



Monitoring the response to hepatitis and HIV in Europe and Central Asia: Are we on track to reach agreed targets?

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European Centre for Disease Prevention and Control (ECDC)

HepHIV 2019 Bucharest Conference: Challenges of Timely and Integrated Testing and Care

Bucharest, 28-30 January, 2019

Disclosure

Employed by ECDC

No conflicts to disclose



Outline



- What are the targets for ‘eliminating viral hepatitis’ and ‘ending AIDS’ by 2030?
- Are we on track to meet these targets?
- Conclusions



Sustainable Development Goals and communicable diseases



Goal 3. Ensure healthy lives and promote well-being for all at all ages

*3.3 By 2030, end the epidemics of **AIDS**, tuberculosis, malaria and neglected tropical diseases and combat **hepatitis**, water-borne diseases and other communicable diseases.*

Hepatitis



WHAT IS HEPATITIS ?

Hepatitis virus causes infection and inflammation of the liver

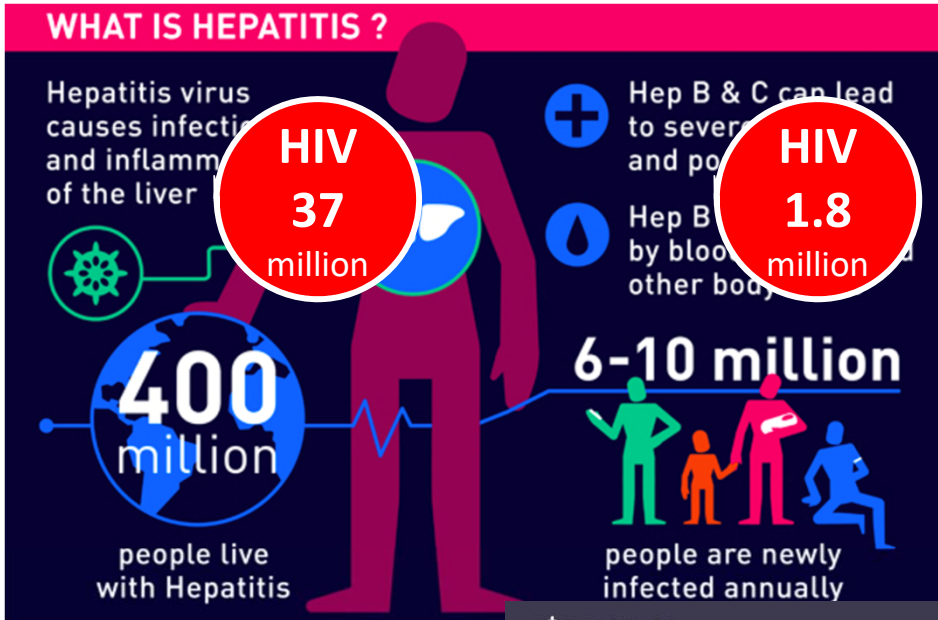
HIV 37 million

HIV 1.8 million

400 million people live with Hepatitis

6-10 million people are newly infected annually

- Hep B & C can lead to severe liver disease and possible liver failure
- Hep B is transmitted by blood and other body fluids



WORLD HEPATITIS DAY | JULY 28th

World Health Organization

KNOW HEPATITIS ACT NOW

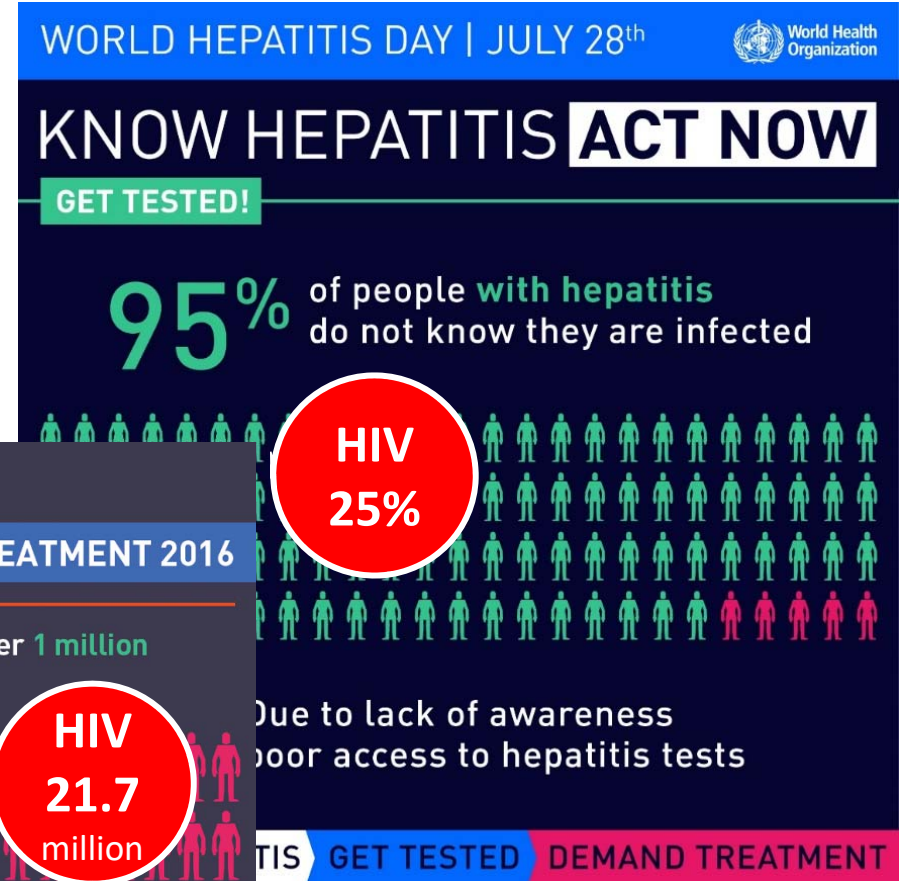
GET TESTED!

95% of people with hepatitis do not know they are infected

HIV 25%

Due to lack of awareness and poor access to hepatitis tests

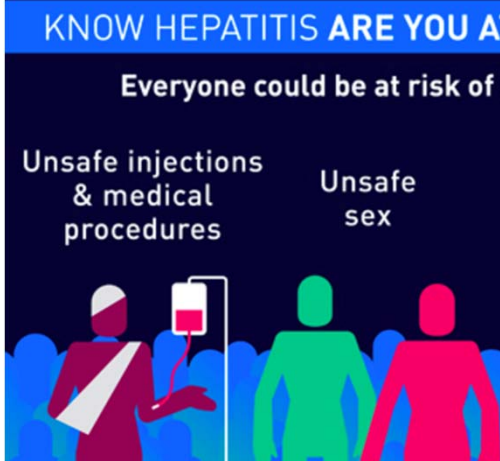
GET TESTED DEMAND TREATMENT



KNOW HEPATITIS ARE YOU AWARE?

Everyone could be at risk of hepatitis

- Unsafe injections & medical procedures
- Unsafe sex

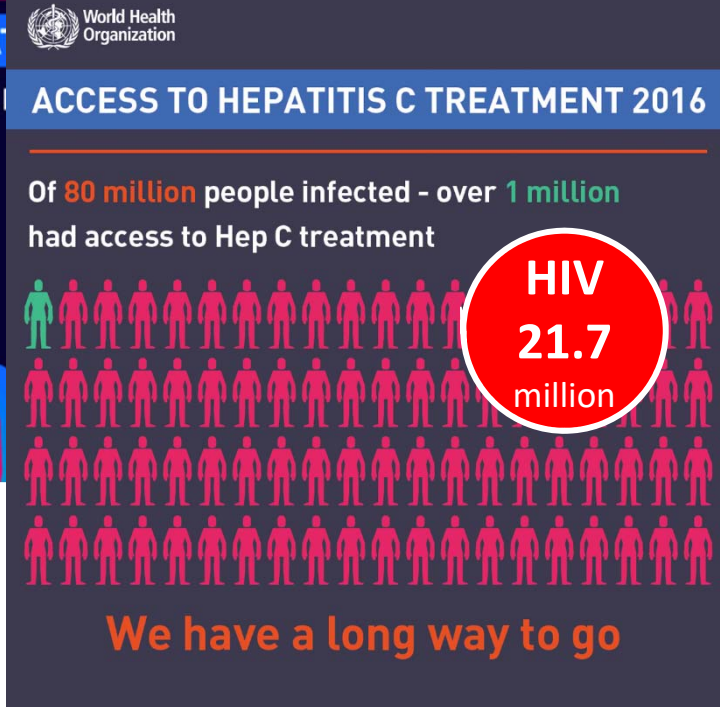


ACCESS TO HEPATITIS C TREATMENT 2016

Of **80 million** people infected - over **1 million** had access to Hep C treatment

HIV 21.7 million

We have a long way to go



What are the global targets for viral hepatitis?



JUNE 2016

GLOBAL HEALTH SECTOR STRATEGY ON VIRAL HEPATITIS 2016–2021

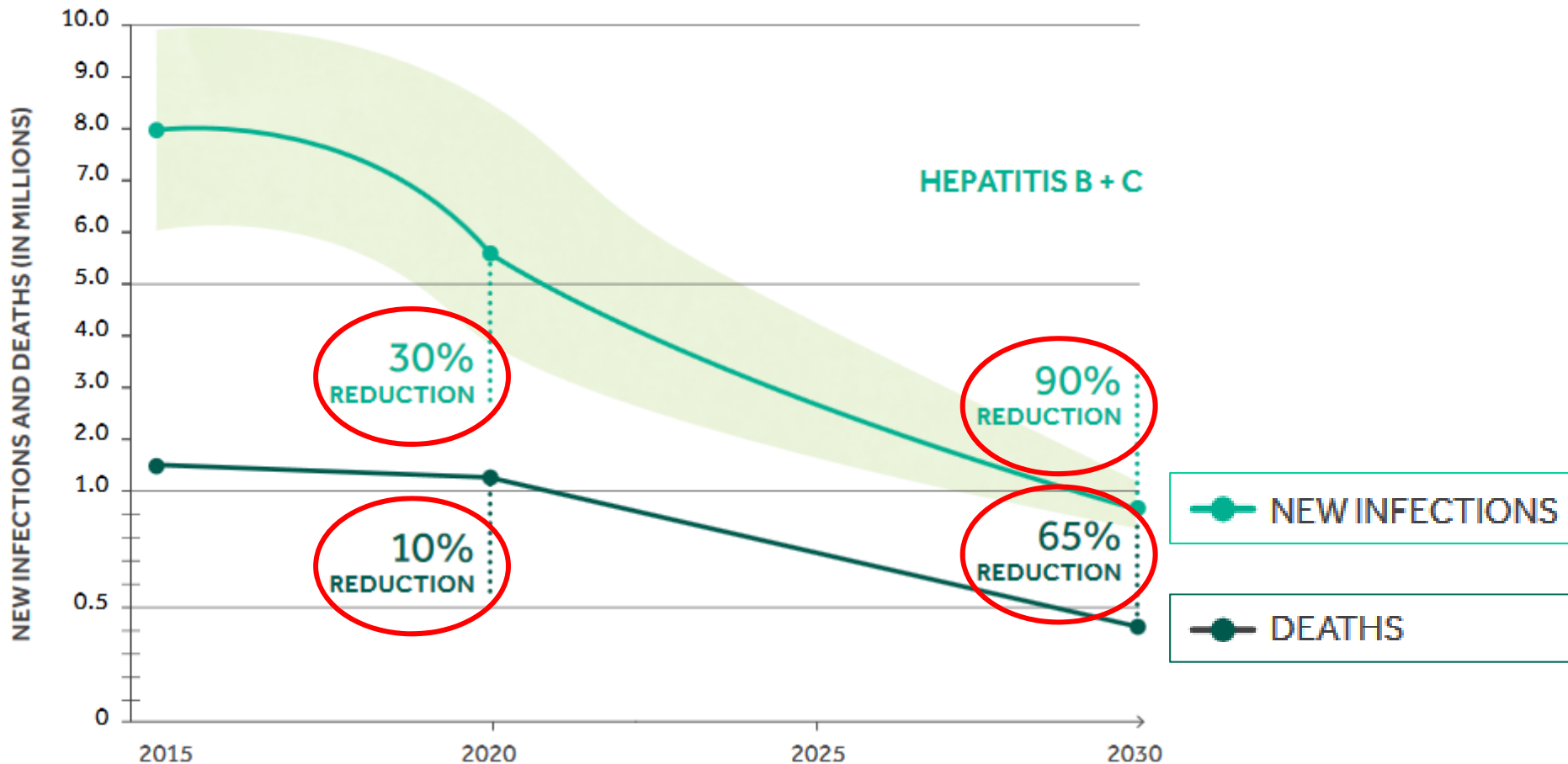
TOWARDS ENDING VIRAL HEPATITIS



Action plan for the health sector response to viral hepatitis in the WHO European Region



Impact targets that would eliminate HBV and HCV by 2030: incidence and mortality



Service coverage targets that would eliminate HBV and HCV by 2030



Target areas		Baseline 2015	2020 target	2030 target		
Service coverage	Prevention					
	1	Three-dose hepatitis B vaccine for infants (coverage %)	82%	90%	90%	
	2	Prevention of mother-to-child transmission of HBV: hepatitis B birth-dose vaccination or other approaches (coverage %)	38%	50%	90%	
	3	Blood and injection safety (coverage %)	Blood safety: donations screened with quality assurance	89%	95%	100%
			Injection safety: use of engineered devices	5%	50%	90%
	4	Harm reduction (sterile syringe/needle set distributed per person per year for people who inject drugs [PWID])	20	200	300	
	5	Treatment	5a. Diagnosis of HBV and HCV (coverage %)	<5%	30%	90%
5b. Treatment of HBV and HCV (coverage %)			<1%	5 million (HBV) 3 million (HCV)	80% eligible treated	



Will Europe achieve these targets for hepatitis?



?



Monitoring of hepatitis B & C in the EU/EEA



- 1st European monitoring system for hepatitis B & C rolled out 14th Dec 2018
- Focus on **prevention**, **testing** and **treatment**
- Deadline for reporting **30th January 2019**
- Preliminary results at EASL in April 2019
- Report launched in June 2019

European Hepatitis B and C Monitoring 2018

Fields marked with * are mandatory.



A Introduction

On the request of the European Commission and with the collaboration of the ECDC hepatitis network, ECDC has developed a tool to monitor the response to hepatitis B and C in the EU/EEA. This monitoring tool is aligned with the targets and milestones in the WHO European Action plan and the monitoring and evaluation framework developed by WHO. This framework supports efforts to monitor progress towards the WHO Global Health Sector Strategy on Viral Hepatitis as well as the Sustainable Development Goals.

The main aims of this monitoring system are:

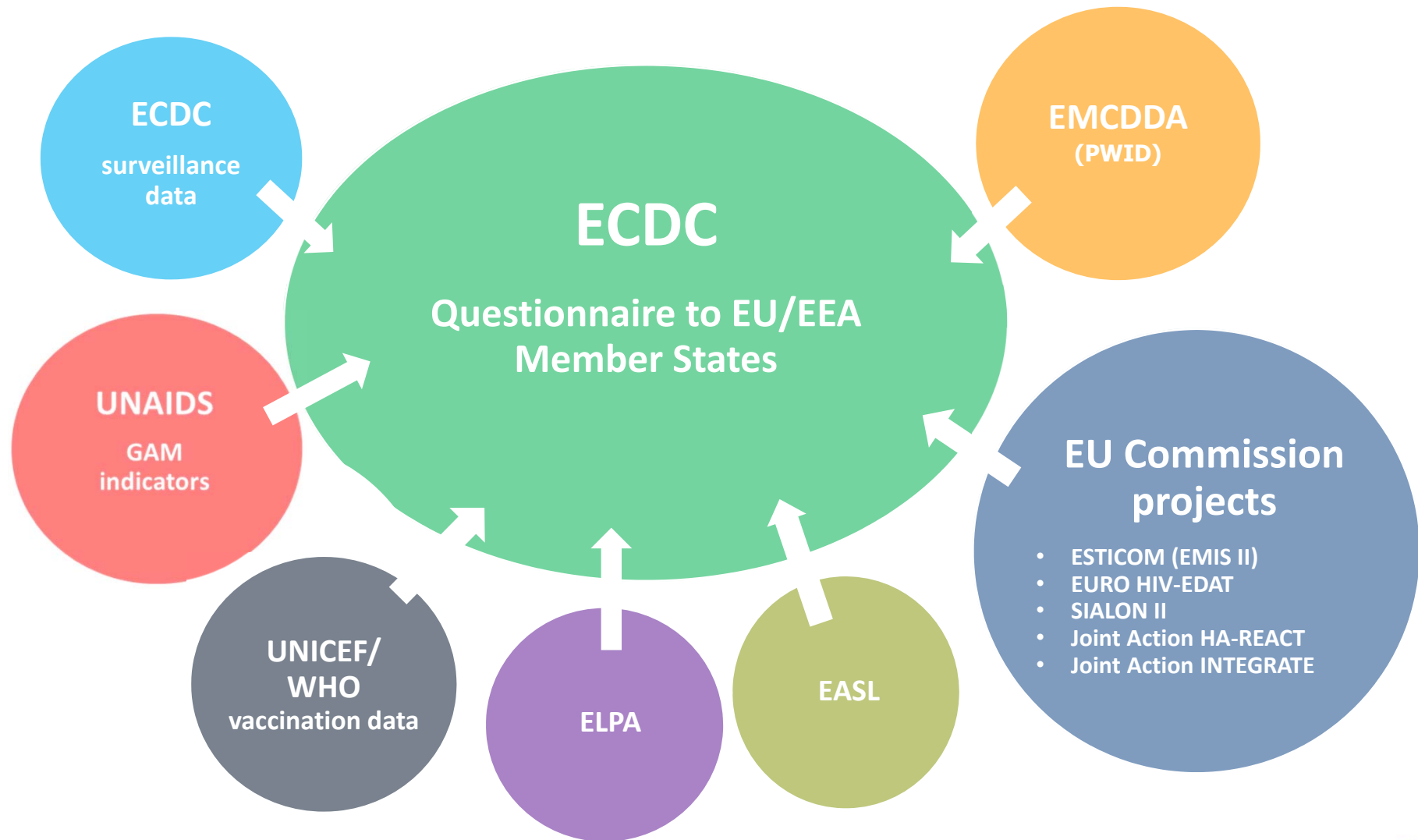
- to support EU/EEA Member States in monitoring their responses to tackling the epidemics of hepatitis B and C in a standardized, high quality and comparable manner;
- to provide an overview of the response to hepatitis B and C in the EU/EEA and support national and EU-level efforts in achieving their eventual goal of elimination.

The monitoring system will utilise data from existing data sources wherever possible to reduce the reporting burden on countries. However, mapping of the indicators and potential sources of data has identified significant gaps in the availability of data for several areas and to fill these gaps we propose the direct collection of the best available data from national authorities using this standardised questionnaire.

Please see the general instructions in the next section for information on completing the questionnaire.

Monitoring of hepatitis B & C in the EU/EEA

Data sources



HIV



Global targets for 'ending the AIDS epidemic' by 2030





By 2030
(SDG targets)



- ✓ Zero new infections
- ✓ Zero AIDS deaths
- ✓ Zero discrimination

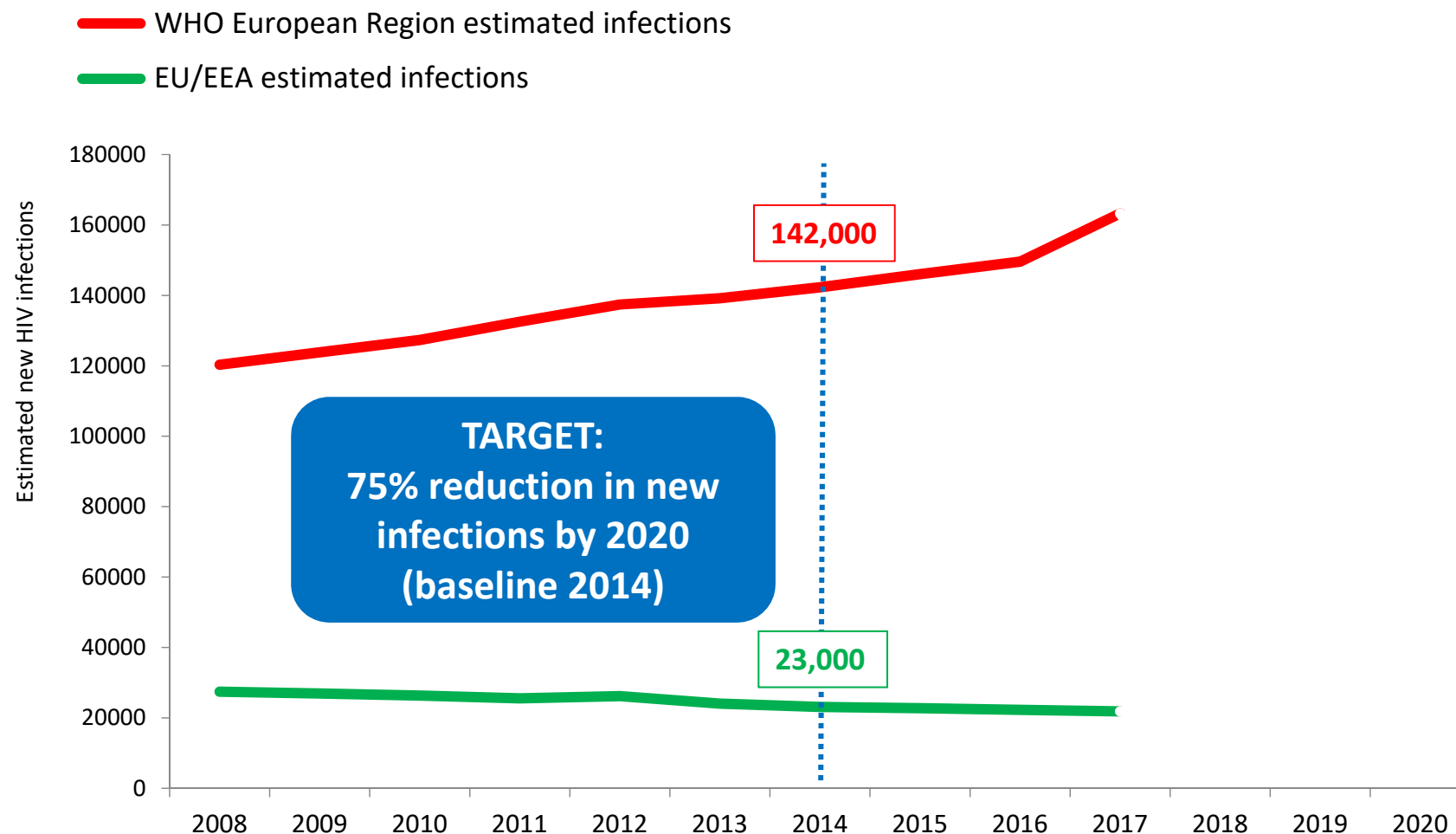
Global targets for 'ending the AIDS epidemic' by 2030



By 2020 (Fast-track targets) 	By 2030 (SDG targets) 
✓ To reduce new HIV infections to fewer than 500 000 by 2020	✓ Zero new infections
✓ To reduce AIDS-related death to fewer than 500 000 by 2020	✓ Zero AIDS deaths
✓ To eliminate HIV-related stigma and discrimination by 2020	✓ Zero discrimination

Are we on track to end AIDS?

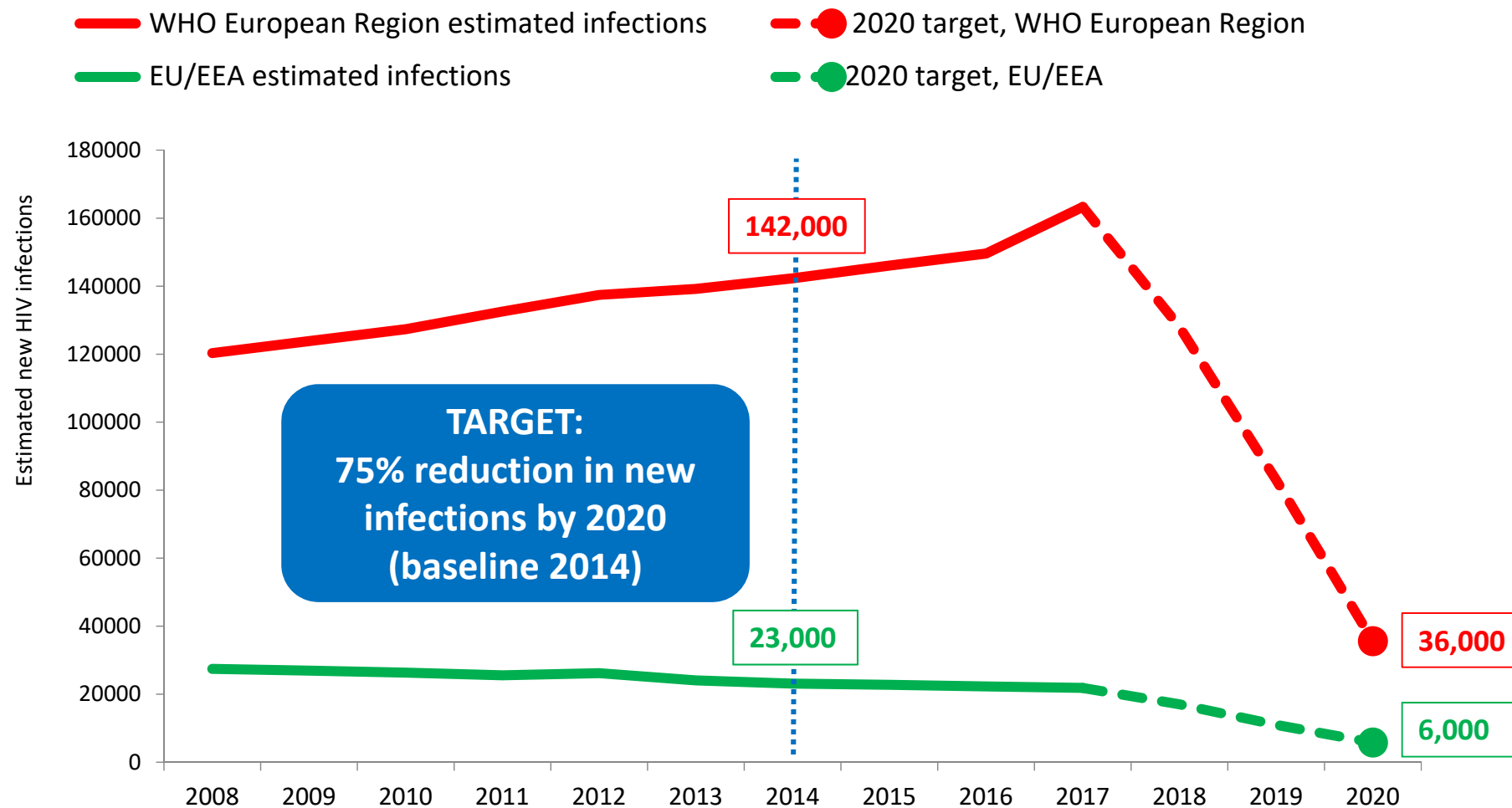
Incidence



Source: UNAIDS 2018, ECDC/WHO, HIV Surveillance in Europe 2018, 2017 data

Are we on track to end AIDS?

Incidence



Source: UNAIDS 2018, ECDC/WHO, HIV Surveillance in Europe 2018, 2017 data

Are we on track to end AIDS?

90-90-90 treatment targets



Target 1

90%

of all



living with HIV

DIAGNOSED

Target 2

90%

of all



diagnosed with HIV

ON ART

Target 3

90%

of all



on ART

**VIRALLY
SUPPRESSED**

Overall target

73%

=

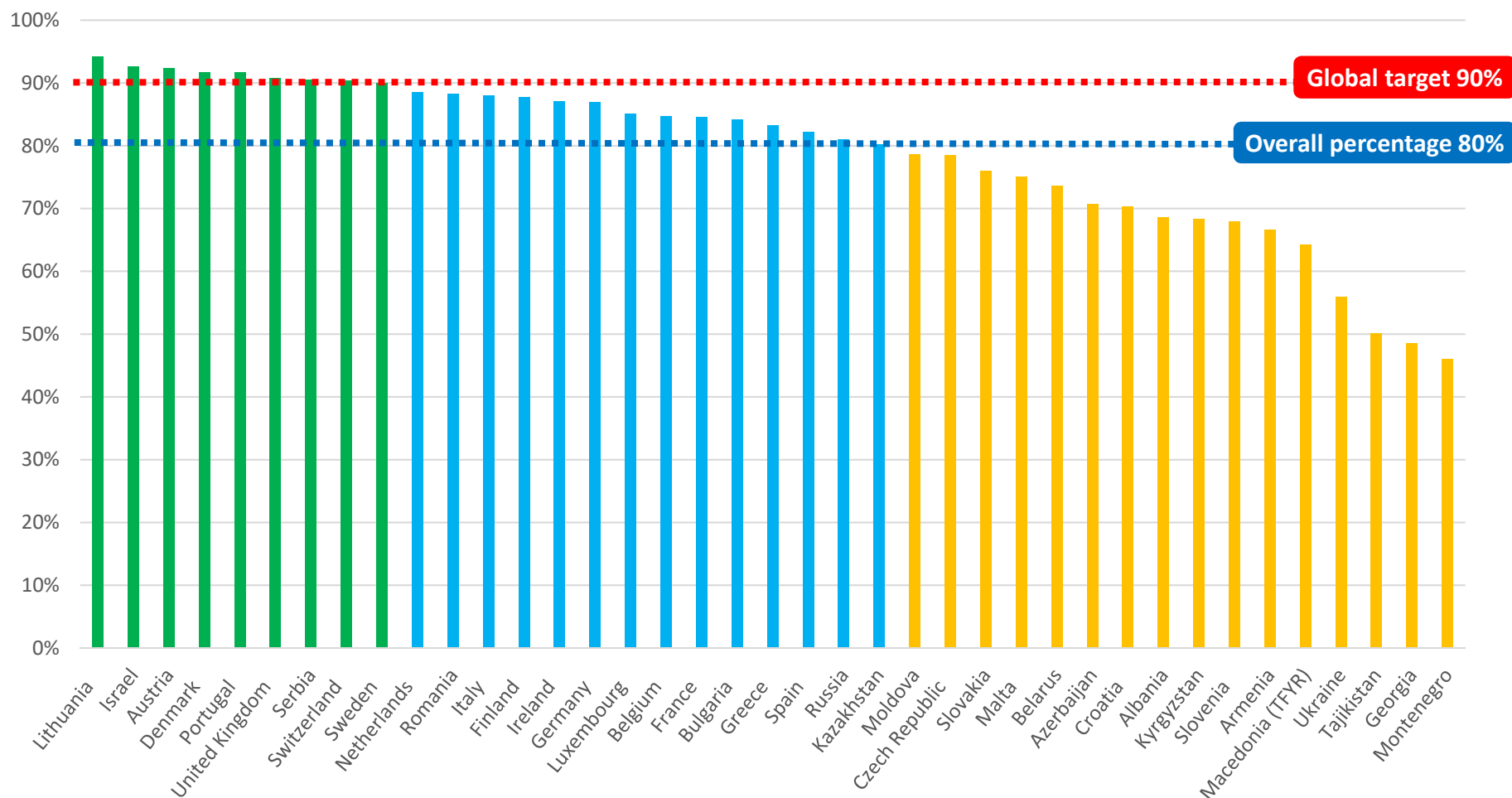
of all people living
with HIV

**VIRALLY
SUPPRESSED**

Progress toward achieving the 1st 90: 90% of all PLHIV who know their status (n=39)



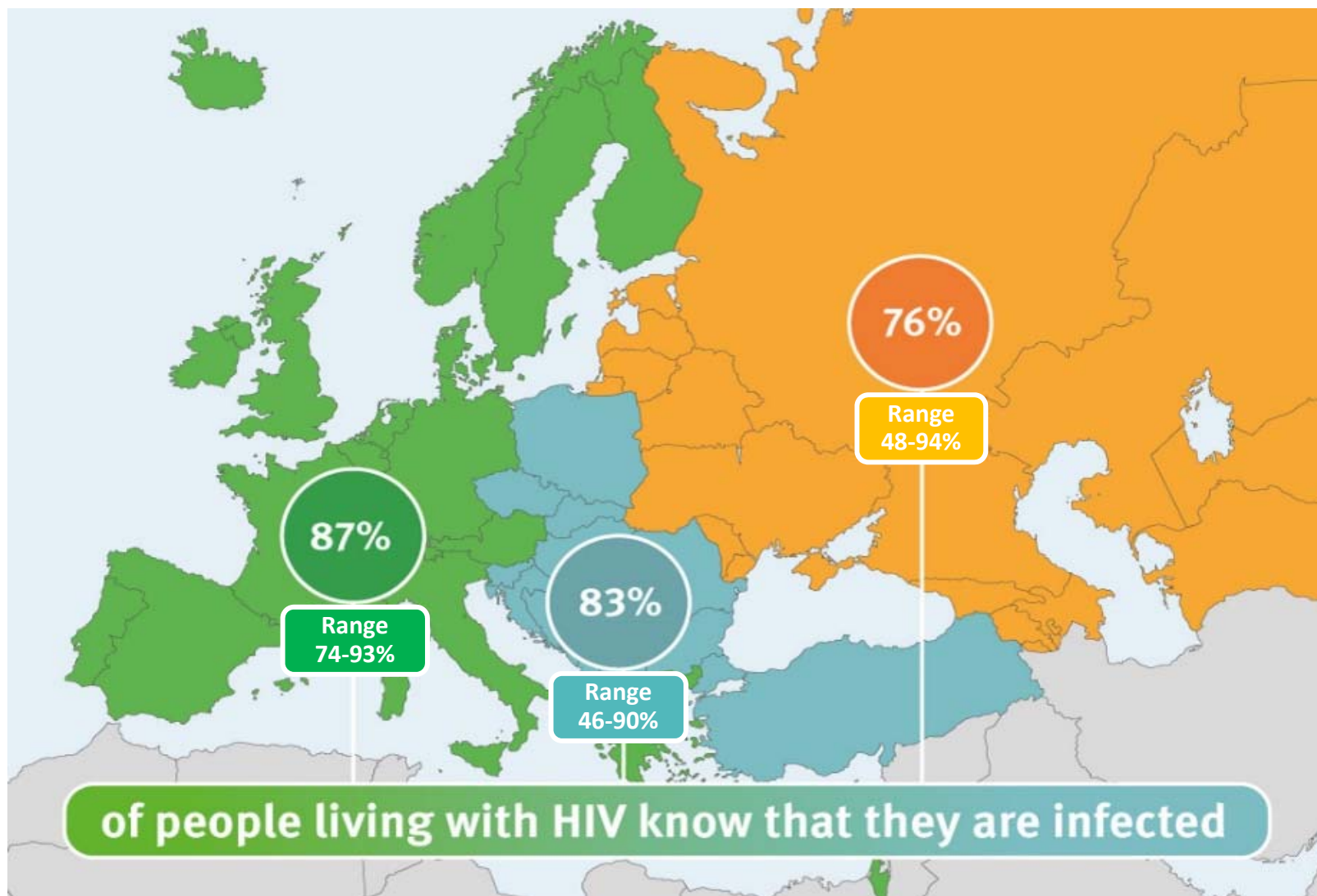
Target reached Above regional average Below regional average



Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

Progress toward achieving the 1st 90:

Sub-regional variation: **West**, **Centre**, **East**



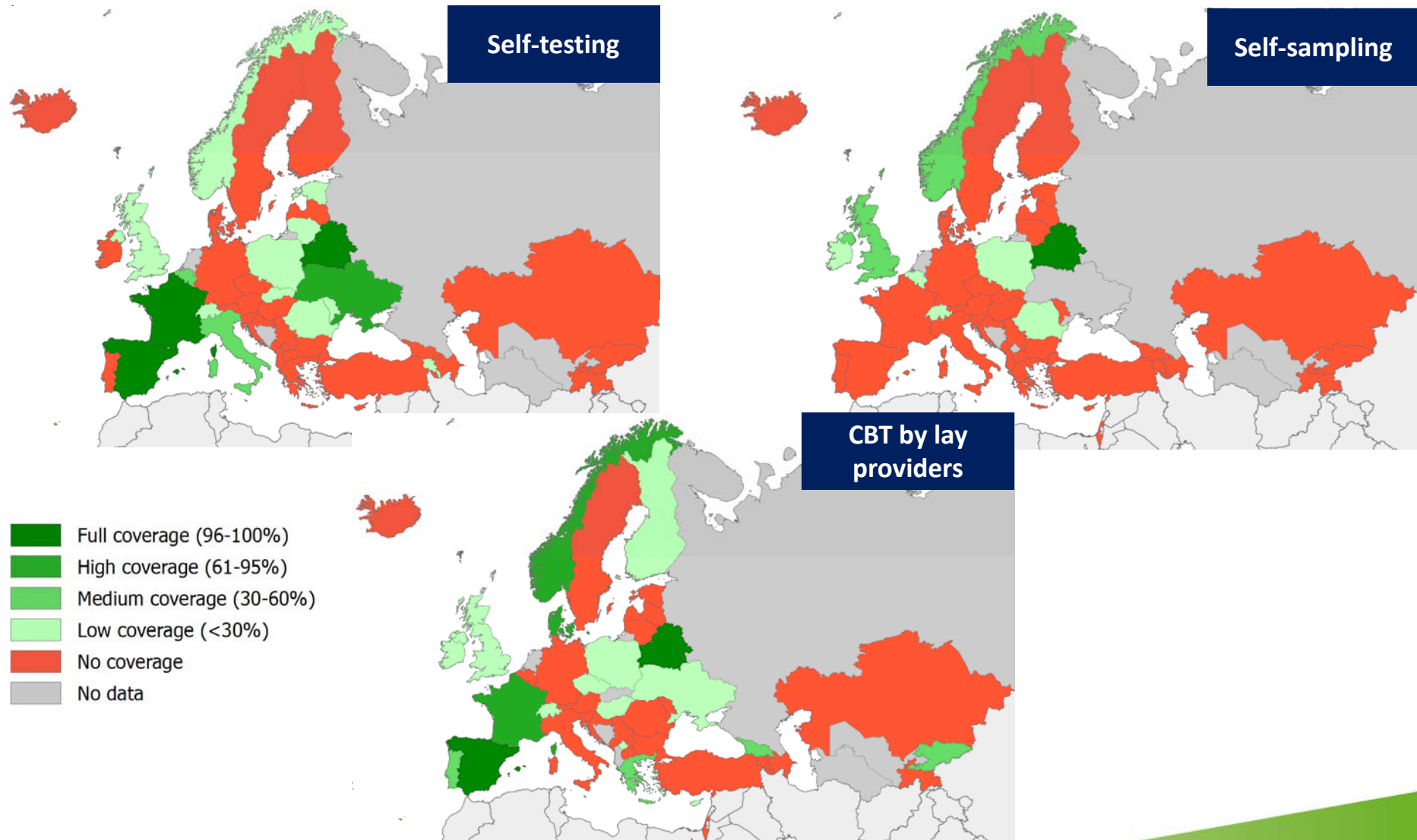
Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

Are new innovative approaches to HIV testing included in national HIV testing guidelines? (2018)



Testing approaches	Yes	No	No response
Community-based testing delivered by trained medical staff	28	12	15
Community-based testing delivered by non-medical staff (e.g. trained lay people)	14	26	15
Home-sampling kits	4	36	15
Self-testing kits	9	32	14

Coverage of community-based testing by lay providers, self-testing and self-sampling, 2018



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

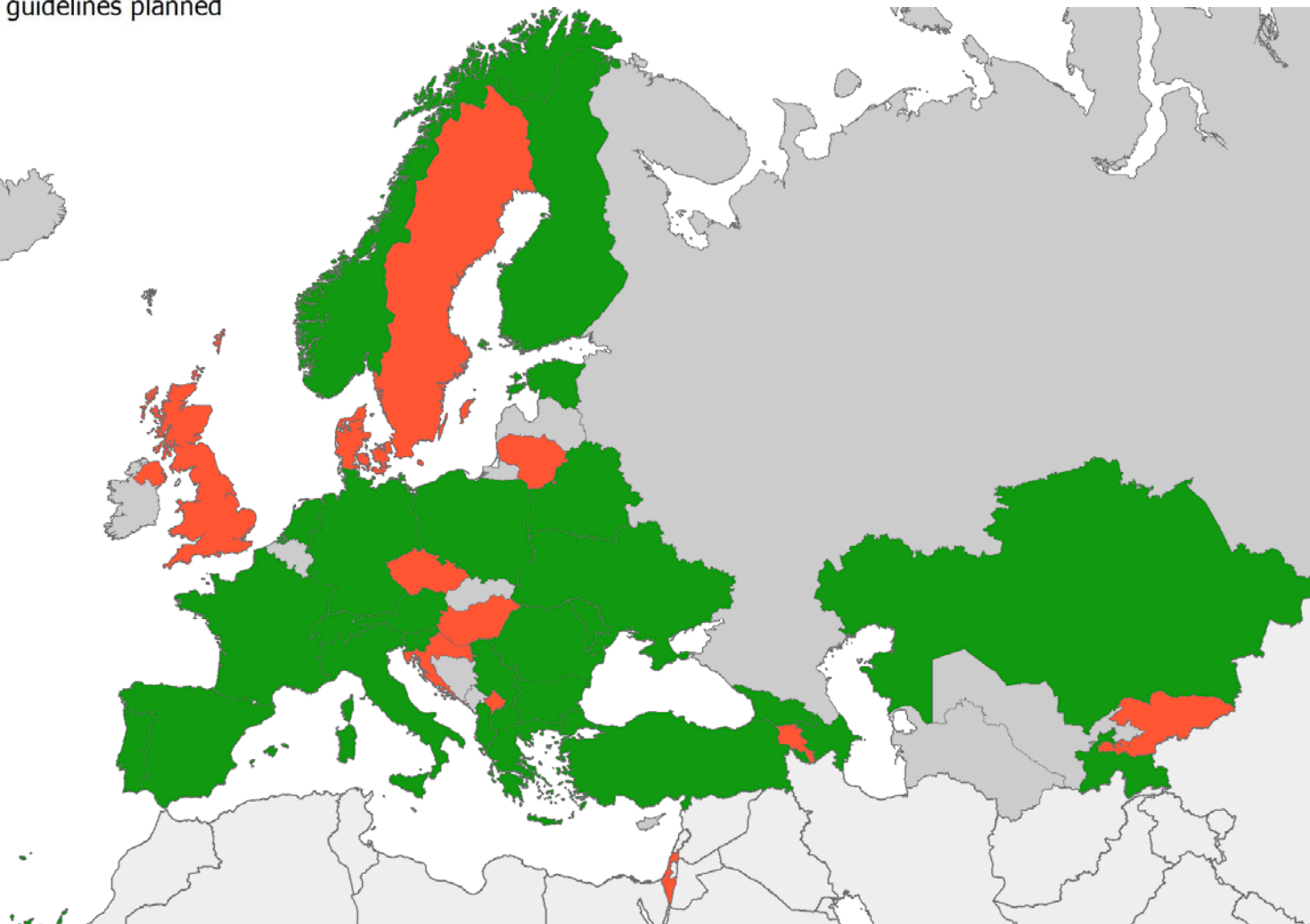
Countries considering revisions to national HIV testing guidelines, 2018



Revision of HIV testing guidelines planned

- Yes
- No
- No response

- Luxembourg
- Malta



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

Are we on track to end AIDS?

90-90-90 treatment targets



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Overall target

73%

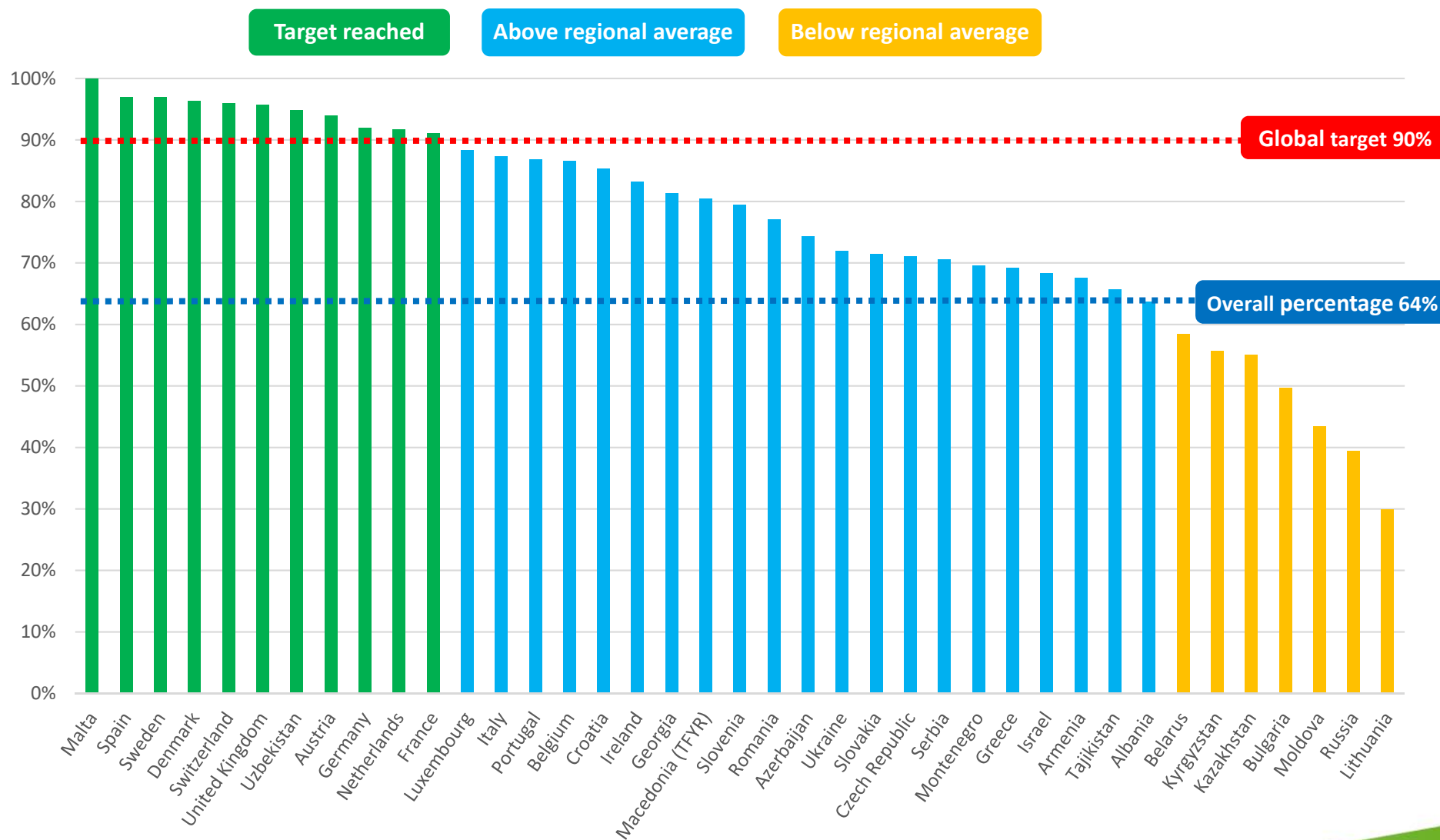
=

of all people living
with HIV

**VIRALLY
SUPPRESSED**

Progress toward achieving the 2nd 90:

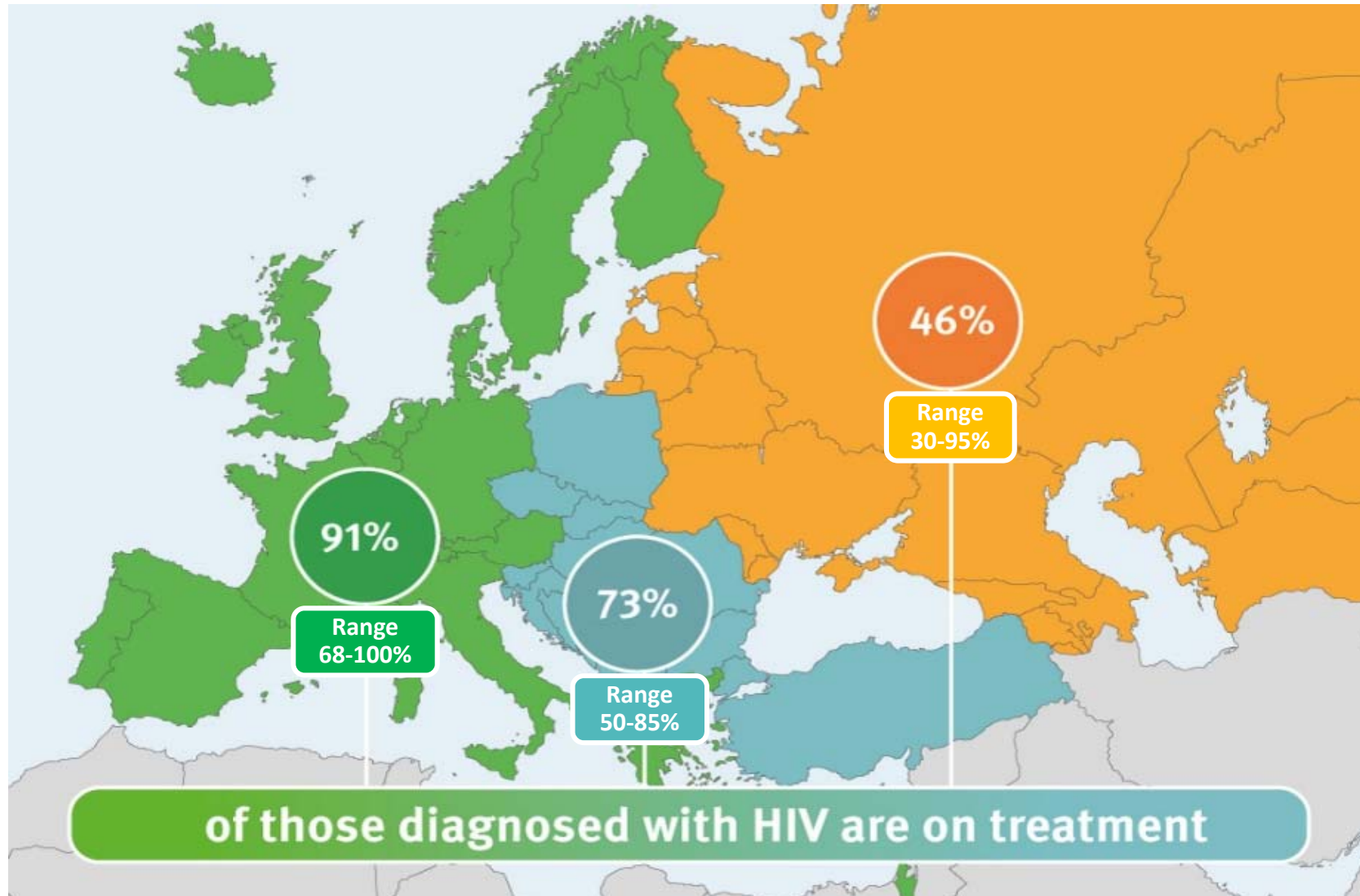
90% of those diagnosed on ART (n=39)



Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

Progress toward achieving the 2nd 90:

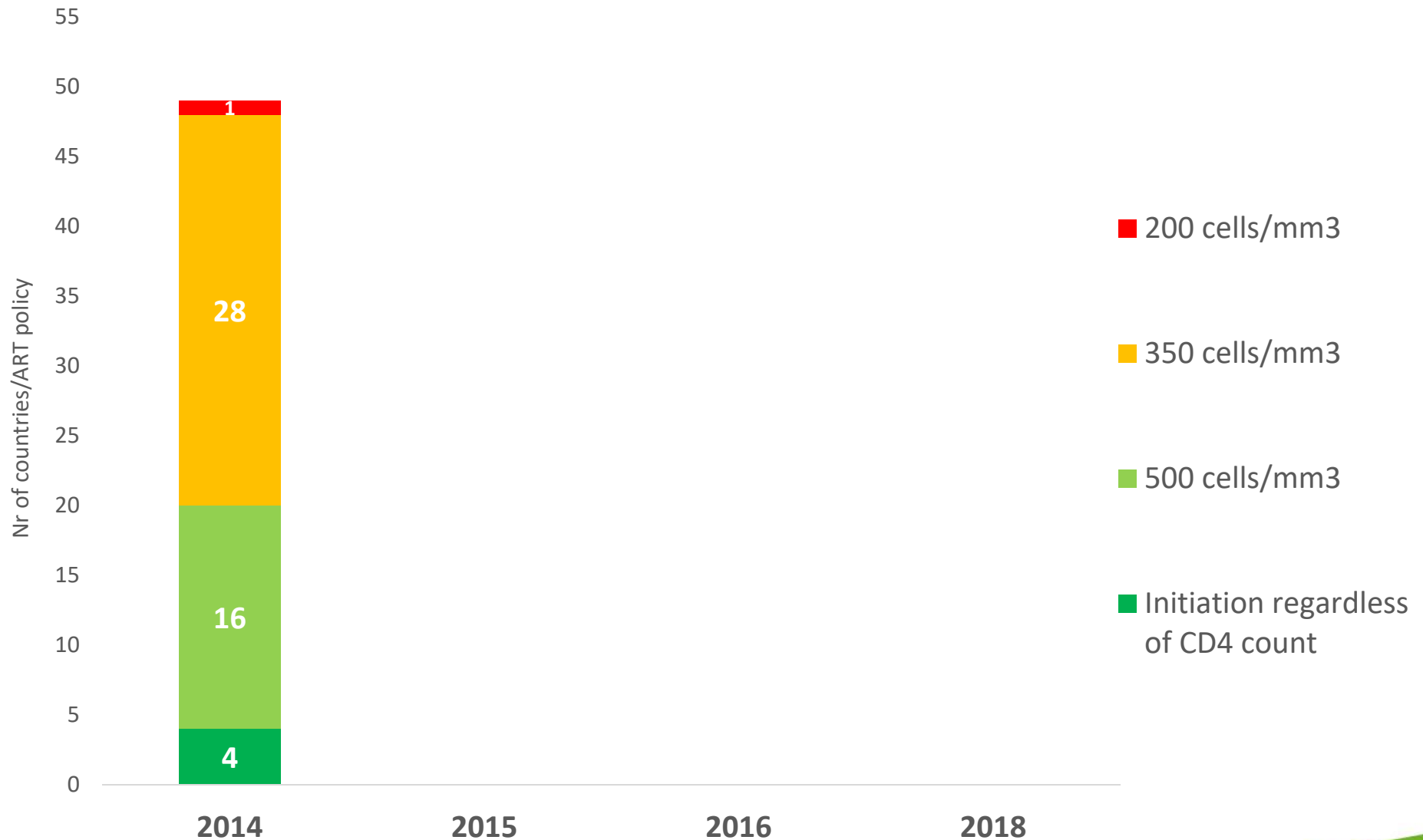
Significant sub-regional variation: **West**, **Centre**, **East**



Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

ART initiation policies in European countries

2014 (n=49)



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

ART initiation policies in European countries

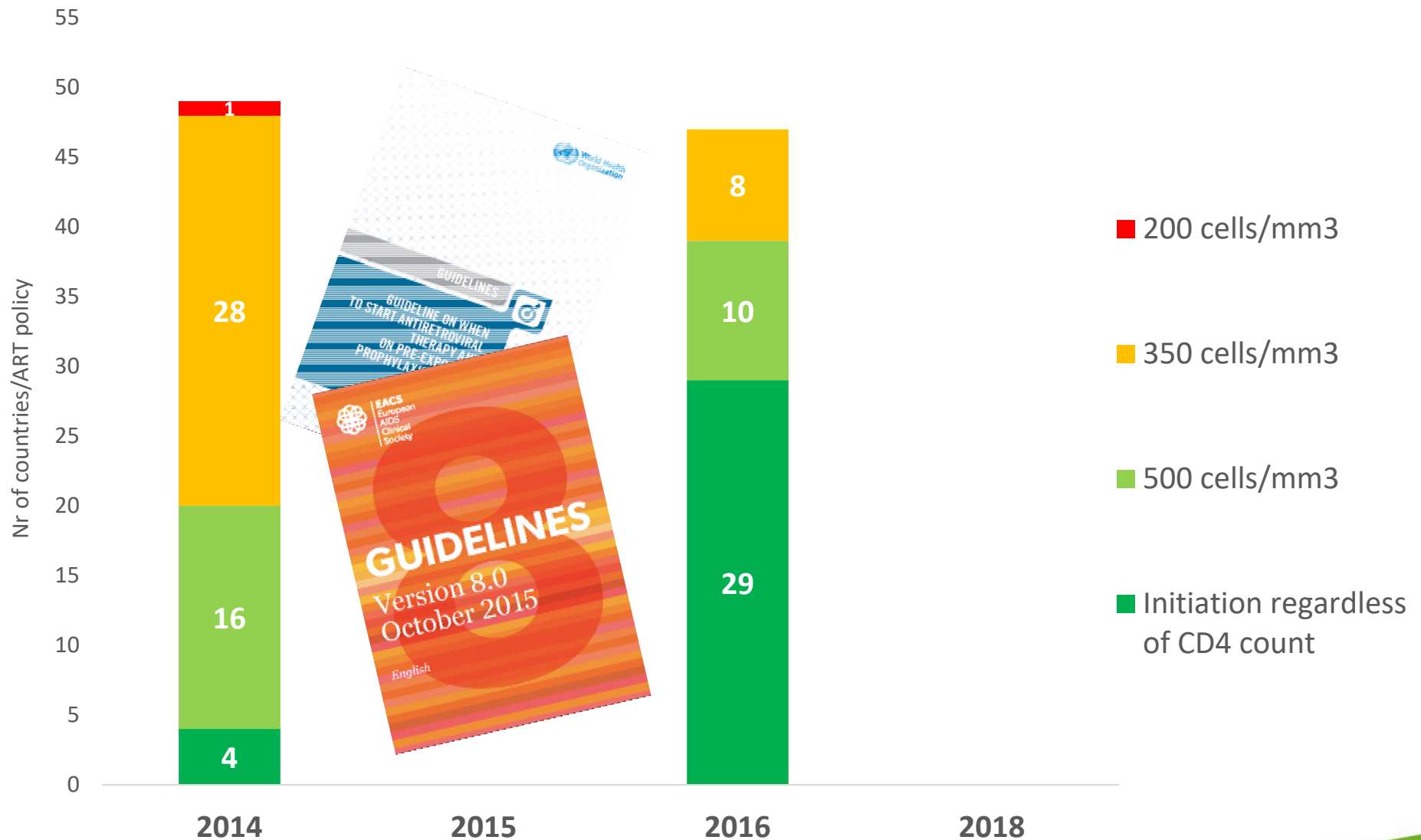
2014 (n=49)



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

ART initiation policies in European countries

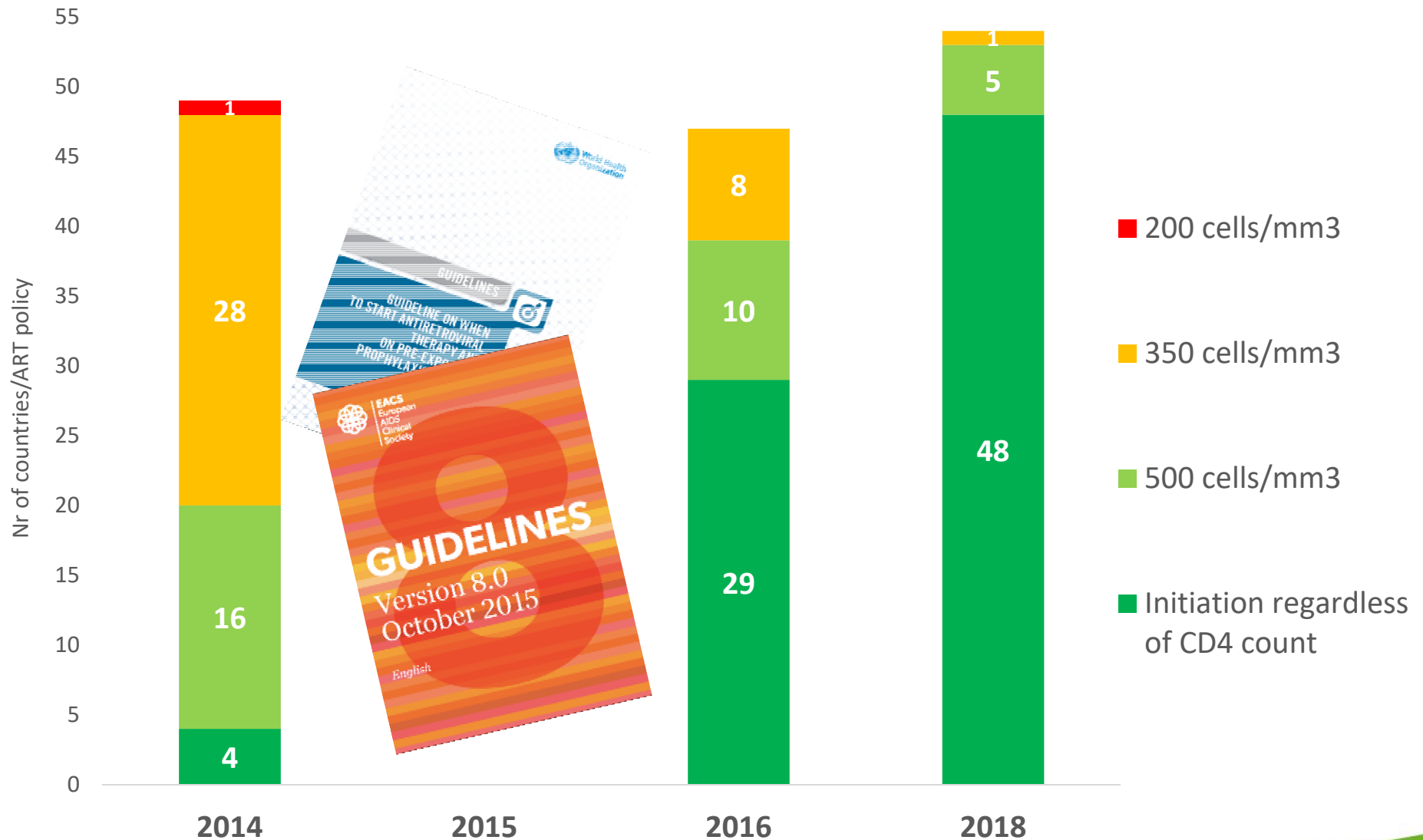
2014 (n=49), 2016 (n=47)



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

ART initiation policies in European countries

2014 (n=49), 2016 (n=47), 2018 (n=54)



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

Availability of ART for undocumented migrants

2018



BMC Public Health

Deblonde et al. BMC Public Health (2015) 15:1228
DOI 10.1186/s12889-015-2571-y

DEBATE

Open Access

Restricted access to antiretroviral treatment for undocumented migrants: a bottle neck to control the HIV epidemic in the EU/EEA



Jessika Deblonde^{1*}, André Sasse¹, Julia Del Amo², Fiona Burns^{3,4}, Valerie Delpech⁵, Susan Cowan⁶, Michele Levoy⁷, Lilana Keith⁷, Anastasia Pharris⁸, Andrew Amato-Gauci⁹ and Teymur Noori⁸

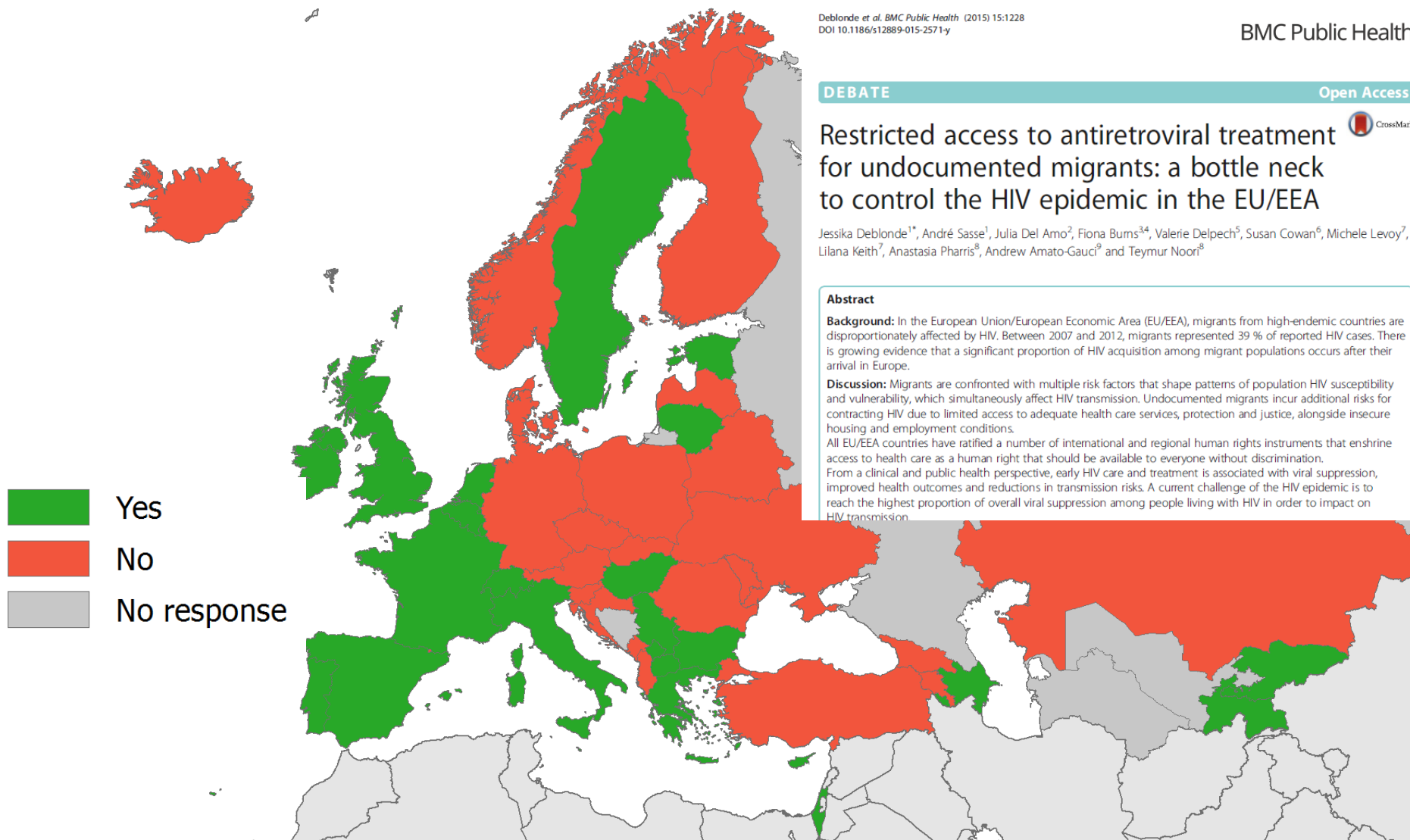
Abstract

Background: In the European Union/European Economic Area (EU/EEA), migrants from high-endemic countries are disproportionately affected by HIV. Between 2007 and 2012, migrants represented 39 % of reported HIV cases. There is growing evidence that a significant proportion of HIV acquisition among migrant populations occurs after their arrival in Europe.

Discussion: Migrants are confronted with multiple risk factors that shape patterns of population HIV susceptibility and vulnerability, which simultaneously affect HIV transmission. Undocumented migrants incur additional risks for contracting HIV due to limited access to adequate health care services, protection and justice, alongside insecure housing and employment conditions.

All EU/EEA countries have ratified a number of international and regional human rights instruments that enshrine access to health care as a human right that should be available to everyone without discrimination.

From a clinical and public health perspective, early HIV care and treatment is associated with viral suppression, improved health outcomes and reductions in transmission risks. A current challenge of the HIV epidemic is to reach the highest proportion of overall viral suppression among people living with HIV in order to impact on HIV transmission.



Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.

Are we on track to end AIDS?

90-90-90 treatment targets



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living with HIV

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Overall target

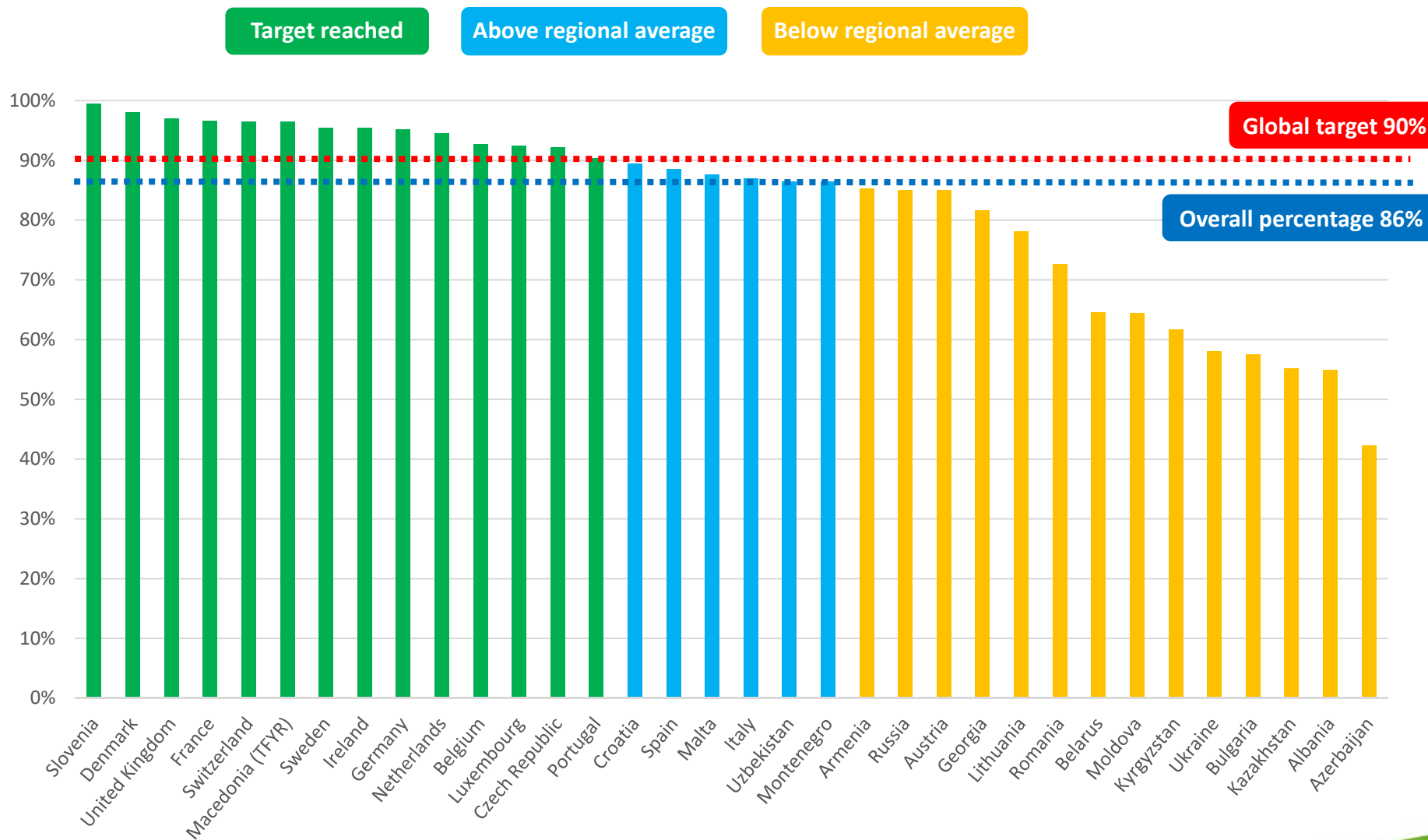
73%

of all people living
with HIV

**VIRALLY
SUPPRESSED**

=

Progress toward achieving the 3rd 90: 90% of those on ART virally suppressed (n=34)



Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

Are we on track to end AIDS?

90-90-90 treatment targets



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ON ART

Target 3

90%

of all



on ART

**VIRALLY
SUPPRESSED**

Overall target

73%

of all people living with HIV

**VIRALLY
SUPPRESSED**

=

Progress toward achieving the overall target: 73% of all PLHIV virally suppressed (n=33)



Target reached

Above regional average

Below regional average

100%

Potential impact on HIV incidence of higher HIV testing rates and earlier antiretroviral therapy initiation in MSM

Andrew N. Phillips^a, Valentina Cambiano^a, Alec Miners^b,
Fiona C. Lampe^a, Alison Rodger^a, Fumiyo Nakagawa^a, Alison Brown^c,
O. Noel Gill^c, Daniela De Angelis^c, Jonathan Elford^d, Graham Hart^a,
Anne M. Johnson^a, Jens D. Lundgren^e, Simon Collins^f and
Valerie Delpech^c

Background: Increased rates of testing, with early antiretroviral therapy (ART) initiation, represent a key potential HIV-prevention approach. Currently, in MSM in the United Kingdom, it is estimated that 36% are diagnosed by 1 year from infection, and the ART initiation threshold is at CD4⁺ cell count 350/μl. We investigated what would be required to reduce HIV incidence in MSM to below 1 per 1000 person-years (i.e. <535 new infections per year) by 2030, and whether this is likely to be cost-effective.

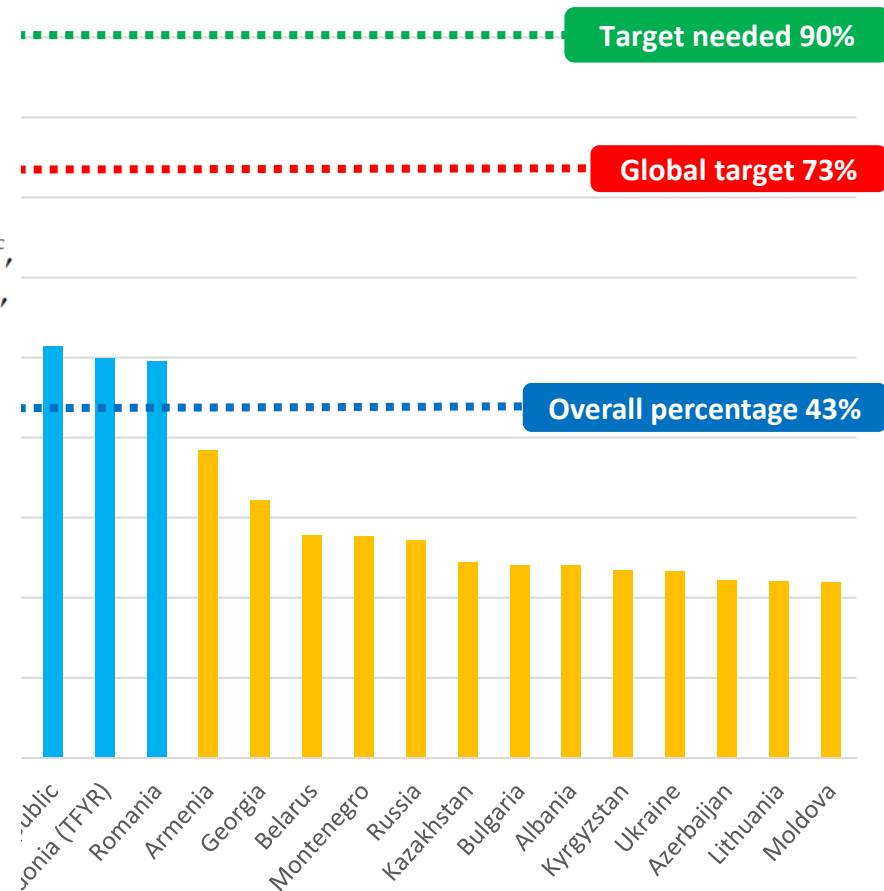
Methods: A dynamic, individual-based simulation model was calibrated to multiple data sources on HIV in MSM in the United Kingdom. Outcomes were projected according to future alternative HIV testing and ART initiation scenarios to 2030, considering also potential changes in levels of condomless sex.

Results: For ART use to result in an incidence of close to 1/1000 person-years requires the proportion of all HIV-positive MSM with viral suppression to increase from below 60% currently to 90%, assuming no rise in levels of condomless sex. Substantial increases in HIV testing, such that over 90% of men are diagnosed within a year of infection, would increase the proportion of HIV-positive men with viral suppression to 80%, and it would be 90%, if ART is initiated at diagnosis. The scenarios required for such a policy to be cost-effective are presented.

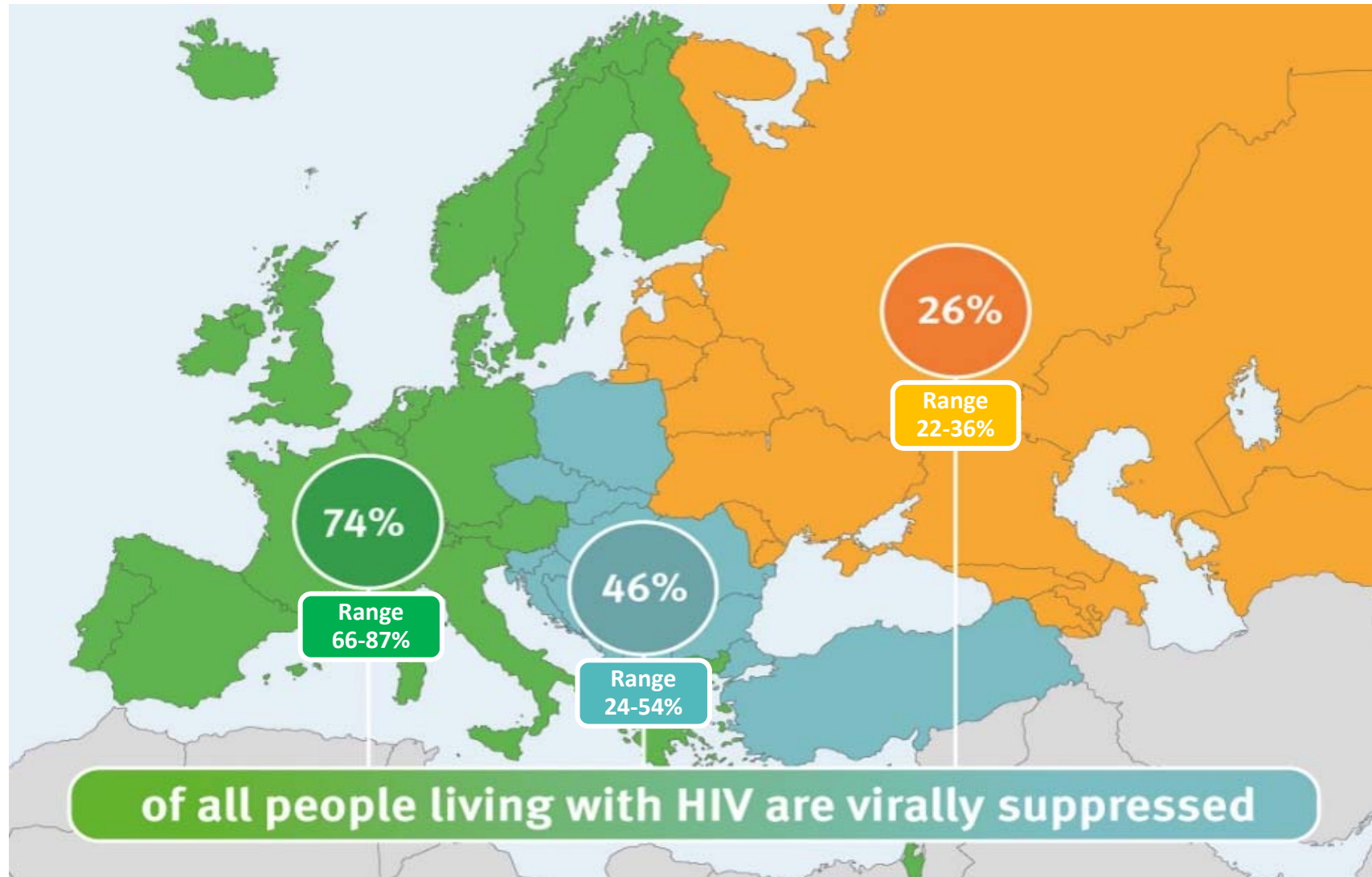
Conclusion: This analysis provides targets for the proportion of all HIV-positive MSM with viral suppression required to achieve substantial reductions in HIV incidence.

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AIDS 2015, 29:1855–1862

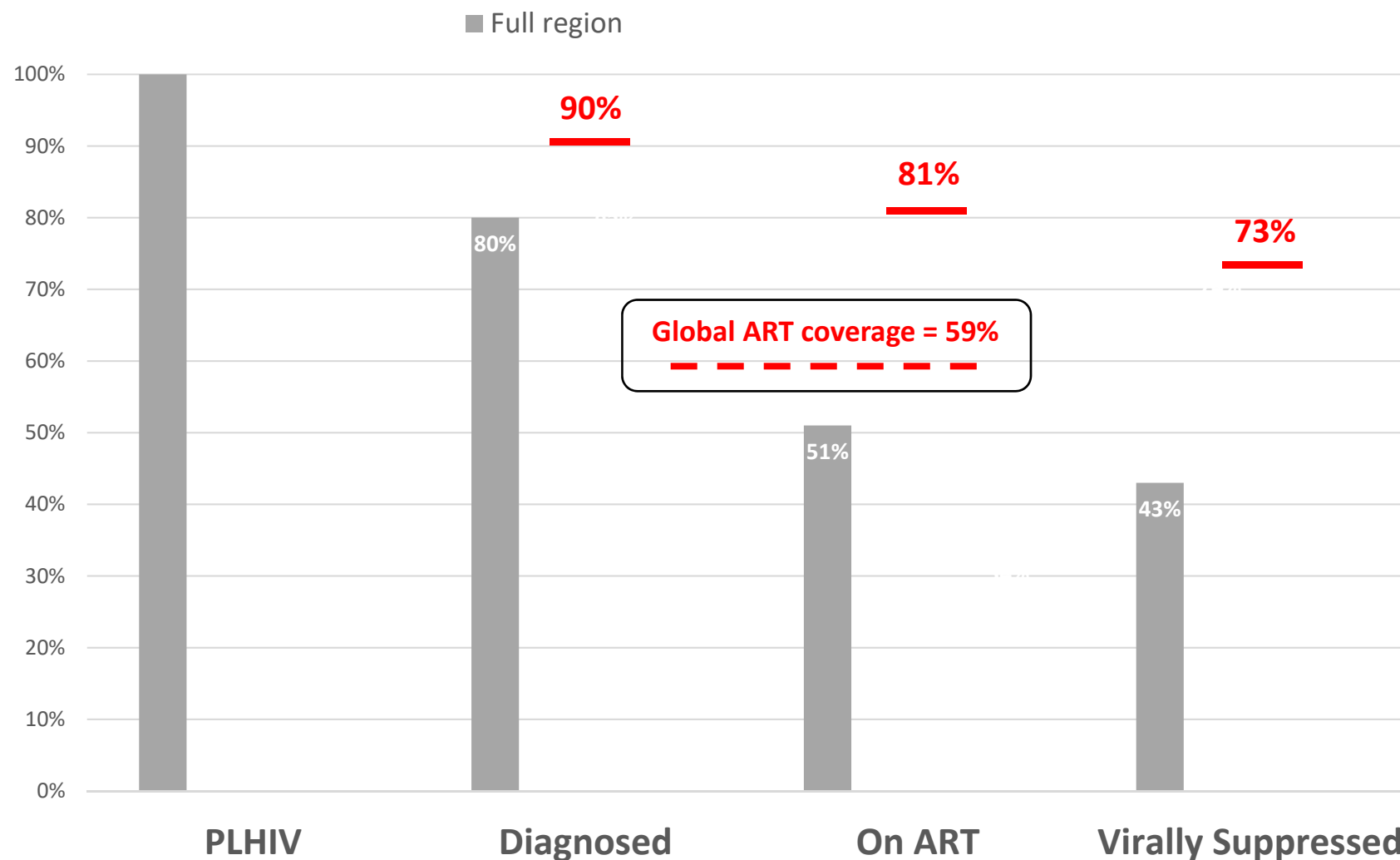


Progress toward achieving the overall 90-90-90 target: Significant sub-regional variation: **West**, **Centre**, **East**



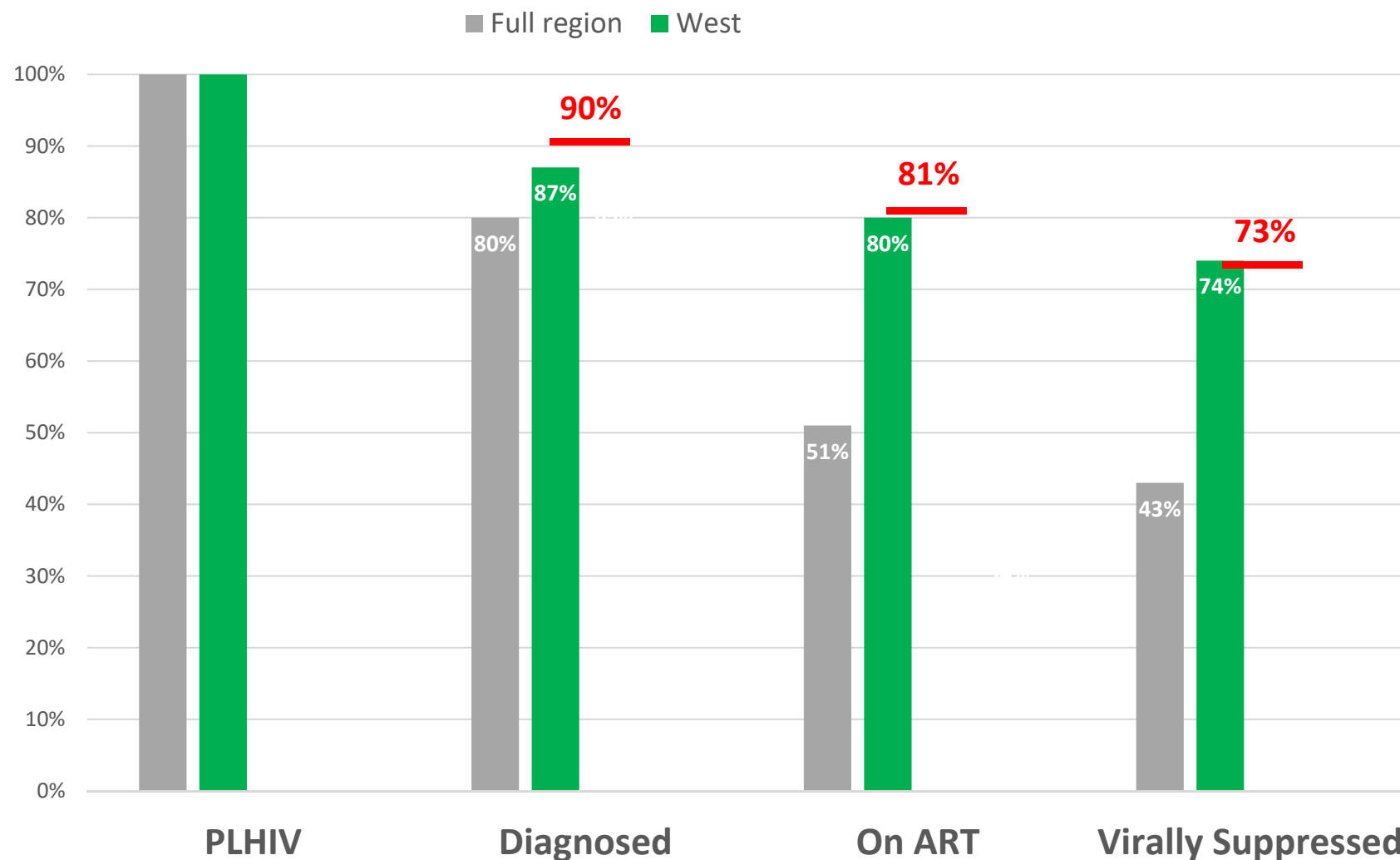
Source: Brown Alison E, Hayes Rosalie, Noori Teymur, Azad Yusef, Amato-Gauci Andrew J., Pharris Anastasia, Delpech Valerie C., the ECDC Dublin Declaration Monitoring Network. HIV in Europe and Central Asia: progress in 2018 towards meeting the UNAIDS 90-90-90 targets. Euro Surveill. 2018;23(48).

Are we on track to reach the 90-90-90 targets by 2020?



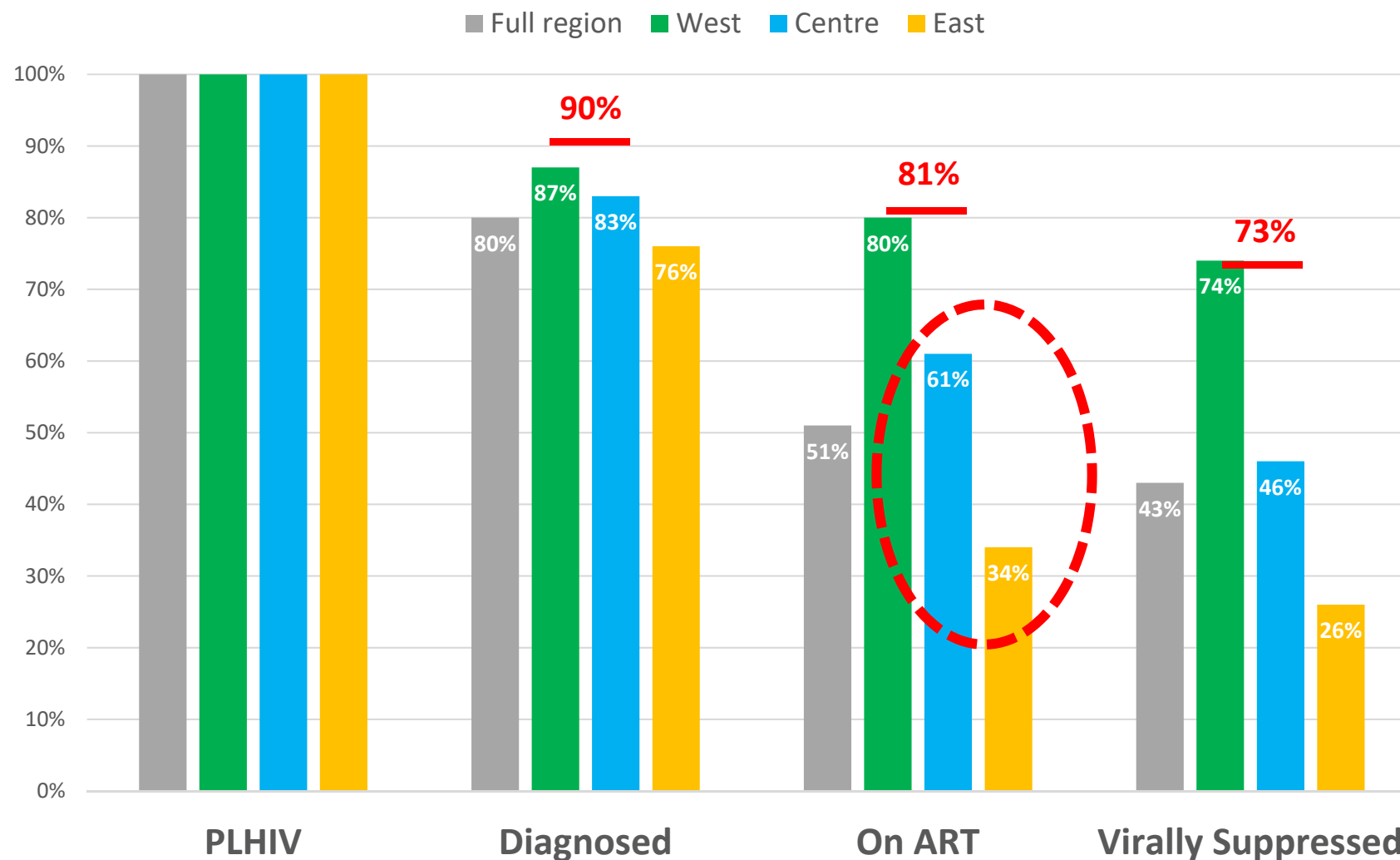
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Are we on track to reach the 90-90-90 targets by 2020?



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Distribution of people with transmissible levels of virus in the full region, reported in 2018



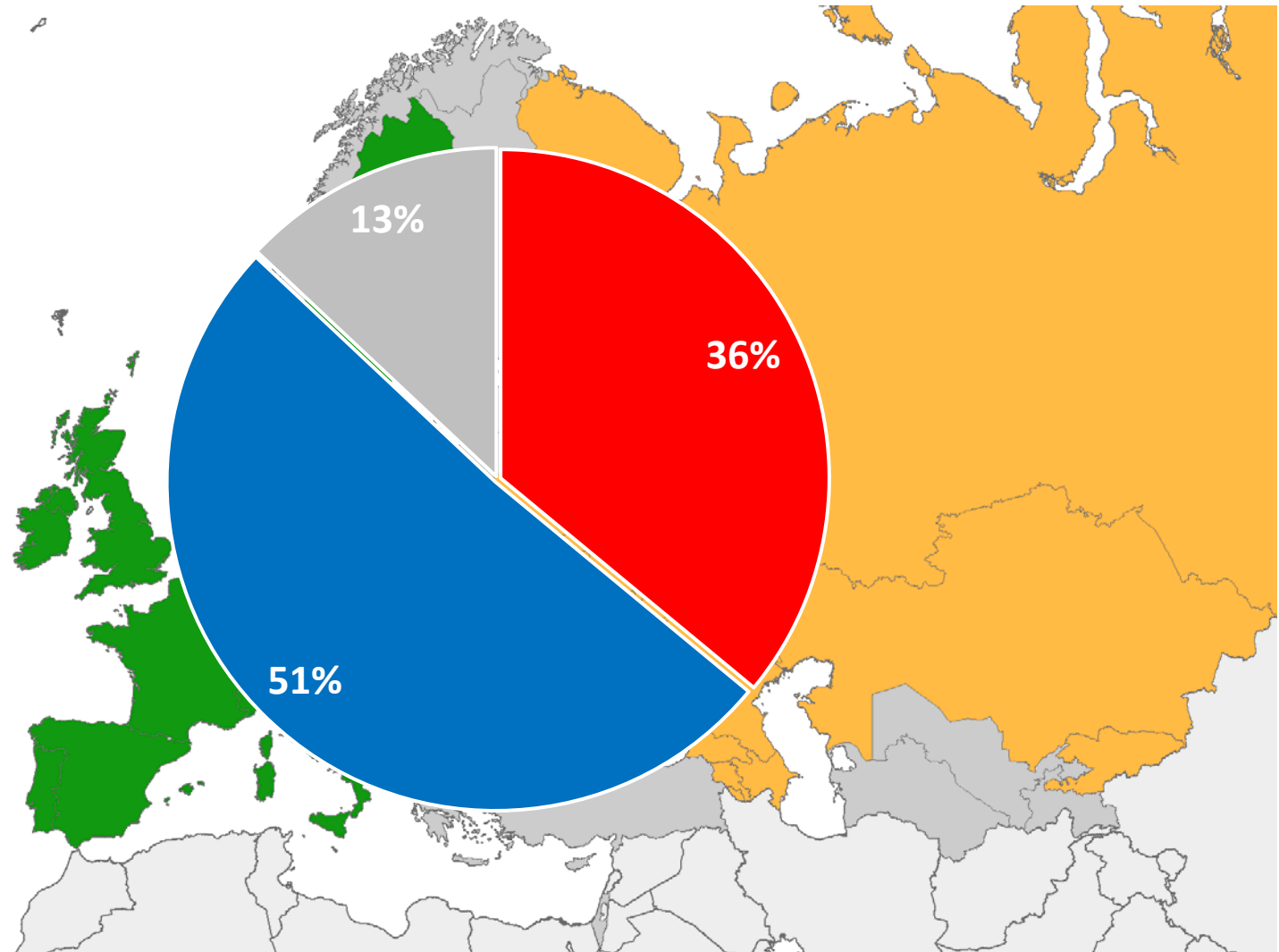
N ≈ 1,200,000
People living with
unsuppressed virus



Undiagnosed

**Diagnosed but not
on treatment**

**Treated but not
virally suppressed**



Distribution of people with transmissible levels of virus by sub-region, reported in 2018

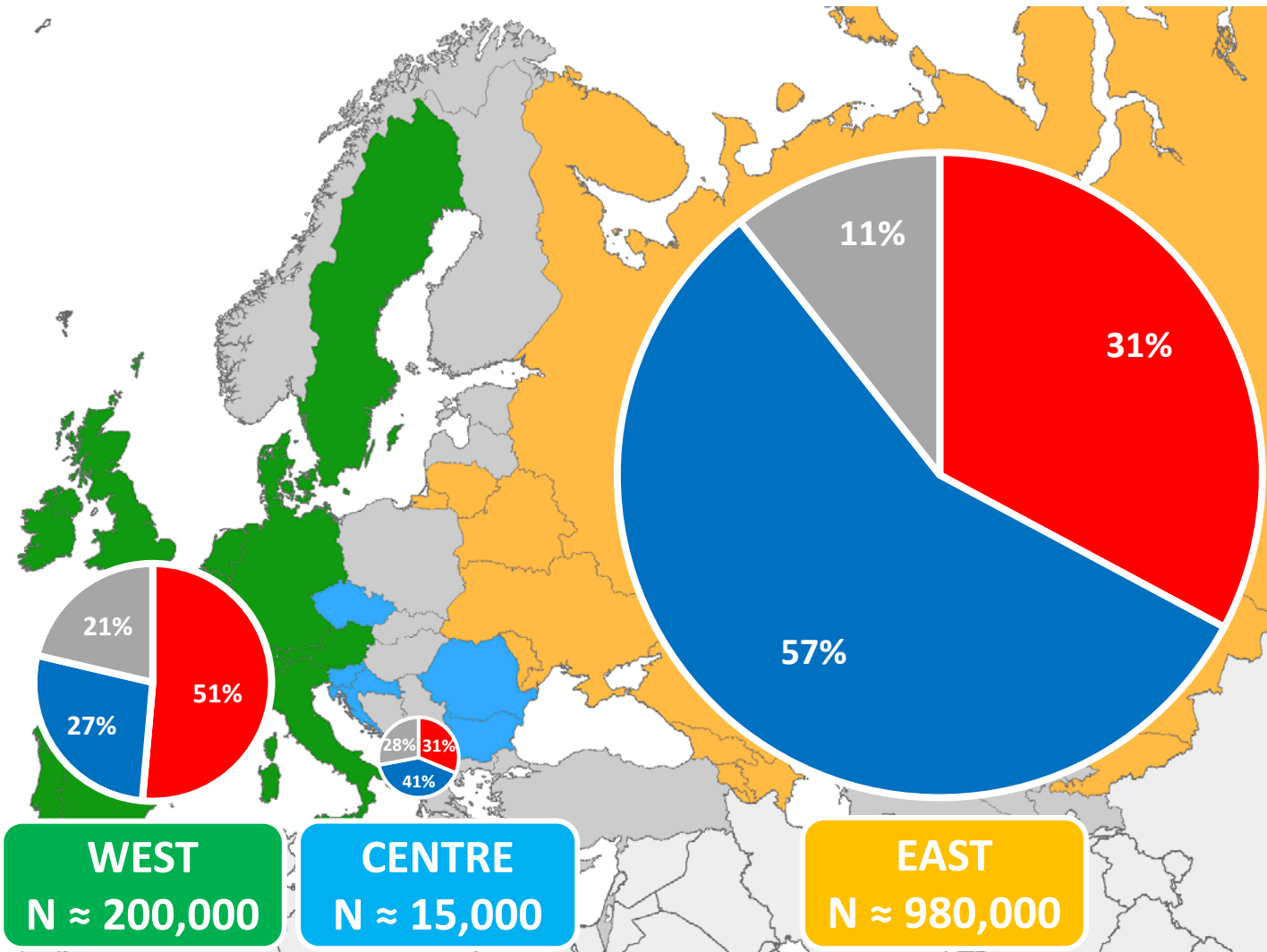


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People living with unsuppressed virus

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Conclusions



Hepatitis B and C

Lack of data:

- To guide effective responses
- To measure progress toward targets

Estimates indicate **progress**:

- Hep B vaccination
- Blood safety



Estimates indicate **major challenges**:

- Prevention
- Testing
- Treatment



ECDC has launched first ever monitoring system for hepatitis B and C

- Results in June 2019

HIV

Strong data:

- To guide effective responses
- To measure progress toward targets

Overall, our region is **not on track** to meet the target of a 75% reduction in new infections by 2020

While the **Western** part of the region is closing in on reaching the 90-90-90 targets, the **Central** and **Eastern** parts are lagging behind

Priorities:

- Testing
- Linkage to care & treatment
- Prevention

Acknowledgements



Dublin Declaration advisory group

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Dublin Declaration focal points in Europe and Central Asia

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HIV Surveillance focal points in the EU/EEA

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