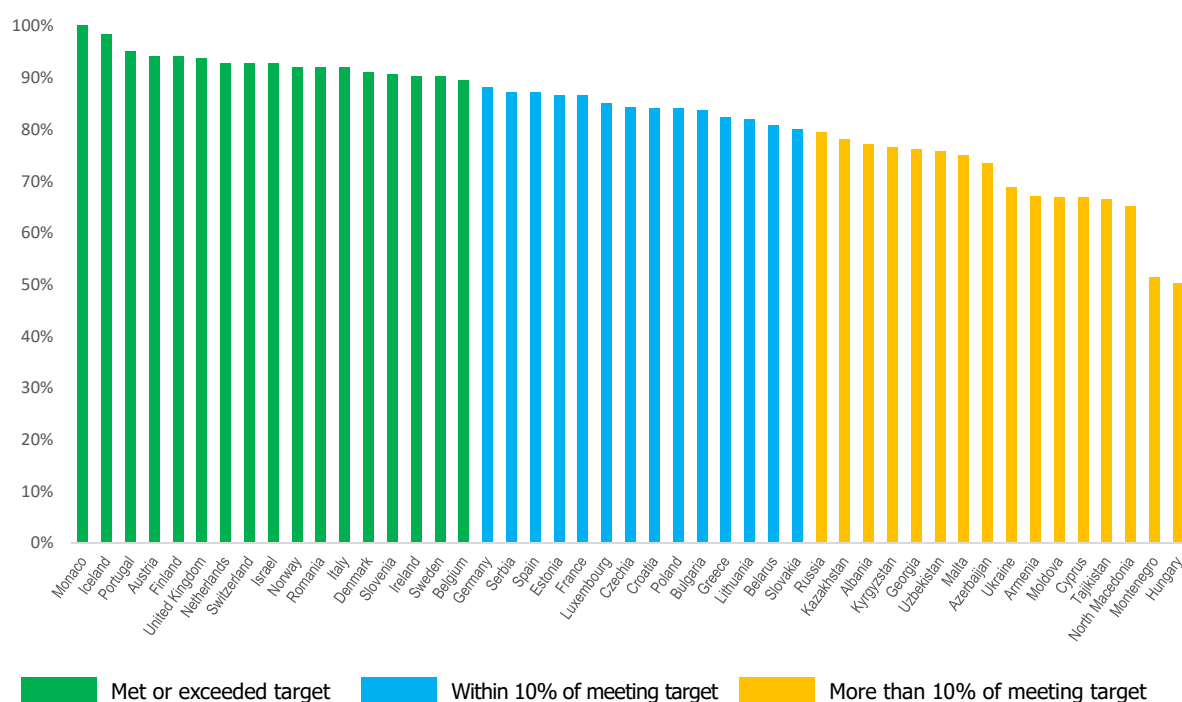
**Table 6. Number and percentage of people living with HIV with diagnosed and undiagnosed HIV infection in 47 countries in Europe and Central Asia, reported in 2021<sup>13</sup>**

Countries	Estimated number of PLHIV	Number of PLHIV diagnosed	% of PLHIV diagnosed (range)	% of PLHIV undiagnosed (range)
West (n=21)	830 241	743 836	89%	11%
Centre (n=13)	63 146	50 726	80%	20%
East (n=13)	1 450 040	1 116 927	77%	23%
<b>All countries (n=47)</b>	<b>2 343 427</b>	<b>1 911 489</b>	<b>82%</b>	<b>18%</b>

A total of 16 of the 47 countries (Austria, Belgium, Denmark, Finland, Iceland, Ireland, Israel, Italy, Monaco, Norway, the Netherlands, Portugal, Slovenia, 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 31 countries, 15 are within 10% of meeting the target, reporting that 80% or more (range 81–89%) of PLHIV know their status (five West; seven Centre; three East), and 16 countries are more than 10% away from reaching the target, reporting that fewer than 80% (range 50–79%) of PLHIV know their status (one West; five Centre; ten East).

<sup>13</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

**Figure 5. Percentage of all people living with HIV who know their status in 47 countries of Europe and Central Asia, reported in 2021<sup>14</sup>**

### Stage 3. Number of people diagnosed who are on treatment

In the 46 countries that reported data for both stage 2 and stage 3 within Europe and Central Asia, an estimated 1 911 489 PLHIV have been diagnosed, 1 616 099 (85%; range 43–100%) of whom were reported to be on treatment (Table 7). Based on available data, around one in four people (15%; range 0–57%) with diagnosed HIV infection in Europe and Central Asia are therefore currently not receiving antiretroviral therapy (ART). These data differ to the overall results presented in the '2021 at a glance' table since the results in the table only include data where all four stages are reported.

In the 21 West sub-region countries that reported data for both stage 2 and stage 3, an estimated 743 836 PLHIV have been diagnosed, 704 387 (95%; range 57–100%) of whom were reported to be on treatment. This means that around one in 20 PLHIV diagnosed in these countries are not benefitting from HIV treatment.

In the 12 Centre sub-region countries that reported data for both stages (Hungary was excluded due to inconsistent information), an estimated 50 726 people living with HIV have been diagnosed, 42 463 (84%; range 57–98%) of whom were reported to be on treatment. This means that one in five people living with HIV (22%; range 2–43%) who have been diagnosed in these countries are not benefitting from HIV treatment.

In the 13 East sub-region countries that reported data for both stages, an estimated 1 116 927 people living with HIV have been diagnosed, 869 856 (78%; range 43–83%) of whom were reported to be on treatment. This means that one in five PLHIV (22%; range 7–57%) 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 in 46 countries in Europe and Central Asia, reported in 2021<sup>15</sup>**

Countries	Number of PLHIV diagnosed	Number of PLHIV diagnosed on ART (range)	% of PLHIV diagnosed on ART (range)	% of PLHIV diagnosed currently <b>not</b> on ART (range)
West (n=21)	743 836	704 387	95%	5%
Centre (n=12)	50 726	42 463	84%	16%
East (n=13)	1 116 927	869 856	78%	22%
<b>All countries (n=47)</b>	<b>1 911 489</b>	<b>1 616 099</b>	<b>85%</b>	<b>15%</b>

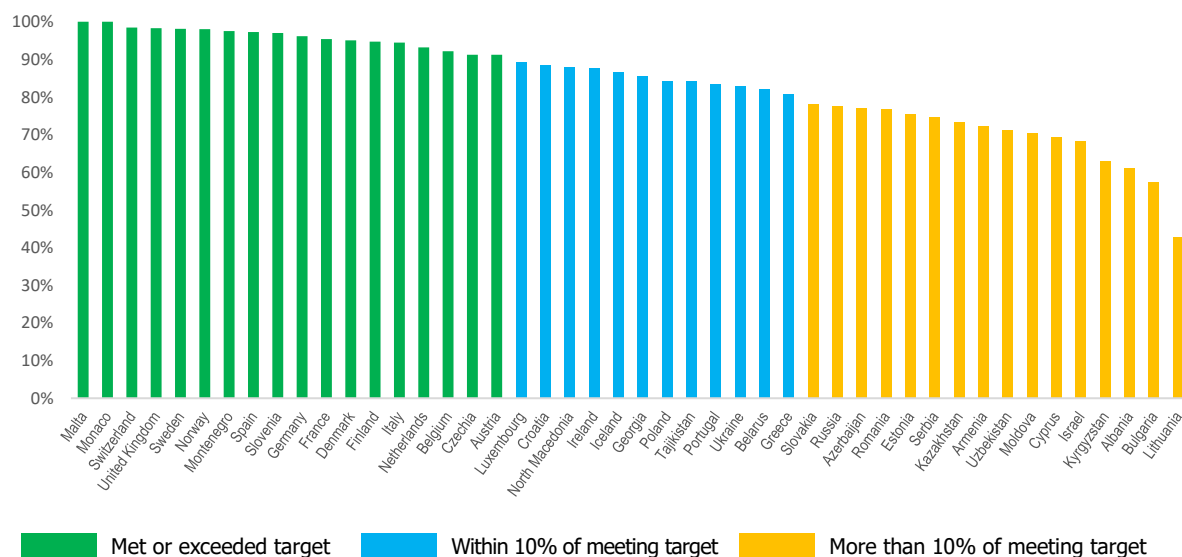
<sup>14</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

<sup>15</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

In total, 18 of the 46 countries (Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Italy, Malta, Monaco, Montenegro, the Netherlands, Norway, Spain, Slovenia, 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). Hungary was excluded for inconsistent information.

Overall, 12 countries are within 10% of meeting the target, reporting that 80% or more (range 80–89%) of PLHIV who know their status are on treatment with the remaining 16 more than 10% away from the target.

**Figure 6. Percentage of all people living with diagnosed HIV who are on treatment in 46 countries of Europe and Central Asia, reported in 2021<sup>16</sup>**



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

In the 39 countries across Europe and Central Asia that reported data for both stage 3 and stage 4, an estimated 1 574 630 PLHIV were on treatment, 1 459 959 of whom (93%; range 57–100%) were virally suppressed (Table 8). Seven per cent (range 0–51%) currently on ART in Europe and Central Asia have therefore not achieved viral suppression. These data differ to the overall results presented in the '2021 at a glance' table since the results in the table only include data where all four stages are reported.

In the 18 West sub-region countries with data for both stages, an estimated 688 171 PLHIV were on treatment, 640 297 (93%; range 54–100%) of whom were virally suppressed.

In the nine Centre sub-region countries with data for both stages, an estimated 21 085 PLHIV were on treatment, 13 464 (64%; range 49–98%) of whom were virally suppressed.

In the 12 East sub-region countries with data for both stages, an estimated 865 374 PLHIV were on treatment, 806 198 of whom (93%; range 57–100%) were virally suppressed.

**Table 8. Number and percentage of people in treatment who are virally suppressed in 39 countries across Europe and Central Asia, reported in 2021<sup>17</sup>**

Countries	Number of PLHIV on ART	Number of PLHIV virally suppressed	% of PLHIV on ART who are virally suppressed	% of PLHIV diagnosed on ART who are <u>not</u> virally suppressed
West (n=18)	688 171	640 297	93%	7%
Centre (n=9)	21 085	13 464	64%	36%
East (n=12)	865 374	806 198	93%	7%
<b>All countries (n=39)</b>	<b>1 574 630</b>	<b>1 459 959</b>	<b>93%</b>	<b>7%</b>

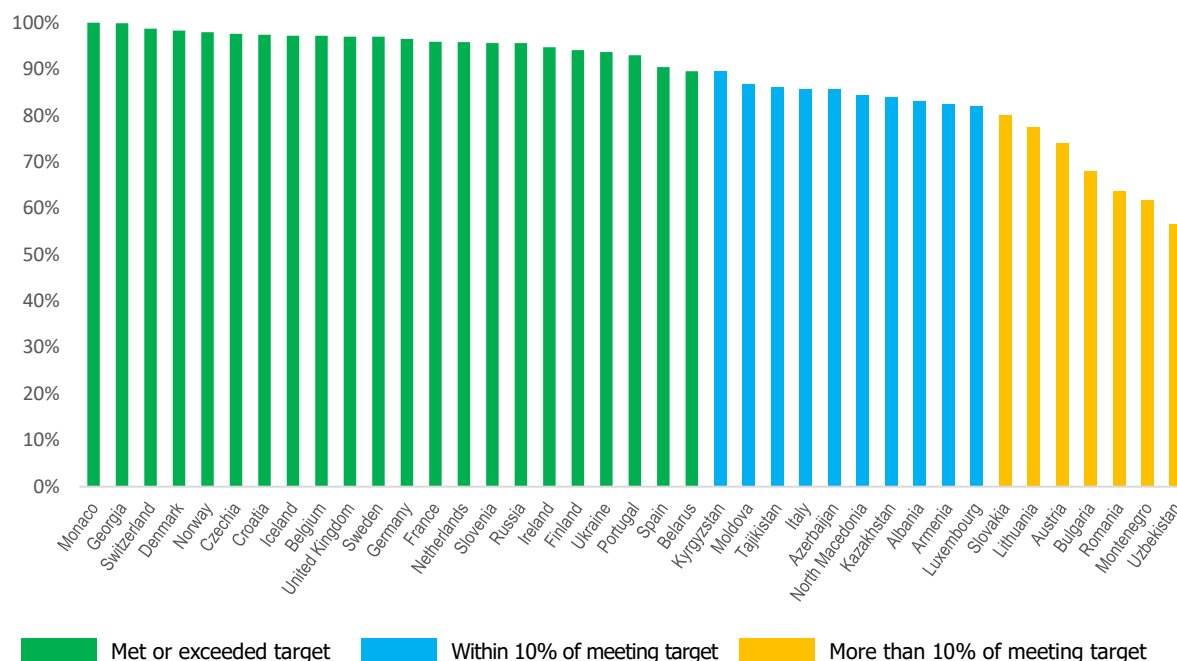
<sup>16</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

<sup>17</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

In all, 22 of the 40 countries (Belarus, Belgium, Croatia, Czechia, Denmark, Finland, France, Germany, Georgia, Iceland, Ireland, Monaco, the Netherlands, Norway, Portugal, Russia, 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 18 countries, 11 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 achieving viral suppression in 39 countries of Europe and Central Asia, reported in 2021<sup>18</sup>**



## Viral suppression among all people living with HIV

Overall, 39 countries (18 West; nine Centre; 12 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 2 281 028 people were living with HIV, 1 459 959 (64%; range 27–100%) of whom were virally suppressed (Table 9). This means that one third of PLHIV (36%; range 0–73%) in Europe and Central Asia have still not achieved viral suppression.

In the 18 West sub-region countries with data for all four stages, an estimated 805 459 people were living with HIV, 640 297 (79%; range 40–100%) of whom were virally suppressed. This means that around one in five (21%; range 0–21%) PLHIV in these countries are not virally suppressed.

In the nine Centre sub-region countries with data for all four stages, an estimated 32 384 people were living with HIV, 13 464 (42%; range 31–84%) of whom were virally suppressed. This means that over half (58%; range 16–69%) of PLHIV in these countries are not virally suppressed.

In the 12 East sub-region countries with data for all four stages, an estimated 1 443 185 people were living with HIV, 806 198 (56%; range 27–54%) of whom were virally suppressed. This means that almost half (44%; range 46–73%) of PLHIV in these countries are not virally suppressed.

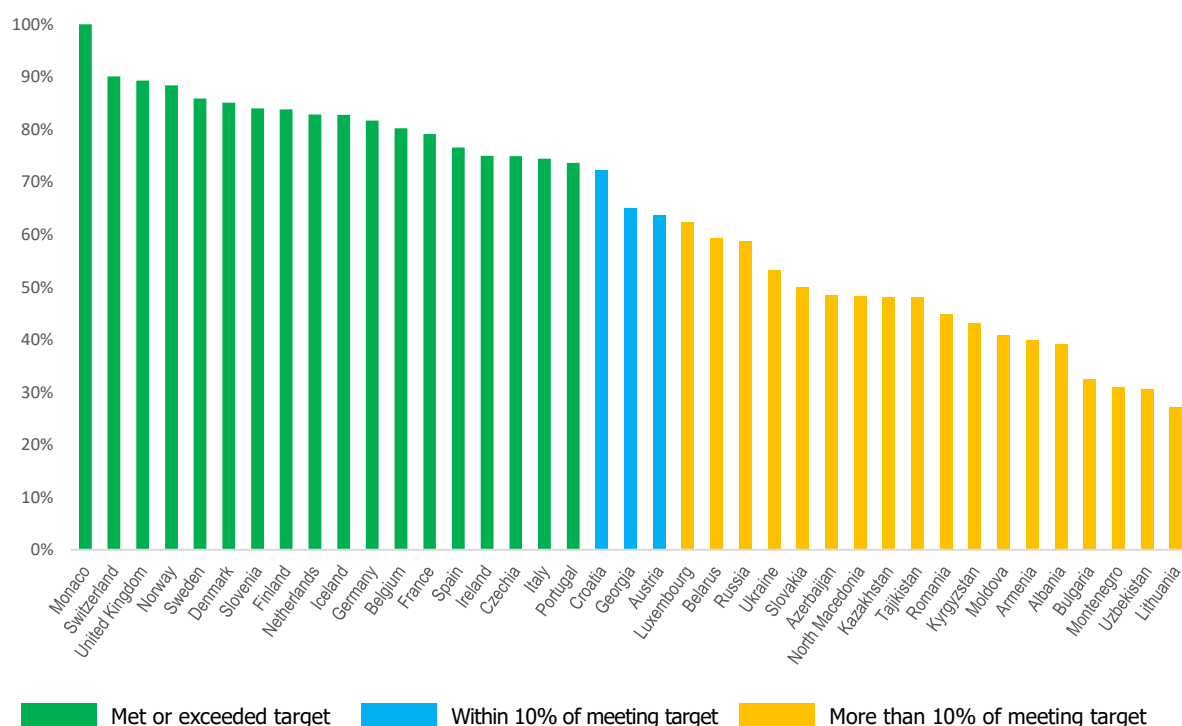
<sup>18</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

**Table 9. Number and percentage of people living with HIV who are virally suppressed in 39 countries of Europe and Central Asia, reported in 2021<sup>19</sup>**

Countries	Estimated number of PLHIV	Estimated number of people virally suppressed	% of all PLHIV who are virally suppressed	% of all PLHIV who are not virally suppressed
West (n=18)	805 459	640 297	79%	21%
Centre (n=9)	32 384	13 464	42%	58%
East (n=12)	1 443 185	806 198	56%	44%
<b>All countries (n=39)</b>	<b>2 281 028</b>	<b>1 459 959</b>	<b>64%</b>	<b>36%</b>

Overall, 18 of the 40 countries (Belgium, Czechia, Denmark, Finland, France, Germany, Iceland, 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 22 countries, three were within 10% of meeting the target and 19 were more than 10% away, reporting that fewer than 63% (range 27–62%) of all estimated PLHIV being virally suppressed (two West, six Centre; 11 East).

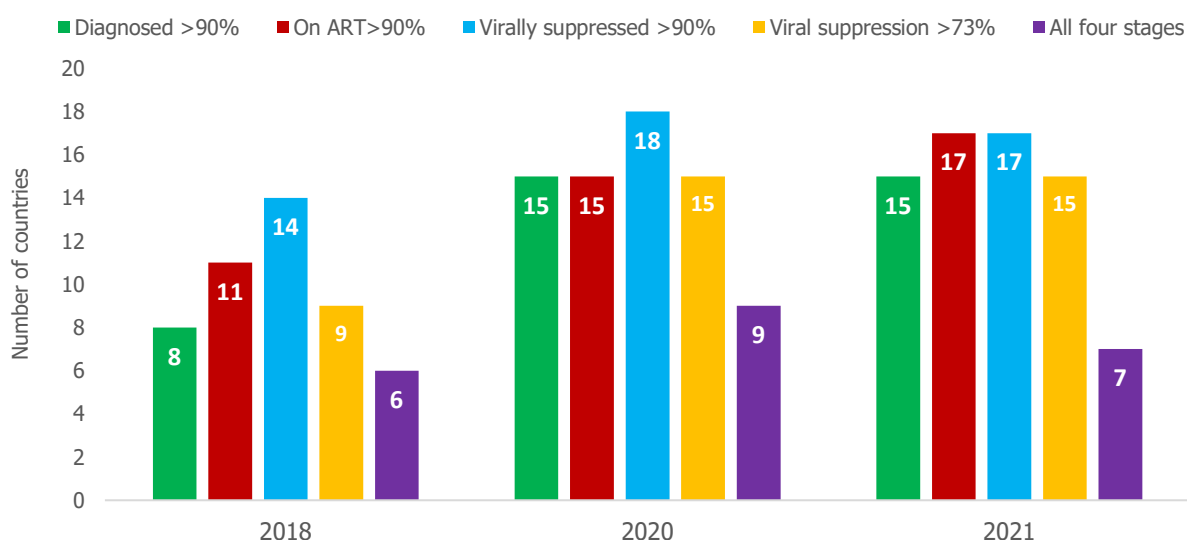
**Figure 8. Percentage of all people living with HIV who know their status, are on treatment and are virally suppressed in 39 countries across Europe and Central Asia, reported in 2021<sup>20</sup>**

## Progress over time

Since 2018, 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. However, results for 2021 were broadly in line with 2020 when nine countries in the region met all of the fast-track targets set by UNAIDS compared to seven in 2021. Annex 4 provides a full overview of what data were provided by which countries at each stage, and their performance against the global targets.

<sup>19</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate to.

**Figure 9. Number of countries which have met or exceeded global targets in Europe and Central Asia (n=55), reported in 2018, 2020 and 2021**

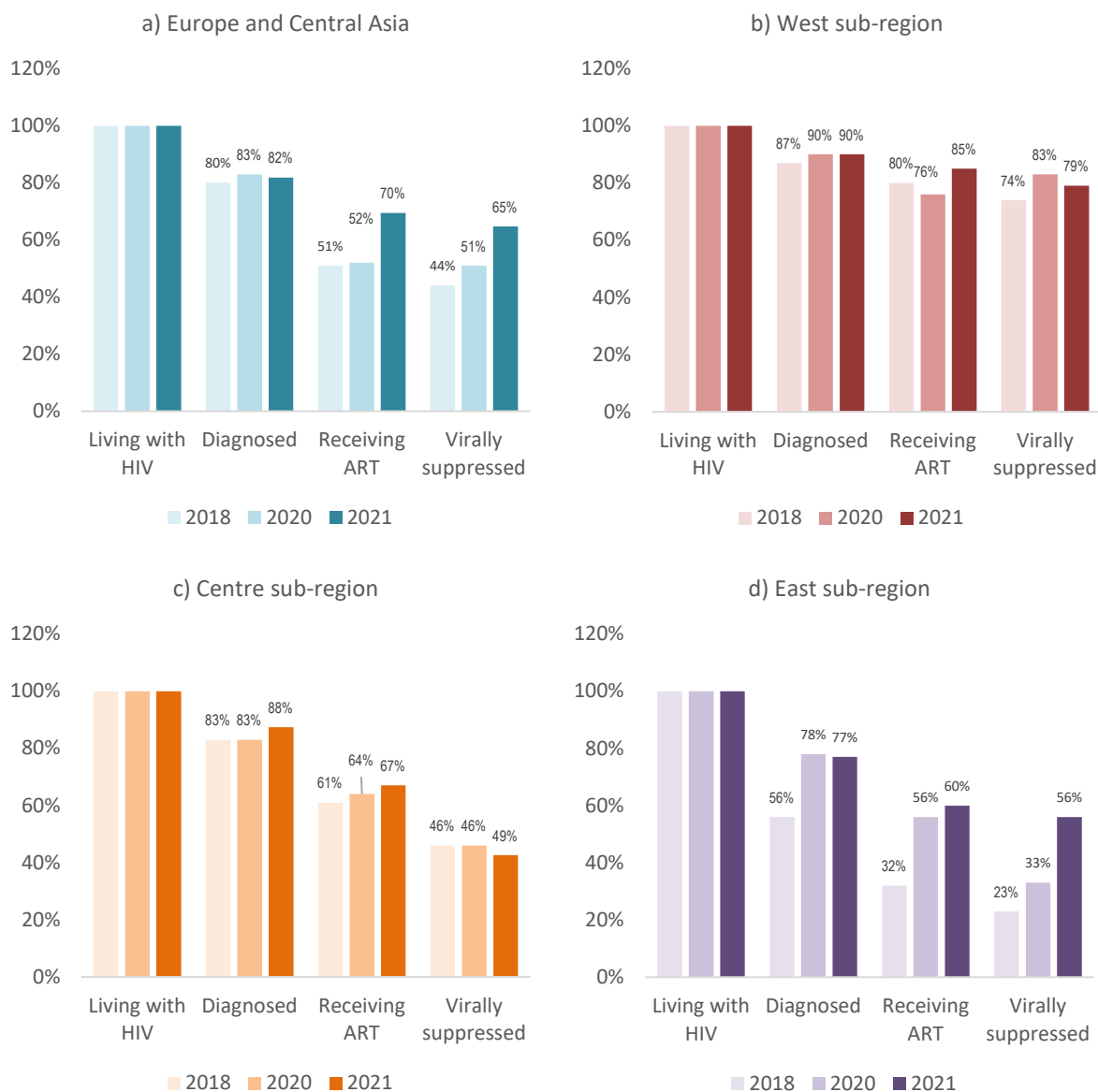


Overall, 30 countries reported on all four stages of the continuum for each of 2018, 2020 and 2021 (four countries provided identical data for all three years – these were included). Among countries able to report data for all three years, by 2021, 82% of all people with HIV were diagnosed, 70% were on treatment and 65% were virally suppressed. This compares to 83%, 52% and 51% in 2020 and 80%, 51% and 44% in 2018 respectively against the global substantive targets of 90-81-73 (Figure 10).

The West sub-region reported the highest values across the continuum in 2021, with 79% of all PLHIV virally suppressed for the 15 countries able to report data for all three years (exceeding the UNAIDS substantive target of 73%), higher than the 74% in 2018. In the Centre sub-region, among the eight countries that had all four stages for each year, the proportion of PLHIV who were virally suppressed was 44% in 2021 compared to 46% reported in 2018. In the East sub-region, (seven countries included) there was improvement in the proportion of PLHIV who are virally suppressed, with the proportion increasing from 23% in 2018 to 56% in 2021.

It is important to note that each sub-region showed improvements in the continuum of care outcomes for 2021 compared to 2018. However, given that 25 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.

**Figure 10. Continuum of HIV care (substantive), overall and by WHO sub-region, comparison between data reported in 2018, 2020 and 2021**



## Key populations

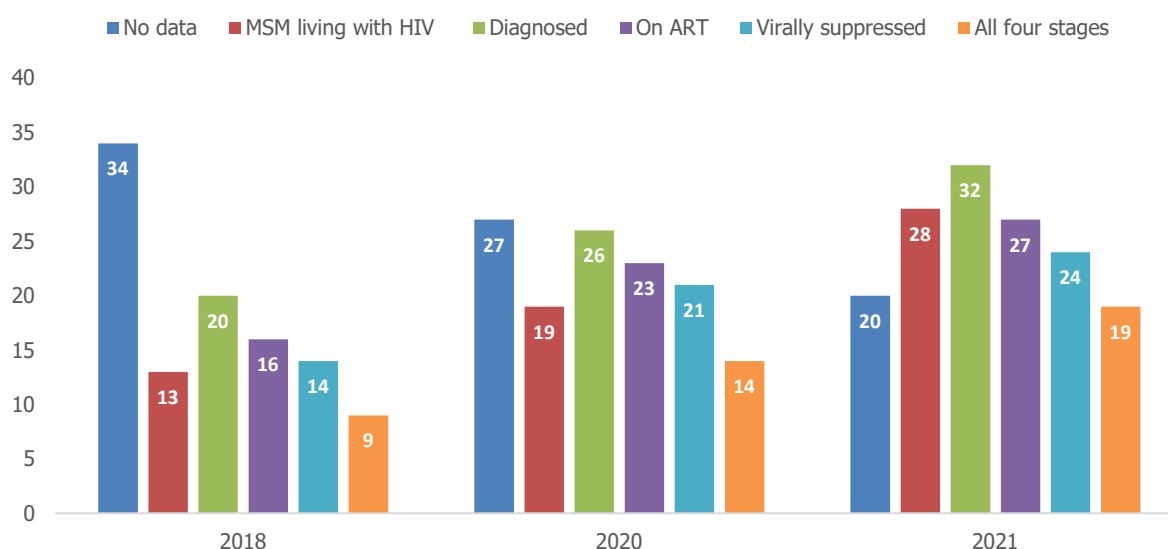
While there are no specific global targets for key populations, HIV remains a concentrated epidemic for the majority of Europe and Central Asia, meaning that these groups constitute most of those affected by HIV in many countries. This section discusses each stage of the continuum of HIV care for key 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 overall. Annexes 5–9 provides 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

By 2021, all four stages for MSM were reported by 19 countries, compared to 14 in 2020 and nine in 2018 (Figure 11). At least two stages were reported by 31 countries.

**Figure 11. Number of countries reporting data for different stages of the HIV continuum of care for men who have sex with men, Europe and Central Asia, reported in 2018, 2020 and 2021**



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

In the 26 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 391 821 MSM were living with HIV, 309 276 of whom (79%; range 1–100%) knew their status (Figure 12). Nine countries have met or exceeded the global target of 90% of all people living with HIV knowing their status among MSM. Of the other countries, nine are within 10% of meeting the target and eight are more than 10% away from reaching the target.

In the 26 countries reporting data for both stage 2 and stage 3, an estimated 306 518 MSM were diagnosed with HIV, 282 830 of whom (92%; range 22–99%) were on ART. Sixteen countries have met or exceeded the global target of 90% of all people diagnosed with HIV on ART among MSM. Of the other countries, five are within 10% of meeting the target and five are more than 10% away from reaching the target.

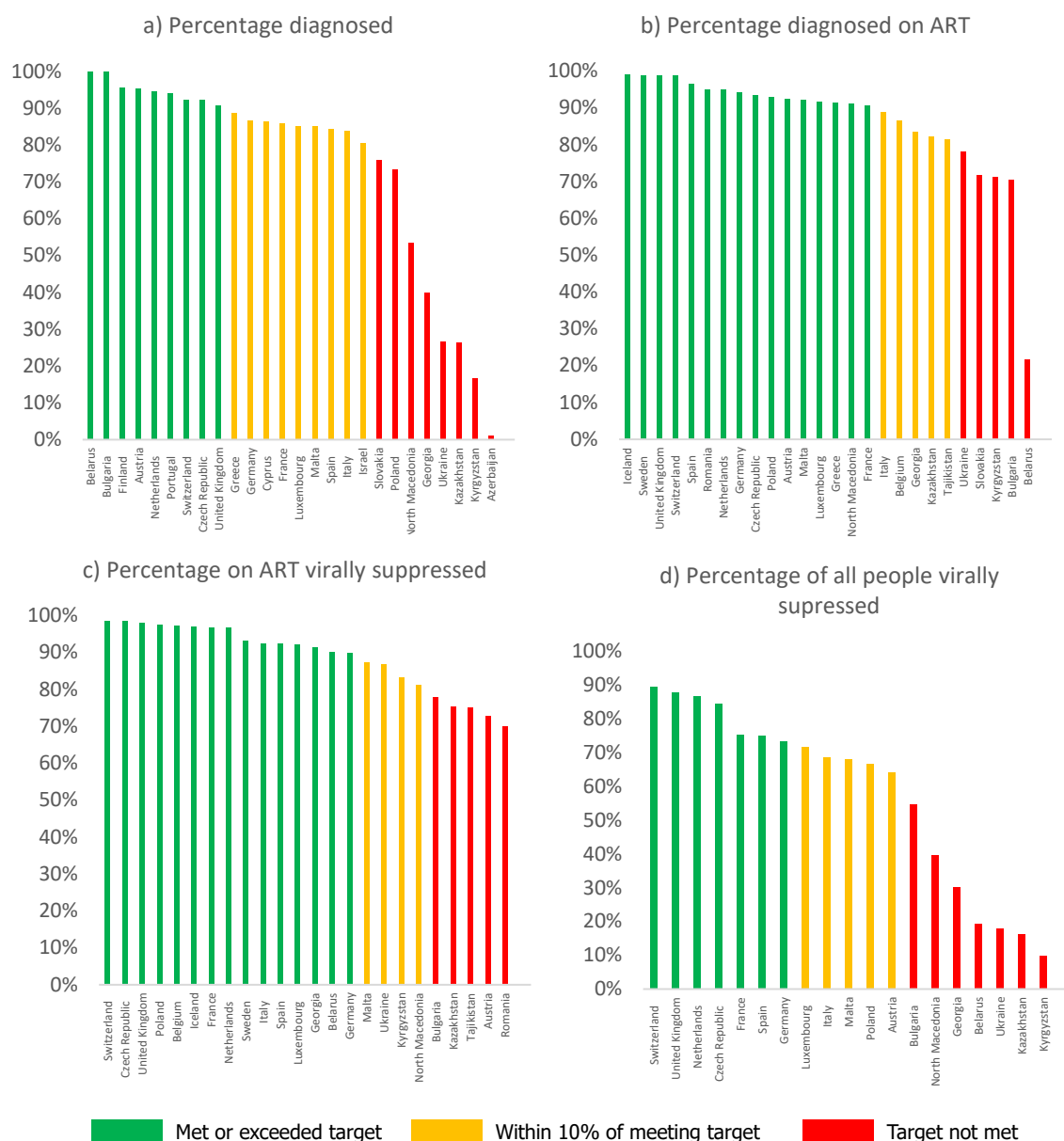
In the 24 countries reporting data for both stage 3 and stage 4, an estimated 275 952 MSM were on ART, 258 663 of whom (94%; range 70–99%) were virally suppressed. Fifteen countries have met or exceeded the global target of 90% of all those on ART being virally suppressed among MSM. Of the other countries, four are within 10% of meeting the target and five are more than 10% away from reaching the target.

Finally, in the 19 countries reporting data for stage 1 and stage 4, an estimated 345 482 MSM were living with HIV, 250 269 of whom (72%; range 10–90%) were virally suppressed. Seven of these countries have met or exceeded the overall global target of 73% of all those living with HIV being virally suppressed among MSM. Of the other countries, five are within 10% of meeting the target and seven are more than 10% away from reaching the target.

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 men who have sex with men living with HIV in European and Central Asian countries, reported in 2021<sup>20</sup>**



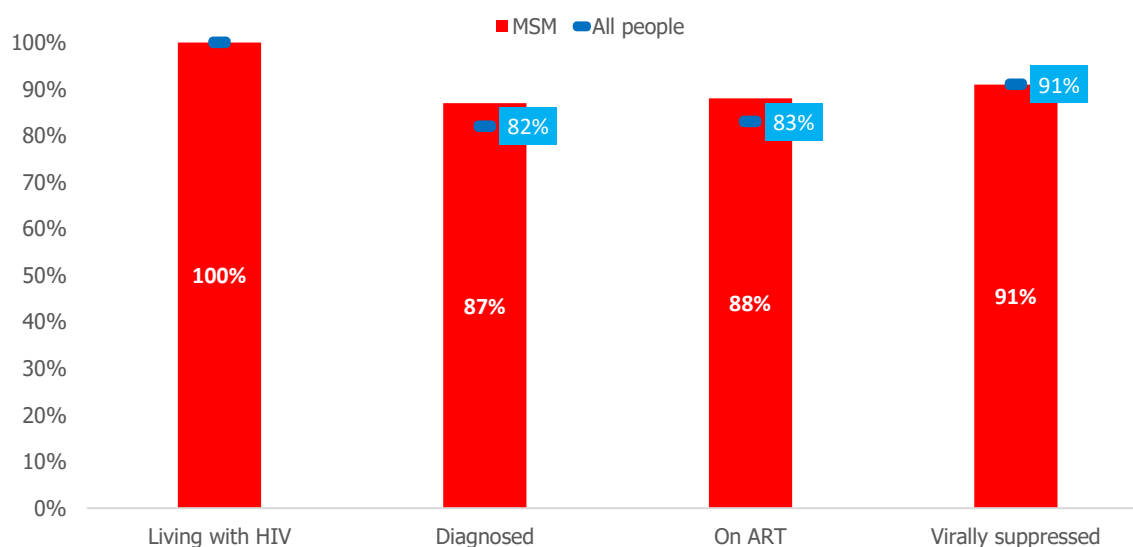
### Comparison against the national continuum of care

Among the 19 countries that were able to report data on all four stages of the continuum for MSM in 2021, the proportion of all MSM living with HIV who were diagnosed was 87%, the proportion treated was 88% and the proportion virally suppressed was 91% (Figure 13). The equivalent figures for all PLHIV at the national level (for the 19 countries reporting MSM data) were 82%, 83% and 91% respectively.

Compared to the other countries in the region, a higher proportion of newly diagnosed people 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. Over half of the 19 countries reporting all four stages of the data for MSM were from the West sub-region.

<sup>20</sup> Latest available data reported by countries in 2020. See Annex 5 for information on which year reported data relate to.

**Figure 13. Comparison of the continuum of HIV care for men who have sex with men against the national continuum of all people living with HIV, Europe and Central Asia, reported in 2021<sup>21</sup>**

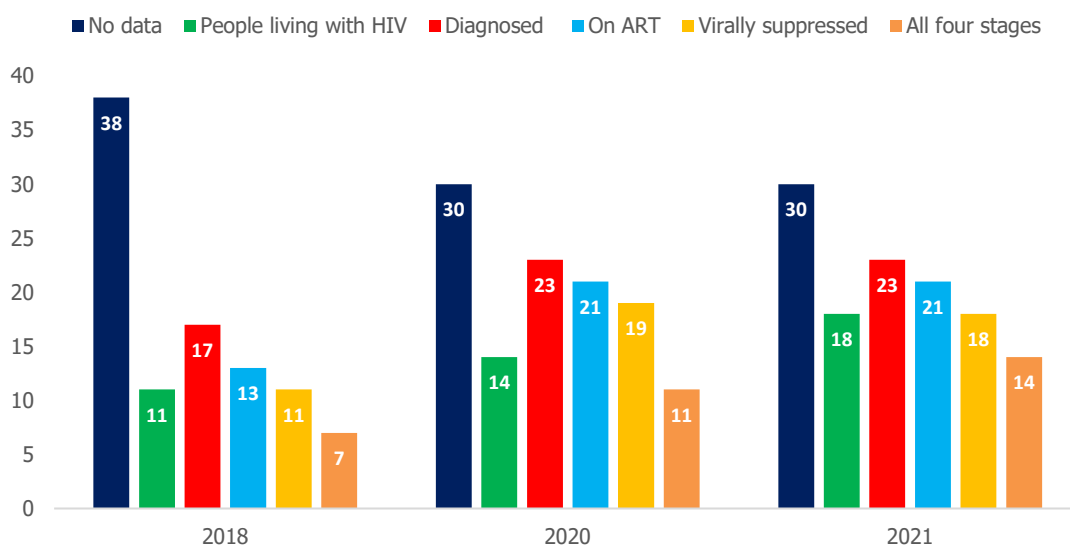


## People who inject drugs (PWID)

### Data availability

By 2021, all four stages of the continuum of care for PWID were reported by 14 countries, compared to 11 countries in 2020 and seven in 2018 (Figure 14). At least two stages were reported by 22 countries.

**Figure 14. Number of countries reporting data for different stages of the HIV continuum of care for people who inject drugs, Europe and Central Asia, reported in 2018, 2020 and 2021**



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

In the 17 countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 262 205 PWID were living with HIV, 147 338 of whom (69%; range 5–100%) knew their status (Figure 15). Eight of these countries have met or exceeded the global target of 90% of all people living with HIV knowing their status among PWID. Of the other countries, four are within 10% of meeting the target and five are more than 10% away from reaching the target.

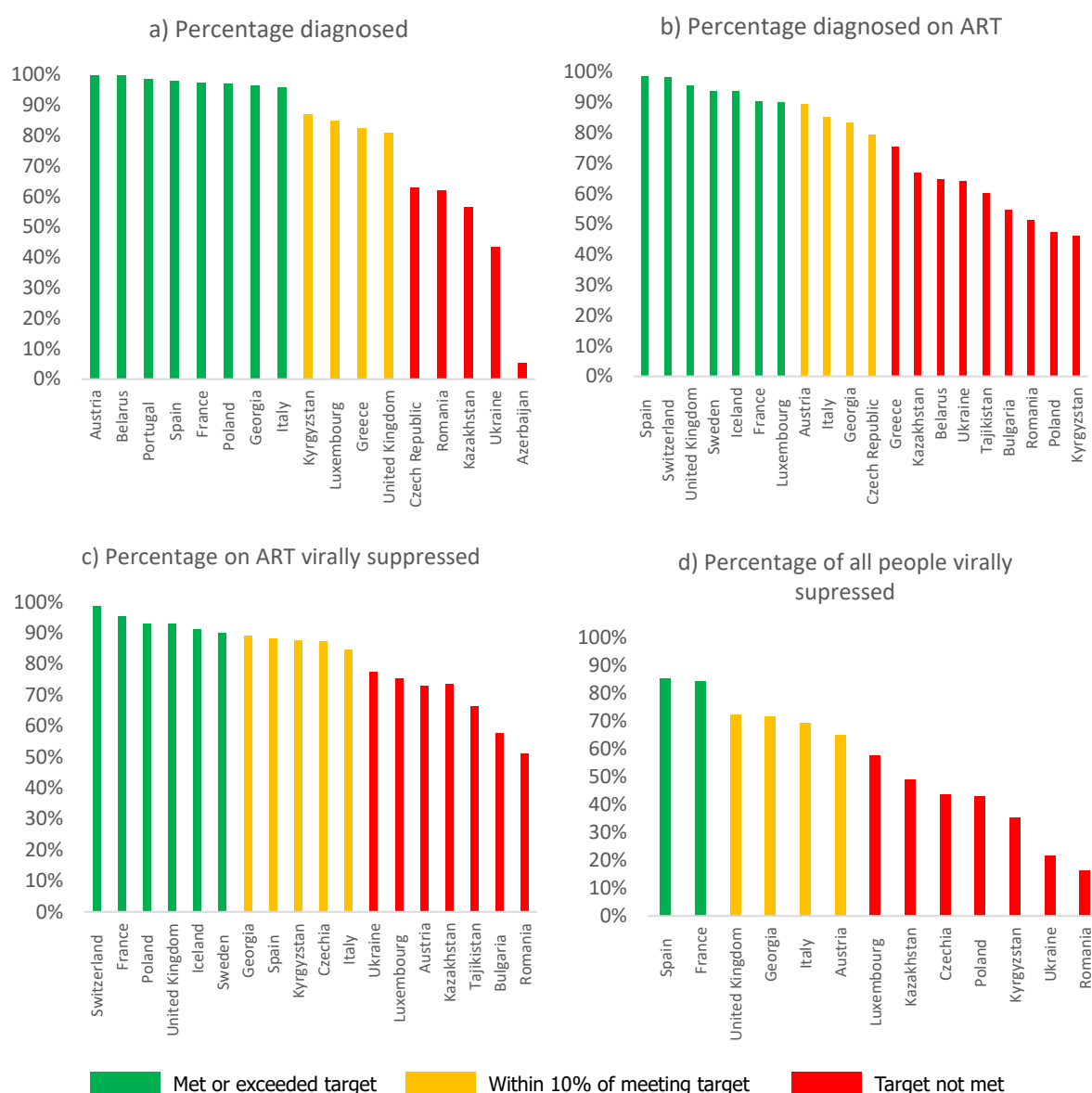
<sup>21</sup> Latest available data reported by countries in 2020. See Annex 5 for information on which year reported data relate to.

In the 20 countries reporting data for both stage 2 and stage 3, an estimated 138 074 PWID were diagnosed with HIV, 106 377 of whom (77%; range 46-96%) were on ART. Seven of these countries have met or exceeded the global target of 90% of all those diagnosed with HIV being on ART among PWID. Of the other countries, four are within 10% of meeting the target and nine are more than 10% away from reaching the target.

In the 18 countries reporting data for both stage 3 and stage 4, an estimated 97 713 PWID were on ART, 81 831 of whom (84%; range 51–99%) were virally suppressed. Six countries have met or exceeded the global target of 90% of all those on ART being virally suppressed among PWID. Of the other countries, five are within 10% of meeting the target and seven are more than 10% away from reaching the target.

Finally, in the 13 countries reporting data for stage 1 and stage 4, an estimated 181 755 PWID were living with HIV, 79 701 of whom (44%; range 16–85%) were virally suppressed. Two countries have met or exceeded the overall global target of 73% of all those living with HIV being virally suppressed among PWID. Of the other countries, four are within 10% of meeting the target and seven are more than 10% away from reaching the target.

**Figure 15. 90-90-90 and overall viral suppression among people who inject drugs living with HIV in European and Central Asian countries, reported in 2021<sup>22</sup>**

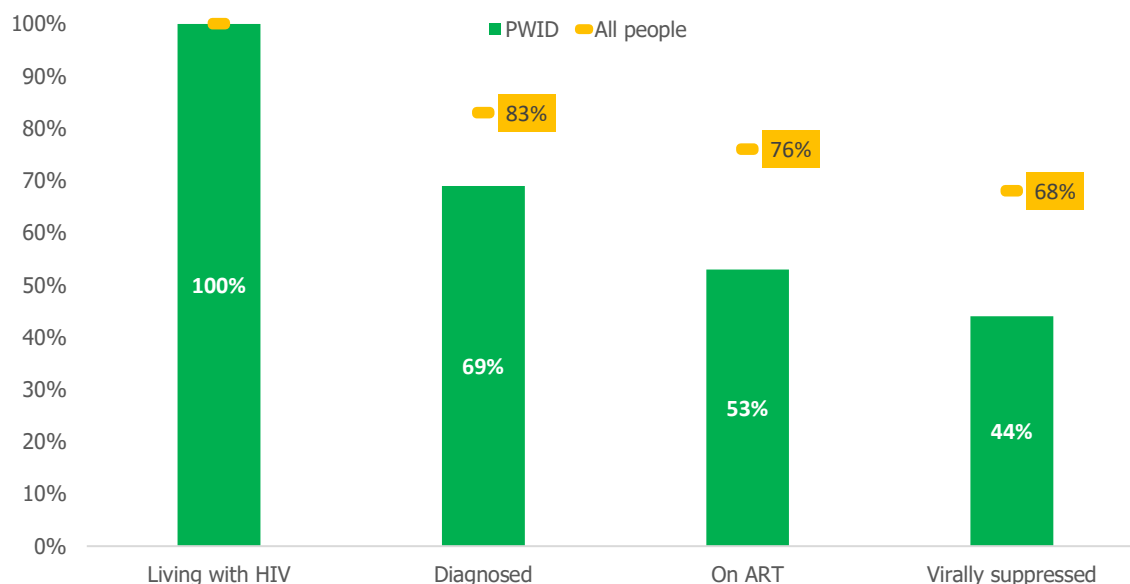


<sup>22</sup> Latest available data reported by countries in 2020. See Annex 6 for information on which year reported data relates to.

## Comparison against the national continuum of care

In the 13 countries reporting all four stages, 69% of all PWID living with HIV were reported to be diagnosed, 53% treated and 44% 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); 83%, 76% and 68% respectively.

**Figure 16. Comparison of the continuum of HIV care for people who inject drugs against the national continuum for all people living with HIV, Europe and Central Asia, reported in 2021<sup>23</sup>**

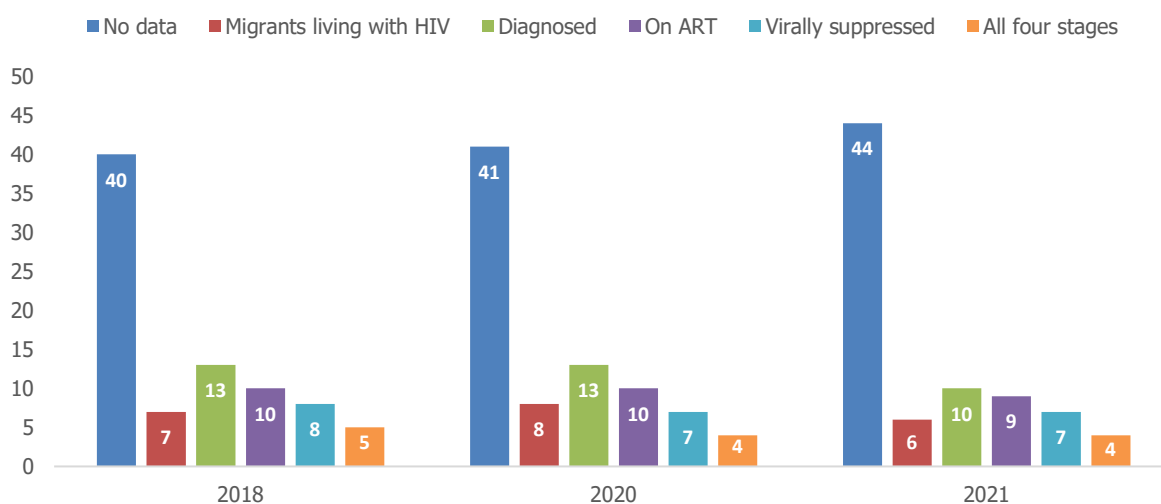


## Migrants

### Data availability

By 2021, all four stages of the continuum of care for migrants were reported by four countries (Figure 17). At least two stages were reported by nine countries. There was a slight decrease in the number of countries able to report each element of the continuum of care.

**Figure 17. Number of countries reporting data for different stages of the HIV continuum of care for migrants, Europe and Central Asia, reported in 2018, 2020 and 2021**



<sup>23</sup> Latest available data reported by countries in 2020. See Annex 6 for information on which year reported data relate to.

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

In the six countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 48 133 migrants were living with HIV, 42 916 of whom (89%; range 61–94%) know their status (Figure 18). Three countries met or exceeded the global target of 90% of all those living with HIV knowing their status among migrants. Of the other three countries, one was within 10% of meeting the target and two were more than 10% away from reaching the target.

In the eight countries reporting data for both stage 2 and stage 3, an estimated 39 864 migrants were diagnosed with HIV, 36 525 of whom (92%; range 61–98%) were on ART. Five countries met or exceeded the global target of 90% of all those diagnosed with HIV being on ART among migrants. Of the other countries, two were within 10% of meeting the target and one was more than 10% away from reaching the target.

In the seven countries reporting data for both stage 3 and stage 4, an estimated 34 563 migrants were on ART, 28 943 of whom (84%; range 69–98%) were virally suppressed. Four countries met or exceeded the global target of 90% of all those on ART being virally suppressed among migrants. Of the other countries, two were within 10% of meeting the target and one was more than 10% away from the target.

Finally, in the four countries reporting data for stage 1 and stage 4, an estimated 31 925 migrants were living with HIV, 22 550 of whom (71%; range 56–73%) were virally suppressed. Only one country met or exceeded the overall global target of 73% of all those living with HIV being virally suppressed among migrants. One country was within 10% of the target and the remaining two were more than 10% away from the target.

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 2021<sup>24</sup>**

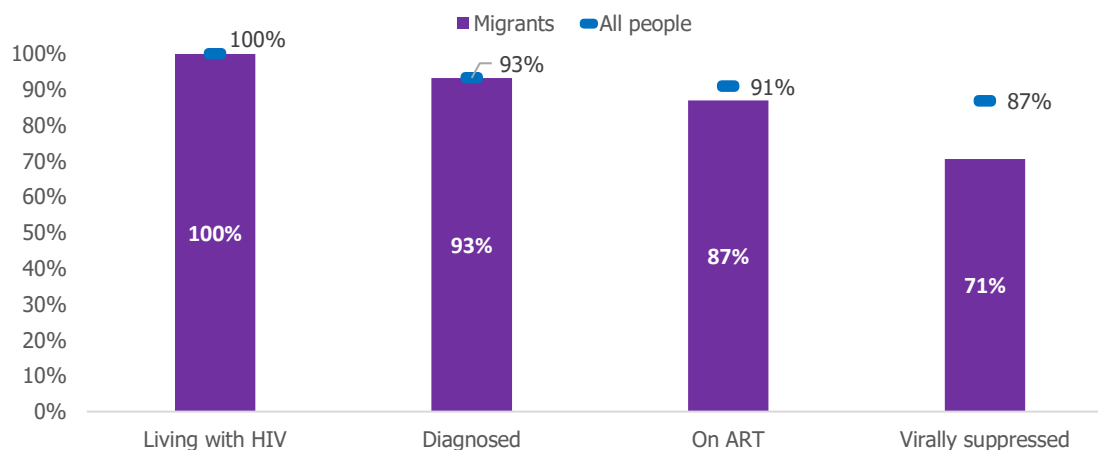


<sup>24</sup> Latest available data reported by countries in 2020. See Annex 7 for information on which year reported data relate to.

## 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% treated and 71% virally suppressed (global substantive targets). Although migrants have similar diagnosis and treatment estimates, the percentage of migrant PLHIV reaching viral suppression in the four countries with data is much lower (71%) compared to the general population of PLHIV (87%) (Figure 19, Annex 7).

**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 2021<sup>25</sup>**

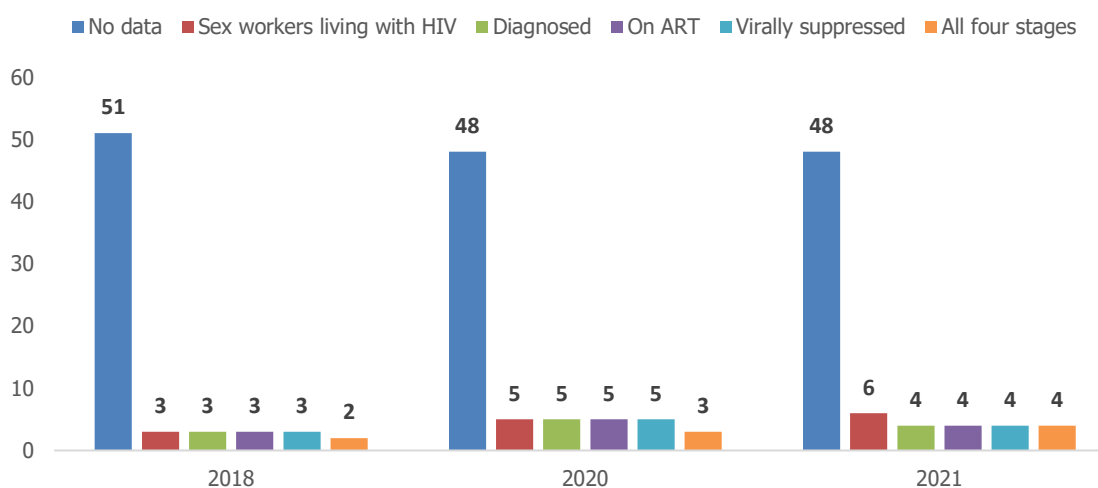


## Sex workers

### Data availability

By 2021, all four stages of the continuum of care for sex workers were reported by four countries, one more than in 2020 (Figure 20).

**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, 2020 and 2021**



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

In the four countries reporting data within Europe and Central Asia for both stage 1 and stage 2, an estimated 2 763 sex workers were living with HIV, 2 639 of whom (96%; range 65–100%) knew their status (Figure 21). Overall, 81% of all sex workers living with HIV were reported from Belarus, which also reported that 100% of sex workers living with HIV were diagnosed. If Belarus is excluded, there were 529 sex workers living with HIV, 405 of whom (77%) were estimated to be diagnosed. Two countries were within 10% of meeting the target and one was more than 10% away from reaching the target.

<sup>25</sup> Latest available data reported by countries in 2020. See Annex 7 for information on which year reported data relate to.

In the five countries reporting data for both stage 2 and stage 3, an estimated 2 802 sex workers were diagnosed with HIV, 586 of whom (21%; range 9–93%) were on ART. If Belarus is excluded, the equivalent figure was 68% (386/568). Of the other four countries, two were within 10% of meeting the target and two were more than 10% away from reaching the target.

In the five countries reporting data for both stage 3 and stage 4, an estimated 586 sex workers were on ART, 420 of whom (72%; range 56–78%) were virally suppressed. All countries were more than 10% away from reaching the target.

Finally, in the four countries reporting data for stage 1 and stage 4, an estimated 2 763 sex workers were living with HIV, 335 of whom (12%; range 7–43%) were virally suppressed. If Belarus is excluded, the equivalent figure is 185/529 (35%). All countries were more than 10% from reaching the target.

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 2021<sup>26</sup>**

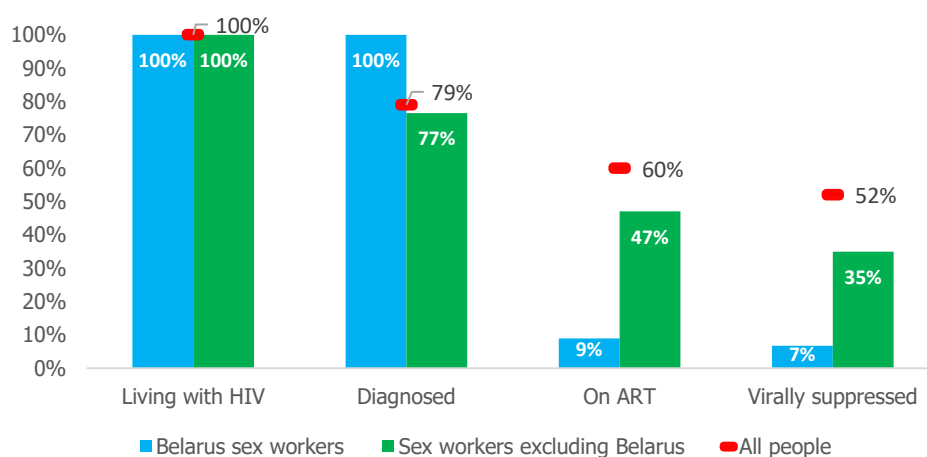


## Comparison against the national continuum of care

In the four countries reporting all four stages, 96% of all sex workers living with HIV were reported to be diagnosed, 16% treated and 12% virally suppressed (global substantive targets). If Belarus is excluded, the equivalent figures were 77%, 47% and 35% respectively. The results for the general population were higher at each stage of the continuum (Figure 22, Annex 8).

<sup>26</sup> Latest available data reported by countries in 2020. See Annex 8 for information on which year reported data relate to.

**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 (excluding Belarus), reported in 2021<sup>27</sup>**

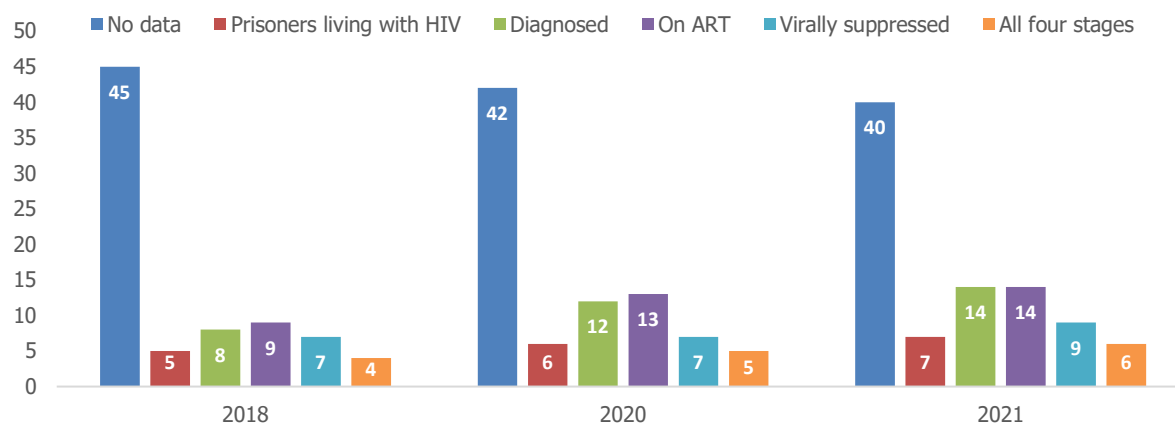


## Prisoners

### Data availability

In 2021, all four stages of the continuum of care for prisoners were reported by six countries, one more than in 2020 (Figure 23). At least two stages were reported by 13 countries. With the exception of those living with HIV, there has been an increase in the number of countries reporting data at every stage of the continuum of care for prisoners living with HIV between 2020 and 2021.

**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, 2020 and 2021**



### 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 7 939 prisoners were living with HIV, 7 811 of whom (98%; range 80–100%) knew their status (Figure 24). Four of these six countries have met or exceeded the global target of 90% of all those living with HIV knowing their status among prisoners. Of the other two countries, both are within 10% of meeting the target.

In the 13 countries reporting data for both stage 2 and stage 3, an estimated 9 286 prisoners were diagnosed with HIV, 7 636 of whom (82%; range 31–100%) were on ART. Eight of these countries have met or exceeded the global target of 90% of all those diagnosed with HIV on ART among prisoners. Of the other countries, two are within 10% of meeting the target and three are more than 10% away from reaching the target.

In the ten countries reporting data for both stage 3 and stage 4, an estimated 6 687 prisoners were on ART, 4 696 of whom (70%; range 10–100%) were virally suppressed. One country met or exceeded the global target of 90% of all people on ART being virally suppressed among prisoners. Two were within 10% of meeting the target and seven were more than 10% away from reaching the target.

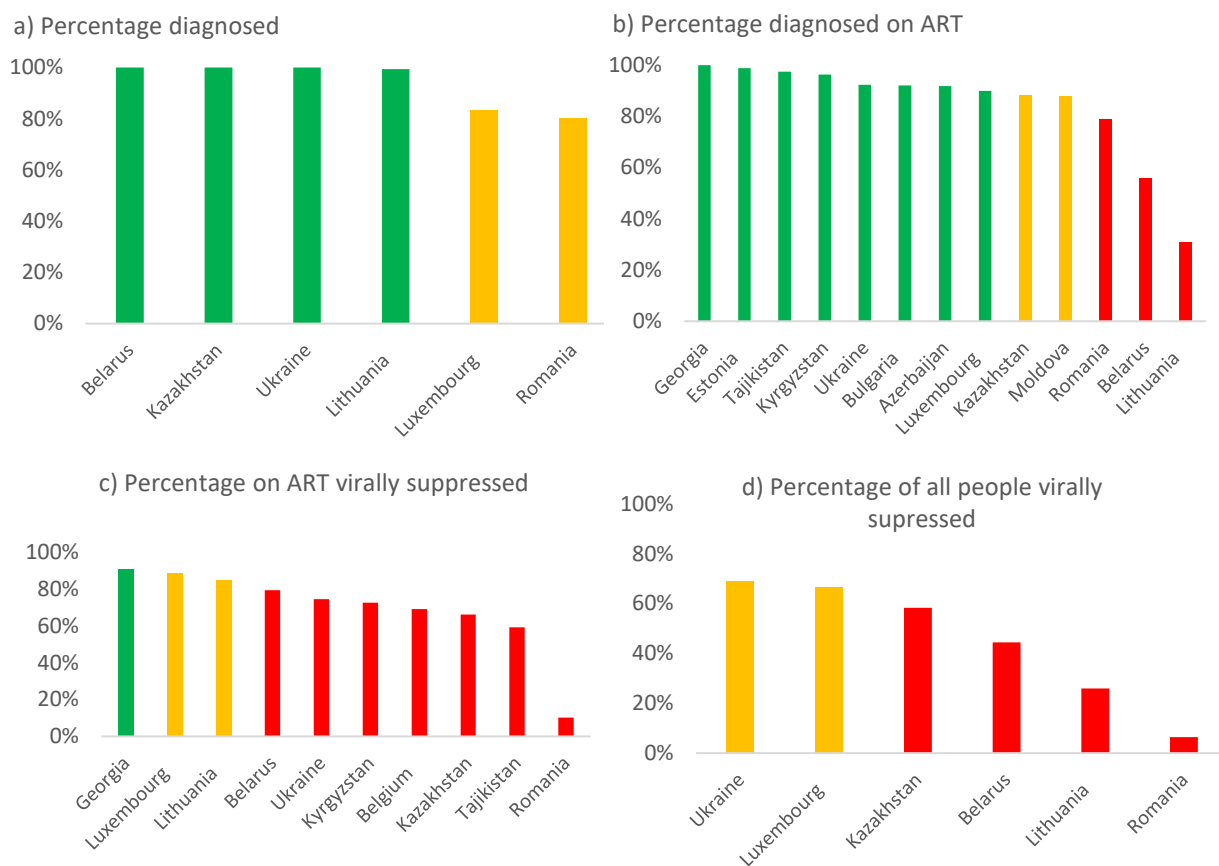
<sup>27</sup> Latest available data reported by countries in 2020. See Annex 8 for information on which year reported data relate to.



Finally, in the six countries reporting data for stage 1 and stage 4, an estimated 7 939 prisoners were living with HIV, 4 380 of whom (55%; range 6–69%) were virally suppressed. No countries have met or exceeded the overall global target of 73% of all people living with HIV being virally suppressed among prisoners. Two were within 10% of meeting the target and the remainder were more than 10% away from reaching the target.

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 2021<sup>28</sup>**

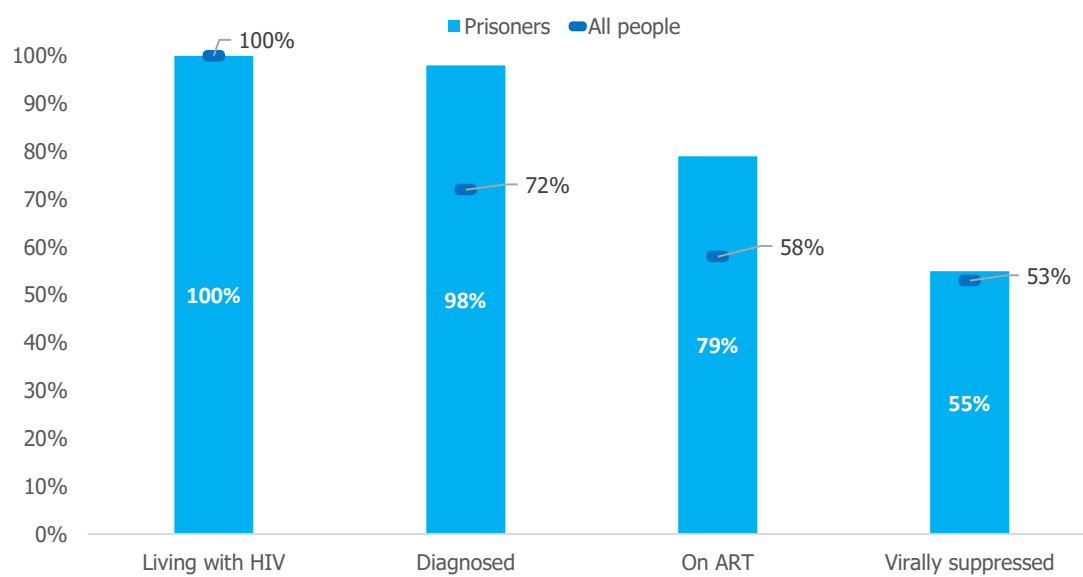


## Comparison against the national continuum of care

Among the six countries that were able to report data on all four stages of the continuum for prisoners in 2021, the proportion of all prisoners living with HIV who were diagnosed was 98%, the proportion treated was 79% and the proportion virally suppressed was 55% (Figure 25). The equivalent figures for all PLHIV at the national level (for the five countries reporting prisoner data) were 72%, 58% and 53% respectively.

<sup>28</sup> Latest available data reported by countries in 2020. See Annex 9 for information on which year reported data relate to.

**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 2021<sup>29</sup>**



<sup>29</sup> Latest available data reported by countries in 2020. See Annex 9 for information on which year reported data relate 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 PrEP or 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.

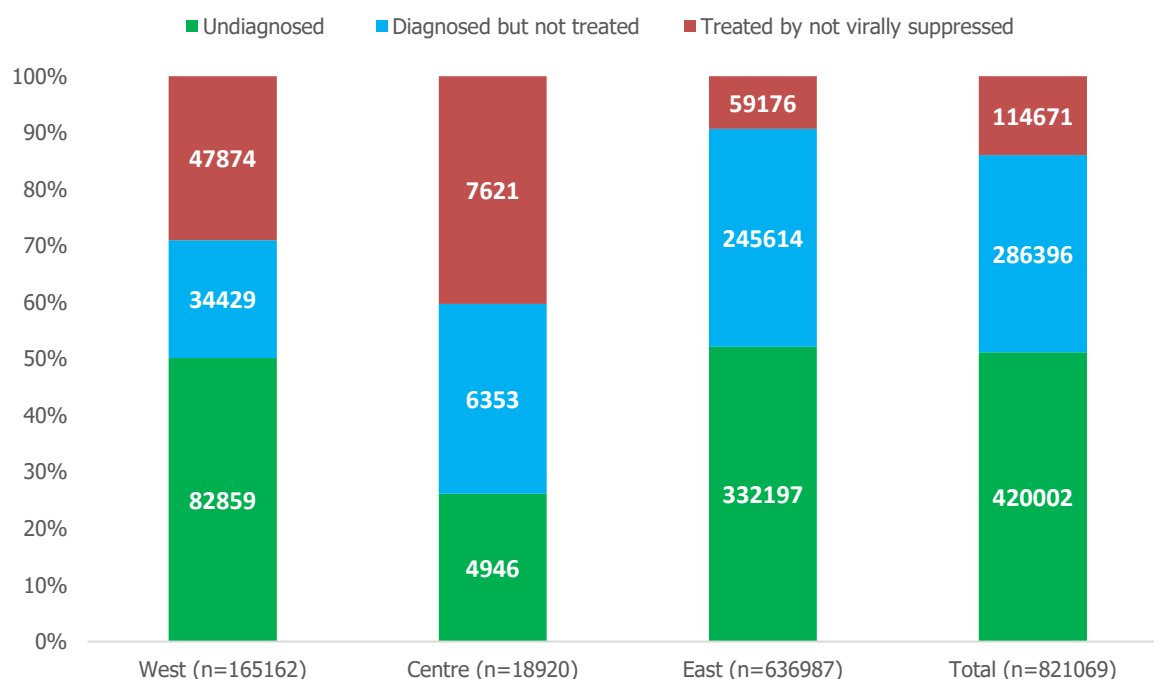
The number of people with transmissible levels of virus consists of PLHIV who are estimated to be undiagnosed, PLHIV who are diagnosed but untreated and PLHIV who are treated but not virally suppressed. Using data from the 40 countries that provided all four stages of the continuum, this is estimated to be 821 069 PLHIV in the reporting countries, equivalent to 36% 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 2021, country respondents reported that 51% (42 002/821 069) of those living with transmissible levels of virus were estimated to be undiagnosed, 35% (286 396) were estimated to be diagnosed but untreated and 14% (114 671) were estimated to be on treatment but have an unsuppressed viral load. This indicates that the number of people with transmissible levels of virus could be reduced through rapid and sustained scale-up of HIV testing and treatment, along with widespread implementation of combination prevention.

Figure 26 shows the 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 Centre sub-region over two-thirds were diagnosed but untreated, and the East sub-region had around half undiagnosed, and almost 40% diagnosed, but untreated.

More information is provided in Annex 10.

**Figure 26. Distribution of people with transmissible levels of virus, by WHO sub-region, and Europe and Central Asia overall, reported in 2021<sup>30</sup>**



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 (i.e. France and Spain).

<sup>30</sup> Latest available data reported by countries in 2020. See Annex 2 for information on which year reported data relate 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 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, this most recent monitoring round demonstrates just how much further progress is needed. There are still seven countries with no data reported for any stage of the continuum. Eight countries are unable to report all four stages of the continuum of HIV care, and among these countries the inability to report on viral suppression is particularly pronounced. 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, particularly at a time when there is likely to be an increase in virtual consultation with fewer face-to-face visits including CD4 and viral load monitoring as a consequence of COVID-19. There is also a need to critique the information received - with some countries providing viral suppression percentages at almost 100%, it is necessary to consider the data source to mitigate any biases.

Significant health inequalities can be obscured where outcomes are known only for the overall population of PLHIV. Eliminating AIDS by 2030 will not be possible if the necessary interventions for key populations are neglected. It is therefore reassuring that an increasing number of countries are able to provide information relating to MSM, although more work is needed to disaggregate the continuum of care for other key populations. Countries that are able to report this information fully are also likely to be able to use information to tackle remaining inequalities. Without knowledge of outcomes of the continuum of care for specific key populations countries cannot influence policy to target interventions effectively to specific groups.

## Overall progress in the continuum of care

By 2021, the overall performance of the European and Central Asian region against the global 90-90-90 targets was 82% of all PLHIV diagnosed, 69% treated and 64% virally suppressed. While improvement has also been observed for the substantive indicator with 64% of all people living with HIV virally suppressed, (compared to 49% for data reported by 2020) this falls short of the target of 73% of all PLHIV being virally suppressed.

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, 95% of people living with diagnosed HIV on treatment, and 93% of those on treatment virally suppressed. However, the West sub-region exceeded the substantive target of 73%, with 79% 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 85%, 77% and 64% respectively, for the 90-90-90 targets, indicating that, in addition to scaling up testing and prevention efforts, this region needs to widen access to treatment and promote adherence through the implementation of support services. The fact that under half of all PLHIV are virally suppressed (at 42% in the Centre region), meaning that just over one in two PLHIV are at risk of ill-health and can still pass on the virus, is of concern. Since the Centre sub-region has seen a more rapid increase in the rate of new HIV diagnoses than anywhere else in the WHO European Region [3], this situation should be urgently addressed.

Finally, the East sub-region is performing at 77%, 78%, and 93% respectively against the 90-90-90 targets, indicating that it has a particular need to promote support and access to treatment and care 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 56% virally suppressed, around half of PLHIV in the East sub-region are not benefitting from viral suppression.

Some progress was made towards meeting the global substantive targets of 90-81-73 between 2018 and 2021. For the countries able to submit data for both years, there was improvement across the continuum of care outcomes from 2018 to 2021 in each sub-region. Progress was particularly apparent in the East sub-region where it was also most needed, with the proportion of people virally suppressed increasing in the two years from 26% by 2018, to 33% by 2020 and 56% by 2021. However, there is still a substantial drop-off of approximately 15–20% between each stage in the Centre and East sub-regions, compared to around 3–5% for the West sub-region. Limited access to treatment (and consequently, higher levels of 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, and 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. 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, it is of concern that only 20 countries can provide all four stages of the continuum for MSM, and almost half of these are from the West sub-region. Outcomes for MSM in the Centre and East sub-regions, where only one country out of nine meets the substantive target, need further improvement. However, previously when only a few countries were able to present information for MSM, outcomes were likely to overestimate performance in the region, and the countries that were able to report were also the countries that had better outcomes. As more countries are able to provide this information and the true levels of inequality are reported, the overall situation may decline for specific key populations.

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 of the countries (seven out of 15) 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, which includes matching like-for-like countries. This highlights that a tailored approach of interventions with proven effectiveness, including harm reduction in the form of needle and syringe provision and opioid substitution therapy, as well as innovative methods, is essential for improving outcomes in this key population.

The number of countries able to report disaggregated data for migrants, sex workers, and prisoners remains low. Information on sex workers and migrants is disproportionately reported by the West sub-region. Data for prisoners is disproportionately reported by the East sub-region where outcomes in this population surpass the general population in like-for-like countries. For all 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, and the inclusion of relatively large countries within this small group.

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 approach to the prevention of sexual transmission, which includes access to condoms, PrEP, and frequent testing for those at high-risk, will be 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 been previously 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 scale-up of these approaches.

## Transmissible levels of virus

Since the outcomes of the 90-90-90 are percentages of the total number of people living with HIV, they mask the underlying numbers. Provision of all stages of the continuum of care allows the total number of people with transmissible levels of virus to be calculated. By 2021, it was estimated that over one third of PLHIV in the region had transmissible levels of virus.

Of the people living with transmissible levels of virus in 2021, 51% were estimated to be undiagnosed, 35% were estimated to be diagnosed but untreated and 14% were estimated to be on treatment but have an unsuppressed viral load. This indicates that the number of people with transmissible levels of virus could be reduced with equal impact through rapid and sustained scale-up of treatment, and widespread implementation of combination prevention, as through the continuation of efforts to reduce the undiagnosed population via testing.

## 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. While improvement across the sub-regions is welcomed, this has resulted in some estimates of 100% outcomes for the 'proportion diagnosed' and 'virally suppressed' indicators among countries previously unable to report information. These results need further investigation since it is possible the data may result from clinical datasets that are not fully representative of all clinics and all settings within a country.

There are still considerable levels of missing data which makes it difficult to generalise findings for the entire European and Central Asian region, especially for key populations. 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 lesbian, gay, bisexual and transgender populations and injecting drug use is prevalent.

Finally, the 90-90-90 metrics may present an overly optimistic picture. The methods employed in this report do not consider patients not linked to care, or not retained in care and countries are not currently encouraged to present information on data completeness. Many countries estimate viral suppression by applying the proportion of people treated who are virally suppressed to the number for whom that information is missing. Further work is needed to explore this.

## Conclusion

Overall, few countries have reached the fast-track 90-90-90 targets since they were first set in 2014. Only 10 countries in the region have met or exceeded the targets of 90% diagnosed, 90% on ART, 90% virally suppressed and 73% of all PLHIV virally suppressed. However enormous progress has been made and it is a huge achievement for the majority of countries within the regions to collect national continuum of care data. This information is critical in informing each country to consider how to maintain and increase rates of progress. Significant variation exists within sub-regions which group countries with similar contexts and epidemics. This shows that there are policy and implementation issues which need to be addressed. However, many countries still struggle to collect continuum of HIV care data disaggregated by key population. It is essential that a full combination prevention strategy is implemented, incorporating improved implementation of multifaceted testing strategies, effective linkage into 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 - in order to deliver improvements in performance across the continuum of care.

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# Annex 1. Continuum of care for people living with HIV in the countries of Europe and Central Asia: number of people and targets reported by 2021

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 on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV on ART	% of PLHIV who are virally suppressed
West	Andorra										
	Austria	7 655	7 209	6 574	4 873	94%	91%	74%	94%	86%	64%
	Belgium	19 090	17 090	15 750	15 312	90%	92%	97%	90%	83%	80%
	Denmark	6 700	6 100	5800	5 700	91%	95%	98%	91%	87%	85%
	Finland	3 265	3 069	29 07	2 736	94%	95%	94%	94%	89%	84%
	France	178 700	154 600	147 500	141 400	87%	95%	96%	87%	83%	79%
	Germany	90 700	79 900	76 800	74 100	88%	96%	96%	88%	85%	82%
	Greece	16 743	13 788	11 129		82%	81%		82%	66%	
	Iceland	296	291	252	245	98%	87%	97%	98%	85%	83%
	Ireland	7 200	6 500	5 700	5 400	90%	88%	95%	90%	79%	75%
	Israel	8 039	7 448	5 087		93%	68%		93%	63%	
	Italy	137 000	126 000	119 000	102 000	92%	94%	86%	92%	87%	74%
	Liechtenstein										
	Luxembourg	1 315	1 118	999	820	85%	89%	82%	85%	76%	62%
	Malta	740	555	555		75%	100%	54%	75%	75%	
	Monaco	48	48	48	48	100%	100%	100%	100%	100%	100%
	Netherlands	23 700	21 969	20 478	19 625	93%	93%	96%	93%	86%	83%
	Norway	4 455	4 100	4 020	3 938	92%	98%	98%	92%	90%	88%
	Portugal	41 889	39 778	33 163	30 842	95%	83%	93%	95%	79%	74%
	San Marino										
	Spain	151 387	131 774	128 216	115 907	87%	97%	90%	87%	85%	77%
Sweden	8 971	8 097	7 943	7 702	90%	98%	97%	90%	89%	86%	
Switzerland	17 100	15 850	15 600	15 400	93%	98%	99%	93%	91%	90%	
United Kingdom	105 248	98 552	96 866	93 951	94%	98%	97%	94%	92%	89%	
<b>Sub-total</b>	<b>805 459</b>	<b>722 600</b>	<b>688 171</b>	<b>640 297</b>	<b>90%</b>	<b>95%</b>	<b>93%</b>	<b>89%</b>	<b>85%</b>	<b>79%</b>	
Centre	Albania	1 433	1 102	678	561	77%	61%	83%	77%	47%	39%
	Bosnia & Herzegovina										
	Bulgaria	3 690	3 084	1 766	1 200	84%	57%	68%	84%	48%	33%
	Croatia	1 700	1 429	1 262	1 229	84%	88%	97%	84%	74%	72%
	Cyprus	1 293	863	598		67%	69%		67%		



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 on ART	% on ART who are virally suppressed	% of PLHIV who are diagnosed	% of PLHIV on ART	% of PLHIV who are virally suppressed
	Czechia	3 503	2 948	2 690	2 625	84%	91%	98%	84%	77%	75%
	Hungary	7 205	3 615			50%			50%		
	Kosovo										
	Montenegro	392	201	196	121	51%	98%	62%	51%	50%	31%
	North Macedonia	404	263	231	195	65%	88%	84%	65%	57%	48%
	Poland	18 923	15 899	13 381		84%	84%		84%	71%	
	Romania	18 000	16 486	12 644	8 064	92%	77%	49	92%	66%	33%
	Serbia	3 341	2 911	2 172		87%	75%		87%	65%	
	Slovakia	1 041	833	650	520	80%	78%	80%	80%	62%	50%
	Slovenia	806	730	708	677	91%	97%	96%	91%	88%	84%
	Turkey										
<b>Sub-total</b>	<b>32 384</b>	<b>27 438</b>	<b>21 085</b>	<b>13 464</b>	<b>85%</b>	<b>77%</b>	<b>64%</b>	<b>85%</b>	<b>65%</b>	<b>42%</b>	
East	Armenia	4 771	3 193	2 305	1 898	67%	72%	82%	67%	48%	40%
	Azerbaijan	9 937	7 302	5 618	4 815	73%	77%	86%	73%	57%	48%
	Belarus	28 315	22 855	18 765	16 804	81%	82%	90%	81%	66%	60%
	Estonia	6 855	5 939	4 482		87%	75%		87%	65%	
	Georgia	8 358	6 357	5 442	5 435	76%	86%	100%	76%	65%	65%
	Kazakhstan	35 201	27 485	20 176	16 946	78%	73%	84%	78%	57%	48%
	Kyrgyzstan	9 222	7 050	4 442	3 974	76%	63%	89%	76%	48%	33%
	Latvia		5 836								
	Lithuania	3 558	2 911	1 248	967	82%	43%	77%	82%	35%	27%
	Moldova	14 474	9 679	6 810	5 913	67%	70%	87%	67%	47%	41%
	Russia	1 000 000	794 220	615 099	587 870	79%	77%	96%	79%	62%	59%
	Tajikistan	14 246	9 459	7 960	6 850	66%	84%	86%	66%	56%	48%
	Turkmenistan										
	Ukraine	257 548	176 871	146 488	137 196	69%	83%	94%	69%	57%	53%
Uzbekistan	57 555	43 606	31 021	17 530	76%	71%	57%	76%	54%	30%	
<b>Sub-total</b>	<b>1 443 185</b>	<b>1 110 988</b>	<b>865 374</b>	<b>806 198</b>	<b>77%</b>	<b>78%</b>	<b>93%</b>	<b>77%</b>	<b>60%</b>	<b>56%</b>	
<b>Total</b>	<b>2 281 028</b>	<b>1 861 026</b>	<b>1 574 630</b>	<b>1 459 959</b>	<b>82%</b>	<b>85%</b>	<b>92%</b>	<b>82%</b>	<b>69%</b>	<b>64%</b>	

## Annex 2. Continuum of care for people living with HIV in the countries of Europe and Central Asia: year of data and data sources, reported in 2021

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	43830							
	Austria	31/12/2019	ECDC modelling tool	31/12/2019	Cohort data	31/12/2019	Cohort data	31/12/2019	Cohort data
	Belgium	31/12/2019	Other modelling tool or estimate	31/12/2019	Surveillance data	31/12/2019	Other data source	31/12/2019	Other data source
	Denmark	31/12/2020	Other modelling tool or estimate	31/12/2019	Other data source	31/12/2020	Cohort data	31/12/2020	Cohort data
	Finland	31/12/2020	ECDC modelling tool	31/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2020	Surveillance data
	France	31/12/2018	Other modelling tool or estimate	31/12/2018	Other data source	31/12/2018	Other data source	31/12/2018	Other data source
	Germany	31/12/2019	Other modelling tool or estimate	31/12/2019	Surveillance data	31/12/2019	Other data source	31/12/2018	Cohort data
	Greece	31/12/2020	ECDC modelling tool	31/12/2020	Surveillance data	31/12/2020	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	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Liechtenstein								
	Luxembourg	31/12/2020	Other modelling tool or estimate	31/12/2020	Cohort data	31/12/2020	Cohort data	31/12/2020	Cohort data
	Malta	31/12/2020	ECDC modelling tool	31/12/2020	Surveillance data	31/12/2020	Other data source	31/12/2017	
	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	31/12/2019	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	31/12/2017	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	30/06/2020	Other modelling tool or estimate	30/06/2020	Other data source	30/06/2020	Other data source	30/06/2020	Other data source	
Switzerland	31/12/2020	Other modelling tool or estimate	31/12/2020	Other data source	31/12/2020	Other data source	31/12/2020	Cohort data	
United Kingdom	31/12/2020	Other modelling tool or estimate	31/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2019	Surveillance data	
Centre	Albania		SPECTRUM estimate	31/12/2020	Surveillance data	31/12/2020		31/12/2020	Other data source
	Bosnia & Herzegovina	31/12/2020							

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
	Bulgaria	31/12/2020	SPECTRUM estimate	31/12/2020	Other data source	31/12/2020	Other data source	31/12/2020	Other data source
	Croatia	31/12/2019	Other modelling tool or estimate	31/12/2020	Surveillance data	31/12/2019	Cohort data	31/12/2020	Cohort data
	Cyprus	31/12/2019	ECDC modelling tool	31/12/2018	Other data source				
	Czechia	31/12/2020	ECDC modelling tool	13/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2020	Surveillance data
	Hungary			31/12/2019	Surveillance data				
	Kosovo					31/12/2019	Other data source		
	Montenegro	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020	Surveillance data	31/12/2020	
	North Macedonia	31/12/2018	SPECTRUM estimate	31/12/2018		31/12/2018	Surveillance data	31/12/2018	
	Poland	31/12/2017	ECDC modelling tool	31/12/2017	Other data source	31/12/2017	Other data source	31/12/2018	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	31/12/2020	SPECTRUM estimate	31/12/2019	Other data source	31/12/2019	Other data source	31/12/2019	Other data source
	Slovakia	31/12/2020	ECDC modelling tool	31/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2020	Surveillance data
	Slovenia	13/12/2020	ECDC modelling tool	31/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2020	Cohort data
	Turkey								
East	Armenia	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020	
	Azerbaijan	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020	
	Belarus	31/12/2017	Other modelling tool or estimate	31/12/2020		31/12/2020		31/12/2020	
	Estonia	31/12/2017	Other modelling tool or estimate			31/12/2019			
	Georgia	31/12/2020	Other modelling tool or estimate	31/12/2020		31/12/2020		31/12/2020	
	Kazakhstan	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020	
	Kyrgyzstan		SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020	
	Latvia			31/12/2019	Surveillance data				
	Lithuania	31/12/2020	SPECTRUM estimate	31/12/2020	Surveillance data	31/12/2020	Surveillance data	31/12/2020	Surveillance data
	Moldova	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020	
	Russia	31/12/2020	SPECTRUM	31/12/2020		31/12/2020		31/12/2020	
	Tajikistan	31/12/2020	SPECTRUM estimate	31/12/2019		31/12/2020		31/12/2020	
	Turkmenistan								
	Ukraine	31/12/2020	Other modelling tool or estimate	31/12/2020		31/12/2020		31/12/2020	
Uzbekistan	31/12/2020	SPECTRUM estimate	31/12/2020		31/12/2020		31/12/2020		

## Annex 3. Continuum of care for people living with HIV in countries of Europe and Central Asia reported in 2021: exclusion of out-migration, deaths, and loss to follow-up

WHO Region	Country	Outmigration				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	
	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		

WHO Region	Country	Outmigration				Deaths				Loss to follow up			
		All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed
South East Europe	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		
	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 the countries of Europe and Central Asia: number of people and global substantive targets reported in 2020 and 2021

WHO Region	Country	2020							2021						
		All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV virally suppressed
West	Andorra														
	Austria	7480	7029	6380	4821	94%	85%	64%	7655	7209	6574	4873	94%	86%	64%
	Belgium	18335	16594	15238	14299	91%	83%	78%	19090	17090	15750	15312	90%	83%	80%
	Denmark	6750	6150	5670	5550	91%	84%	82%	6700	6100	5800	5700	91%	87%	85%
	Finland	2924	2750	2503	2464	94%	86%	84%	3265	3069	2907	2736	94%	89%	84%
	France	172700	148746	133400	126800	86%	77%	73%	178700	154600	147500	141400	87%	83%	79%
	Germany	87900	77300	71400	68000	88%	81%	77%	90700	79900	76800	74100	88%	85%	82%
	Greece	15980	13345	10618		84%	66%		16743	13788	11129		82%	66%	
	Iceland	296	291			98%			296	291	252	245	98%	85%	83%
	Ireland	7200	6500	5700	5400	90%	79%	75%	7200	6500	5700	5400	90%	79%	75%
	Israel	8039	7448	5087		93%	63%		8039	7448	5087		93%	63%	
	Italy	130000	124500	117000	102000	96%	90%	78%	137000	126000	119000	102000	92%	87%	74%
	Liechtenstein														
	Luxembourg	1176	1000	892	792	85%	76%	67%	1315	1118	999	820	85%	76%	62%
	Malta	453	340	340		75%	75%		740	555	555		75%	75%	
	Monaco	48	48	48	48	100%	100%	100%	48	48	48	48	100%	100%	100%
	Netherlands	23300	21360	19913	19046	92%	85%	82%	23700	21969	20478	19625	93%	86%	83%
	Norway	4455	4100	4020	3938	92%	90%	88%	4455	4100	4020	3938	92%	90%	88%
	Portugal	39820	36734	33163	30842	92%	83%	77%	41889	39778	33163	30842	95%	79%	74%
	San Marino	71		71			100%								
	Spain	151387	131774	128216	115907	87%	85%	77%	151387	131774	128216	115907	87%	85%	77%
Sweden	8971	8097	7943	7702	90%	89%	86%	8971	8097	7943	7702	90%	89%	86%	
Switzerland	16700	15500	15000	14800	93%	90%	89%	17100	15850	15600	15400	93%	91%	90%	
United Kingdom	103800	96142	93384	90583	93%	90%	87%	105248	98552	96866	93951	94%	92%	89%	
<b>Sub-total</b>	<b>783399</b>	<b>704664</b>	<b>660210</b>	<b>613290</b>	<b>90%</b>	<b>84%</b>	<b>78%</b>	<b>805163</b>	<b>722309</b>	<b>687919</b>	<b>640052</b>	<b>89%</b>	<b>85%</b>	<b>79%</b>	
Centre	Albania	1400	1034	611	323	74%	44%	23%	1433	1102	678	561	77%	62%	83%
	Bosnia & Herzegovina														
	Bulgaria	3100	3026	1445	1140	98%	47%	37%	3690	3084	1766	1200	84%	47%	37%
	Croatia	1648	1414	1263	1225	86%	77%	74%	1700	1429	1262	1229	84%	77%	74%
	Cyprus	965	863			89%			1293	863	598		67%		

WHO Region	Country	2020							2021							
		All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV virally suppressed	All PLHIV	Diagnosed	Treated	Virally suppressed	% of PLHIV who are diagnosed	% of PLHIV who are on ART	% of PLHIV virally suppressed	
East	Czechia	3277	2782	2481	2383	85%	76%	73%	3503	2948	2690	2625	84%	76%	73%	
	Hungary		3615						7205	3615			50%			
	Kosovo			36												
	Montenegro	368	243	181	170	66%	49%	46%	392	201	196	121	51%	49%	46%	
	North Macedonia	383	246	198	191	64%	52%	50%	404	263	231	195	65%	52%	50%	
	Poland	15166	12385	10496	10052	82%	69%	66%	18923	15899	13381		84%	69%	66%	
	Romania	18000	16486	12644	8064	92%	70%	45%	19415	16848	12904	6336	87%	66%	33%	
	Serbia	3200	2800	2100	1900	88%	66%	59%	3341	2911	2172		87%	66%	59%	
	Slovakia	1041	833	650	520	80%	62%	50%	1041	833	650	520	80%	62%	50%	
	Slovenia	809	704	649	626	87%	80%	77%	806	730	708	677	91%	80%	77%	
	Turkey															
	<b>Sub-total</b>	<b>30026</b>	<b>26768</b>	<b>20122</b>	<b>14642</b>	<b>89%</b>	<b>67%</b>	<b>49%</b>	<b>32384</b>	<b>27438</b>	<b>21085</b>	<b>13464</b>	<b>87%</b>	<b>67%</b>	<b>43%</b>	
	East	Armenia	3500	2700	2200	1900	75%	63%	54%	4771	3193	2305	1898	67%	63%	54%
Azerbaijan		9700	6800	5100	4100	70%	53%	42%	9937	7302	5618	4815	73%	53%	42%	
Belarus		26000	22084	17714	13575	85%	68%	52%	28315	22855	18765	16804	81%	68%	52%	
Estonia		6855		4482			65%		6855	5939	4482		87%	65%		
Georgia		9300	5954	5098	4621	64%	55%	50%	8358	6357	5442	5435	76%	55%	50%	
Kazakhstan		33427	25753	17535	14080	77%	52%	42%	35201	27485	20176	16946	78%	52%	42%	
Kyrgyzstan		10129	6458	4058	3328	62%	40%	33%	9222	7050	4442	3974	76%	40%	33%	
Latvia			5836							5836						
Lithuania		3397	2827	1223	920	83%	36%	27%	3558	2911	1248	967	82%	36%	27%	
Moldova		14589	9407	6690	5602	64%	46%	38%	14474	9679	6810	5913	67%	46%	38%	
Russia		998525	808823	319613	271671	81%	32%	27%	1000000	794220	615099	587870	79%	32%	27%	
Tajikistan		13771	8756	7055	5152	63%	51%	37%	14246	9459	7960	6850	66%	51%	37%	
Turkmenistan																
Ukraine		251168	169787	136105	12787	68%	54%	51%	257548	176871	146488	137196	69%	54%	51%	
Uzbekistan		49676	42556	28643		86%	58%		57555	43606	31021	17530	76%	58%	30%	
<b>Sub-total</b>	<b>1373506</b>	<b>808823</b>	<b>522391</b>	<b>324949</b>	<b>59%</b>	<b>38%</b>	<b>24%</b>	<b>1385630</b>	<b>1067382</b>	<b>834353</b>	<b>788668</b>	<b>77%</b>	<b>60%</b>	<b>56%</b>		
<b>Total</b>	<b>2186931</b>	<b>1540255</b>	<b>1202723</b>	<b>952881</b>	<b>70%</b>	<b>55%</b>	<b>44%</b>	<b>2223177</b>	<b>1817129</b>	<b>1543357</b>	<b>1442184</b>	<b>82%</b>	<b>69%</b>	<b>64%</b>		

## Annex 5. Continuum of care for MSM living with HIV in the countries of Europe and Central Asia: number of people and targets reported in 2021

WHO Region	Country	Number of MSMLHIV	Number of MSMLHIV who are diagnosed	Number of MSMLHIV receiving ART	Number of MSMLHIV 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 on ART	% of MSMLHIV virally suppressed
West	Andorra										
	Austria	3306	3148	2910	2120	95%	92%	73%	95%	88%	64%
	Belgium		5977	5171	5022		87%	97%			
	Denmark										
	Finland	1084	1035			95%			95%		
	France	64900	55800	50500	48900	86%	91%	97%	86%	78%	75%
	Germany	60000	52000	49000	44000	87%	94%	90%	87%	82%	73%
	Greece	8056	7142	6527		89%	91%		89%	81%	
	Iceland		103	102	99		99%	97%			
	Ireland										
	Israel	2038	1941			95%			95%		
	Italy	48458	40678	36081	33339	84%	89%	92%	84%	74%	69%
	Liechtenstein										
	Luxembourg	465	396	363	334	85%	92%	92%	85%	78%	72%
	Malta	529	450	414	361	85%	92%	87%	85%	78%	68%
	Monaco	47									
	Netherlands	14400	13613	12915	12499	95%	95%	97%	95%	90%	87%
	Norway										
	Portugal	10168	9567			94%			94%		
	San Marino										
Spain	61292	51718	49856	46067	84%	96%	92%	84%	81%	75%	
Sweden		2319	2291	2134		99%	93%				
Switzerland	7700	7100	7000	6900	92%	99%	99%	92%	91%	90%	
United Kingdom	50299	45692	45086	44184	91%	99%	98%	91%	90%	88%	
Centre	Albania										
	Bosnia & Herzegovina										
	Bulgaria	1122	1122	789	614	100%	70%	78%	100%	70%	55%
	Croatia										
	Cyprus	448	387			86%			86%		
	Czechia	2324	2142	1998	1966	92%	93%	98%	92%	86%	85%
	Hungary		2029								
	Kosovo										



WHO Region	Country	Number of MSMLHIV	Number of MSMLHIV who are diagnosed	Number of MSMLHIV receiving ART	Number of MSMLHIV 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 on ART	% of MSMLHIV virally suppressed
	Montenegro										
	North Macedonia	338	181	165	134	54%	91%	81%	54%	49%	40%
	Poland	6601	4851	4509	4400	73%	93%	98%	73%	68%	67%
	Romania		1660	1577	1103		95%	70%			
	Serbia			335							
	Slovakia	645	490	351		76%	72%		76%	54%	
	Slovenia										
	Turkey										
East	Armenia										
	Azerbaijan	23900	246			1%			1%		
	Belarus	4621	4621	1000	900	100%	22%	90%	100%	22%	19%
	Estonia										
	Georgia	2340	932	777	710	40%	83%	91%	40%	33%	30%
	Kazakhstan	4092	1078	886	668	26%	82%	75%	26%	22%	16%
	Kyrgyzstan	1447	242	172	143	17%	71%	83%	17%	12%	10%
	Latvia										
	Lithuania										
	Moldova	1186									
	Russia										
	Tajikistan		59	48	36		81%	75%			
	Turkmenistan										
	Ukraine	11248	3004	2342	2030	27%	78%	87%	27%	21%	18%
	Uzbekistan										
	<b>Total</b>	<b>348788</b>	<b>345482</b>	<b>288768</b>	<b>266763</b>	<b>250269</b>	<b>84%</b>	<b>92%</b>	<b>94%</b>	<b>84%</b>	<b>77%</b>

\* Sub-totals and totals for numbers and 90-81-73 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 6. Continuum of care for PWID living with HIV in the countries of Europe and Central Asia: number of people and targets reported, reported in 2021

WHO Region	Country	Number of PWID/HIV	Number of PWID/HIV who are diagnosed	Number of PWID/HIV receiving ART	Number of PWID/HIV virally suppressed	90-90-90 targets			90-81-73 targets		
						% of PWID/HIV who are diagnosed	% of diagnosed PWID/HIV on ART	% on ART who are virally suppressed	% of PWID/HIV who are diagnosed	% of PWID/HIV on ART	% of PWID/HIV who are virally suppressed
West	Andorra										
	Austria	1007	998	901	657	99%	90%	73%	99%	89%	65%
	Belgium										
	Denmark										
	Finland										
	France	11900	11600	10500	10000	97%	91%	95%	97%	88%	84%
	Germany										
	Greece	2219	1828	1378		82%	75%		82%	62%	
	Iceland		49	46	42		94%	91%			
	Ireland										
	Israel										
	Italy	26481	25384	21653	18296	96%	85%	84%	96%	82%	69%
	Liechtenstein										
	Luxembourg	132	112	101	76	85%	90%	75%	85%	77%	58%
	Malta			11							
	Monaco										
	Netherlands										
	Norway										
	Portugal	9746	9632			99%			99%		
	San Marino										
Spain	21282	20848	20556	18131	98%	99%	88%	98%	97%	85%	
Sweden		397	373	336		94%	90%				
Switzerland		904	889	877		98%	99%				
United Kingdom	2300	1864	1784	1659	81%	96%	93%	81%	78%	72%	
Centre	Albania										
	Bosnia & Herzegovina										
	Bulgaria		237	130	75		55%	58%			
	Croatia										
	Cyprus										
	Czechia	140	88	70	61	63%	80%	87%	63%	50%	44%
	Hungary		28								
	Kosovo										

WHO Region	Country	Number of PWIDLHIV	Number of PWIDLHIV who are diagnosed	Number of PWIDLHIV receiving ART	Number of PWIDLHIV virally suppressed	90-90-90 targets			90-81-73 targets		
						% of PWIDLHIV who are diagnosed	% of diagnosed PWIDLHIV on ART	% on ART who are virally suppressed	% of PWIDLHIV who are diagnosed	% of PWIDLHIV on ART	% of PWIDLHIV who are virally suppressed
	Montenegro										
	North Macedonia										
	Poland	5528	5373	2555	2376	97%	48%	93%	97%	46%	43%
	Romania	2034	1261	650	331	62%	52%	51%	62%	32%	16%
	Serbia										
	Slovakia										
	Slovenia										
	Turkey										
East	Armenia										
	Azerbaijan	60250	3225			5%			5%		
	Belarus	11235	11235	7286		100%	65%		100%	65%	
	Estonia										
	Georgia	1900	1833	1530	1362	96%	83%	89%	96%	81%	72%
	Kazakhstan	10113	7851	6786	4979	78%	86%	73%	78%	67%	49%
	Kyrgyzstan	2452	2133	989	865	87%	46%	87%	87%	40%	35%
	Latvia										
	Lithuania										
	Moldova	1946									
	Russia										
	Tajikistan		2006	1206	800		60%	66%			
	Turkmenistan										
	Ukraine	96486	42073	26994	20908	44%	64%	77%	44%	28%	22%
Uzbekistan											
	<b>Total</b>	<b>181755</b>	<b>121418</b>	<b>95069</b>	<b>79701</b>	<b>67%</b>	<b>78%</b>	<b>84%</b>	<b>67%</b>	<b>52%</b>	<b>44%</b>

\* Sub-totals and totals for numbers and 90-81-73 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 7. Continuum of care for migrants living with HIV in the countries of Europe and Central Asia: number of people and targets reported, reported in 2021

WHO Region	Country	Number of MLHIV	Number of MLHIV diagnosed	Number of MLHIV receiving ART	Number of MLHIV virally suppressed	90-90-90 targets			90-81-73 targets		
						% of MLHIV diagnosed	% of diagnosed MLHIV on ART	% on ART virally suppressed	% of MLHIV diagnosed	% of MLHIV on ART	% of MLHIV virally suppressed
West	Andorra										
	Austria	3074	2795	2512	1722	91%	90%	69%	91%	82%	56%
	Belgium										
	Denmark										
	Finland										
	France										
	Germany		13000								
	Greece	5089	3086	1962		61%	64%		61%	39%	
	Iceland		117	115	110		98%	96%			
	Ireland										
	Israel										
	Italy										
	Liechtenstein										
	Luxembourg	958	814	727	589	85%	89%	81%	85%	76%	61%
	Malta			204							
	Monaco										
	Netherlands										
	Norway										
	Portugal	11119	10043			90%			90%		
	San Marino										
Spain											
Sweden		4692	4510	4175		96%	93%				
Switzerland		2182	2149	2108		98%	98%				
United Kingdom	27100	25548	24015	19728	94%	94%	82%	94%	89%	73%	
Centre	Albania										
	Bosnia & Herzegovina										
	Bulgaria										
	Croatia										
	Cyprus										
	Czechia	793	630	535	511	79%	85%	96%	79%	67%	64%
	Hungary										
	Kosovo										

WHO Region	Country	Number of MLHIV	Number of MLHIV diagnosed	Number of MLHIV receiving ART	Number of MLHIV virally suppressed	90-90-90 targets			90-81-73 targets		
						% of MLHIV diagnosed	% of diagnosed MLHIV on ART	% on ART virally suppressed	% of MLHIV diagnosed	% of MLHIV on ART	% of MLHIV virally suppressed
	Montenegro										
	North Macedonia										
	Poland										
	Romania										
	Serbia										
	Slovakia										
	Slovenia										
	Turkey										
East	Armenia										
	Azerbaijan										
	Belarus										
	Estonia										
	Georgia										
	Kazakhstan										
	Kyrgyzstan										
	Latvia										
	Lithuania										
	Moldova										
	Russia										
	Tajikistan										
	Turkmenistan										
	Ukraine										
Uzbekistan											
Total		31925	29787	27789	22550	93%	93%	81%	93%	87%	71%

\* Sub-totals and totals for numbers and 90-81-73 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 8. Continuum of care for sex workers living with HIV in the countries of Europe and Central Asia: number of people and targets reported, reported in 2021

WHO Region	Country	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 on ART	% on ART who are virally suppressed	% of SWLHIV who are diagnosed	% of SWLHIV on ART	% of SWLHIV who are virally suppressed
West	Andorra										
	Austria										
	Belgium										
	Denmark										
	Finland										
	France										
	Germany										
	Greece										
	Iceland										
	Ireland										
	Israel										
	Italy										
	Liechtenstein										
	Luxembourg	21	18	16	9	86%	89%	56%	86%	76%	43%
	Malta										
	Monaco										
	Netherlands										
	Norway										
	Portugal										
	San Marino										
	Spain										
Sweden											
Switzerland											
United Kingdom											
Centre	Albania										
	Bosnia & Herzegovina										
	Bulgaria										
	Croatia										
	Cyprus										
	Czechia										
	Hungary										
	Kosovo										

WHO Region	Country	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 on ART	% on ART who are virally suppressed	% of SWLHIV who are diagnosed	% of SWLHIV on ART	% of SWLHIV who are virally suppressed
	Montenegro										
	North Macedonia										
	Poland										
	Romania										
	Serbia										
	Slovakia										
	Slovenia										
	Turkey										
East	Armenia										
	Azerbaijan										
	Belarus	2234	2234	200	150	100%	100%	75%	100%	9%	7%
	Estonia										
	Georgia										
	Kazakhstan	350	284	188	141	81%	66%	75%	81%	54%	40%
	Kyrgyzstan	158	103	45	35	65%	44%	78%	65%	28%	22%
	Latvia										
	Lithuania										
	Moldova	736									
	Russia										
	Tajikistan		163	137	85		84%	62%			
	Turkmenistan										
	Ukraine	9338									
Uzbekistan											
Total		2763	2639	449	335	95%	17%	74%	95%	16%	12%

\* Sub-totals and totals for numbers and 90-81-73 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 9. Continuum of care for prisoners living with HIV in the countries of Europe and Central Asia: number of people and targets reported, reported in 2021

WHO Region	Country	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		218								
	Belgium										
	Denmark										
	Finland										
	France										
	Germany										
	Greece										
	Iceland										
	Ireland										
	Israel										
	Italy										
	Liechtenstein										
	Luxembourg	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		63	58			92%				
	Croatia										
	Cyprus										
	Czechia										
	Hungary										
	Kosovo										



WHO Region	Country	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
	Montenegro										
	North Macedonia										
	Poland										
	Romania	617	495	390	40	80%	79%	10%	80%	63%	6%
	Serbia										
	Slovakia										
	Slovenia										
	Turkey										
East	Armenia										
	Azerbaijan		417	383			92%				
	Belarus	1800	1800	1008	800	100%	56%	79%	100%	56%	44%
	Estonia		254	251			99%				
	Georgia		100	100	91		100%	91%			
	Kazakhstan	1290	1290	1136	753	100%	88%	66%	100%	88%	58%
	Kyrgyzstan		193	186	135		96%	73%			
	Latvia										
	Lithuania	300	298	92	78	99%	31%	85%	99%	31%	26%
	Moldova		292	257			88%				
	Russia										
	Tajikistan		156	152	90		97%	59%			
	Turkmenistan										
	Ukraine	3901	3901	3601	2687	100%	92%	69%	100%	92%	69%
Uzbekistan											
Total		7939	7811	6249	4380	98%	82%	70%	97%	64%	40%

\* Sub-totals and totals for numbers and 90-81-73 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 10. Number of people with transmissible levels of virus in the countries of Europe and Central Asia: reported in 2021

WHO Region	Country	All PLHIV	Number undiagnosed	Number untreated	Number not virally suppressed	Total with transmissible levels of virus	Proportion of all PLHIV with transmissible virus	Proportion undiagnosed	Proportion untreated	Proportion not virally suppressed
West	Austria	7655	446	635	1701	2782	36%	16%	23%	61%
	Belgium	19090	2000	1340	438	3778	20%	53%	35%	12%
	Denmark	6700	600	300	100	1000	15%	60%	30%	10%
	Finland	3265	196	162	171	529	16%	37%	31%	32%
	France	178700	24100	7100	6100	37300	21%	65%	19%	16%
	Germany	90700	10800	3100	2700	16600	18%	65%	19%	16%
	Iceland	296	5	39	7	51	17%	10%	76%	14%
	Ireland	7200	700	800	300	1800	25%	39%	44%	17%
	Italy	137000	11000	7000	17000	35000	26%	31%	20%	49%
	Luxembourg	1315	197	119	179	495	38%	40%	24%	36%
	Malta	740	185	0	257	442	60%	42%	0%	58%
	Netherlands	23700	1731	1491	853	4075	17%	42%	37%	21%
	Norway	4455	355	80	82	517	12%	69%	15%	16%
	Portugal	41889	2111	6615	2321	11047	26%	19%	60%	21%
	Spain	151387	19613	3558	12309	35480	23%	55%	10%	35%
	Sweden	8971	874	154	241	1269	14%	69%	12%	19%
	Switzerland	17100	1250	250	200	1700	10%	74%	15%	12%
United Kingdom	105248	6696	1686	2915	11297	11%	59%	15%	26%	
	<b>Subtotal</b>	<b>805411</b>	<b>82859</b>	<b>34429</b>	<b>47874</b>	<b>165162</b>	<b>21%</b>	<b>50%</b>	<b>21%</b>	<b>29%</b>
Centre	Albania	1433	331	424	117	872	61%	38%	49%	13%
	Bulgaria	3690	606	1318	566	2490	67%	24%	53%	23%
	Croatia	1700	271	167	33	471	28%	58%	35%	7%
	Czechia	3503	555	258	65	878	25%	63%	29%	7%
	Montenegro	392	191	5	75	271	69%	70%	2%	28%
	North Macedonia	404	141	32	36	209	52%	67%	15%	17%
	Romania	19415	2567	3944	6568	13079	67%	20%	30%	50%
	Slovakia	1041	208	183	130	521	50%	40%	35%	25%
	Slovenia	806	76	22	31	129	16%	59%	17%	24%
		<b>Subtotal</b>	<b>32384</b>	<b>4946</b>	<b>6353</b>	<b>7621</b>	<b>18920</b>	<b>58%</b>	<b>26%</b>	<b>34%</b>
East	Armenia	4771	1578	888	407	2873	60%	55%	31%	14%
	Azerbaijan	9937	2635	1684	803	5122	52%	51%	33%	16%
	Belarus	28315	5460	4090	1961	11511	41%	47%	36%	17%
	Georgia	8358	2001	915	7	2923	35%	68%	31%	0%
	Kazakhstan	35201	7716	7309	3230	18255	52%	42%	40%	18%
	Kyrgyzstan	9222	2172	2608	468	5248	57%	41%	50%	9%
	Lithuania	3558	647	1663	281	2591	73%	25%	64%	11%
	Moldova	14474	4795	2869	897	8561	59%	56%	34%	10%
	Russia	1000000	205780	179121	27229	412130	41%	50%	43%	7%
	Tajikistan	14246	4787	1499	1110	7396	52%	65%	20%	15%
	Ukraine	257548	80677	30383	9292	120352	47%	67%	25%	8%
	Uzbekistan	57555	13949	12585	13491	40025	70%	35%	31%	34%
	<b>Subtotal</b>	<b>1443185</b>	<b>332197</b>	<b>245614</b>	<b>59176</b>	<b>636987</b>	<b>44%</b>	<b>52%</b>	<b>39%</b>	<b>9%</b>
<b>Total</b>		<b>2280980</b>	<b>420002</b>	<b>286396</b>	<b>114671</b>	<b>821069</b>	<b>36%</b>	<b>51%</b>	<b>35%</b>	<b>14%</b>

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