Epidemiology of HIV infection and treatment in Europe: 
Progress toward reaching the 90-90-90 targets

Teymur Noori, European Centre for Disease Prevention and Control (ECDC)
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Outline

- Overview of the epidemiology of HIV in Europe and Central Asia

- Show progress toward achieving the global 90-90-90 HIV targets in Europe and Central Asia

- Highlight the inequalities in Europe and Central Asia by focusing on the variation:
  - between countries
  - between sub-regions
  - within sub-regions
How WHO categorises the region into West, Centre and East

>160,000 persons were diagnosed with HIV in the WHO European Region in 2016

New HIV diagnoses, by transmission mode and year of diagnosis, WHO European Region, 2007-2016

Data from Russia, Turkmenistan and Uzbekistan excluded due to inconsistent reporting during the period; data from Estonia, Poland and Turkey excluded due to incomplete reporting on transmission mode during the period; data from Italy and Spain excluded due to increasing coverage of national surveillance during the period.

Estimated new HIV infections are decreasing globally

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Continuum of HIV care
Data availability on the continuum of HIV care

2014 (n=40); 2016 (n=44); 2018 (n=43)

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 Dublin Declaration monitoring 2018; validated unpublished data.

Promoting collaboration between clinical and public health bodies.
Fast Track Targets by 2020

- **Target 1**: 90% of all living with HIV diagnosed with HIV
- **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
Fast Track Targets by 2020

**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 1\textsuperscript{st} 90:
90% of all PLHIV who know their status (n=39)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
1 in 5 people living with HIV in Europe and Central Asia do not know that they are infected.

Because it's best to know: find a testing centre near you all across Europe. Check http://bit.ly/ETF18

Test. Treat. Prevent.

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Progress toward achieving the 1st 90:

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

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Significant within sub-region variation in achieving the 1st 90 (diagnoses)

- 74-93%
- 46-90%
- 48-94%

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Too many people living with HIV are diagnosed late, 2016

Late diagnosis = CD4<350 at diagnosis

In the EU/EEA 48% of those with a CD4 count reported at HIV diagnosis in 2016 were diagnosed late

Proportion of persons diagnosed late* by demographic, EU/EEA, 2016

*Diagnosed late=CD4<350 cells/mm³ at diagnosis

Decreasing estimated time from infection to diagnosis in the EU/EEA

Median time from infection to diagnosis is 2.9 years

Source: van Sighem, Eurosurveillance, 2017
Fast Track Targets by 2020

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 2\textsuperscript{nd} 90:
90\% of those diagnosed on ART (n=39)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
1 in 3 people diagnosed with HIV in Europe and Central Asia are not on treatment.

Treatment changes HIV infection from a life-threatening disease into a manageable chronic condition.
Adopting ‘test and treat’ policies and reducing barriers to accessing care helps make treatment more effective.

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Progress toward achieving the 2\textsuperscript{nd} 90:

Significant sub-regional variation: \textbf{West, Centre, East}

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Significant within sub-region variation in achieving the 2nd 90 (ART)

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)

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=52)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Availability of ART for undocumented migrants 2018

Availability of ART for undocumented migrants 2018

Fast Track Targets by 2020

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

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Progress toward achieving the 3rd 90:
90% of those on ART virally suppressed (n=33)

Target reached
Above regional average
Below regional average

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

Global target 90%
Regional average 85%
8.5 in 10 HIV positive people on treatment in Europe and Central Asia achieved viral suppression.

This means the virus is not detectable anymore and they do not transmit HIV.

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Progress toward achieving the 3rd 90:
Significant sub-regional variation: West, Centre, East

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Significant within sub-region variation in achieving the 3rd 90 (viral suppression)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Fast Track Targets by 2020

Target 1: 90% of all living with HIV diagnosed with HIV
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 overall target: 73% of all PLHIV virally suppressed (n=32)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
3 in 5 people living with HIV in Europe and Central Asia are **not virally suppressed**

Only those living with HIV on effective treatment who achieved an undetectable viral load do not pass on the virus

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Progress toward achieving the overall 73% target:

Significant sub-regional variation: West, Centre, East

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Significant within sub-region variation in achieving the overall 90-90-90 target (73% viral suppression of all PLHIV)

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
How close are we to reaching the 90-90-90 targets in Europe and Central Asia?

![Graph showing the 90-90-90 targets for Europe and Central Asia.]

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
How close are we to reaching the 90-90-90 targets in Europe and Central Asia?

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Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Is community viral load/undiagnosed fraction impacting new HIV diagnoses in Europe and Central Asia?

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data on the continuum of care.
Comparison of the continuum of care for key populations, 2018

Living with HIV
- MSM (n=10): 100% diagnosed, 86% receiving ART, 78% virally suppressed
- PWID (n=8): 100% diagnosed, 90% receiving ART, 50% virally suppressed
- Migrants (n=5): 100% diagnosed, 84% receiving ART, 75% virally suppressed

Source: ECDC. Dublin Declaration monitoring 2018; validated unpublished data.
Comparison of the continuum of care for key populations against national continua, 2018

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

- Significant variation along all steps of the continuum of care between and within the sub-regions of Europe and Central Asia
- 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:

[Diagram showing progression from prevention to viral suppression]
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teymur.noori@ecdc.europa.eu