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AUDITORIUM, MINISTRY OF HEALTH



EACS European
AIDS Clinical Society

MEETING



STANDARD of CARE for **HIV**
and **COINFECTIONS** in **EUROPE**



Chairs: A. Antinori, A. d'Arminio Monforte, C. Mussini

Access to ART in Eastern Europe

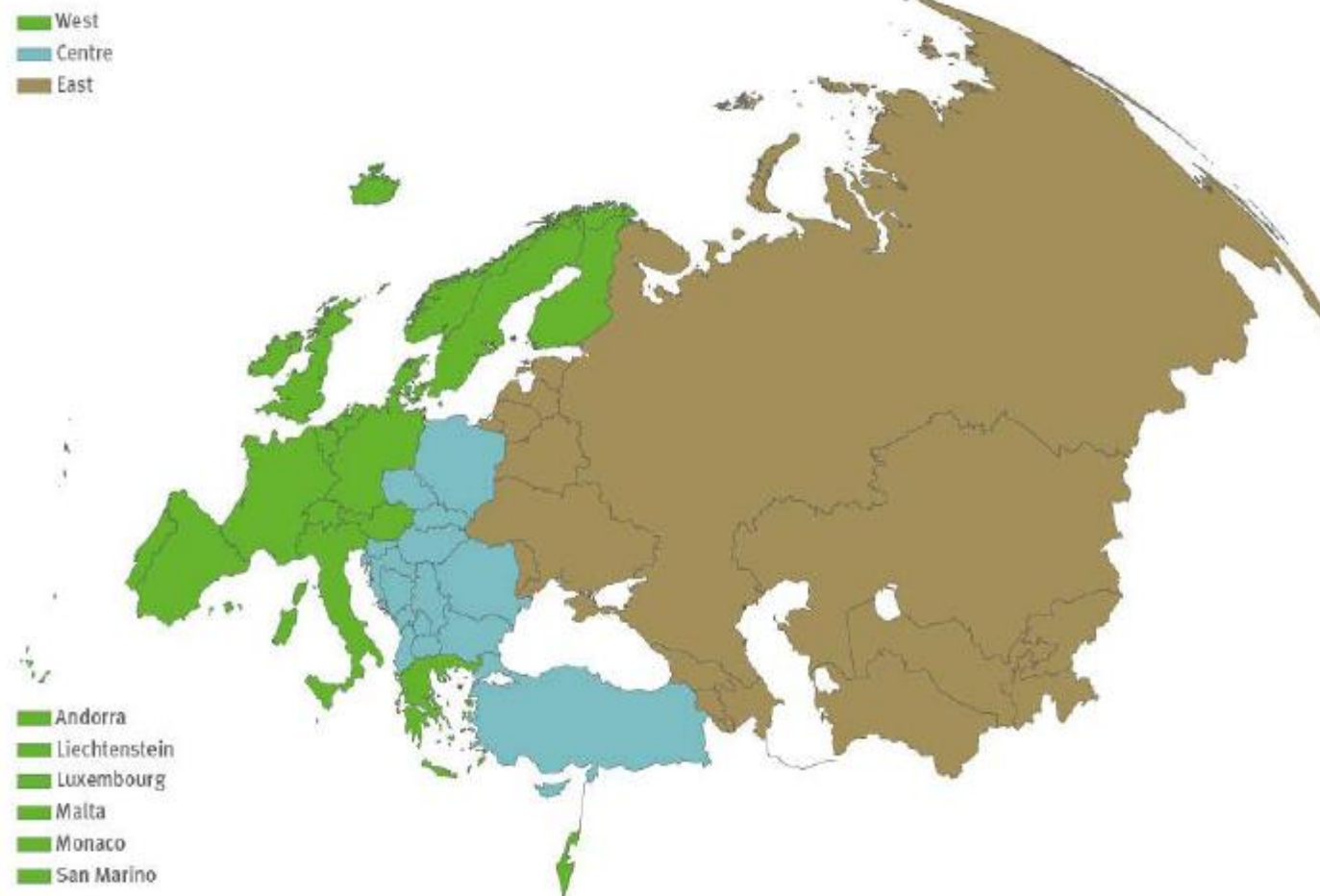
STANDARD of CARE for HIV
and COINFECTIONS in EUROPE

Andrzej Horban
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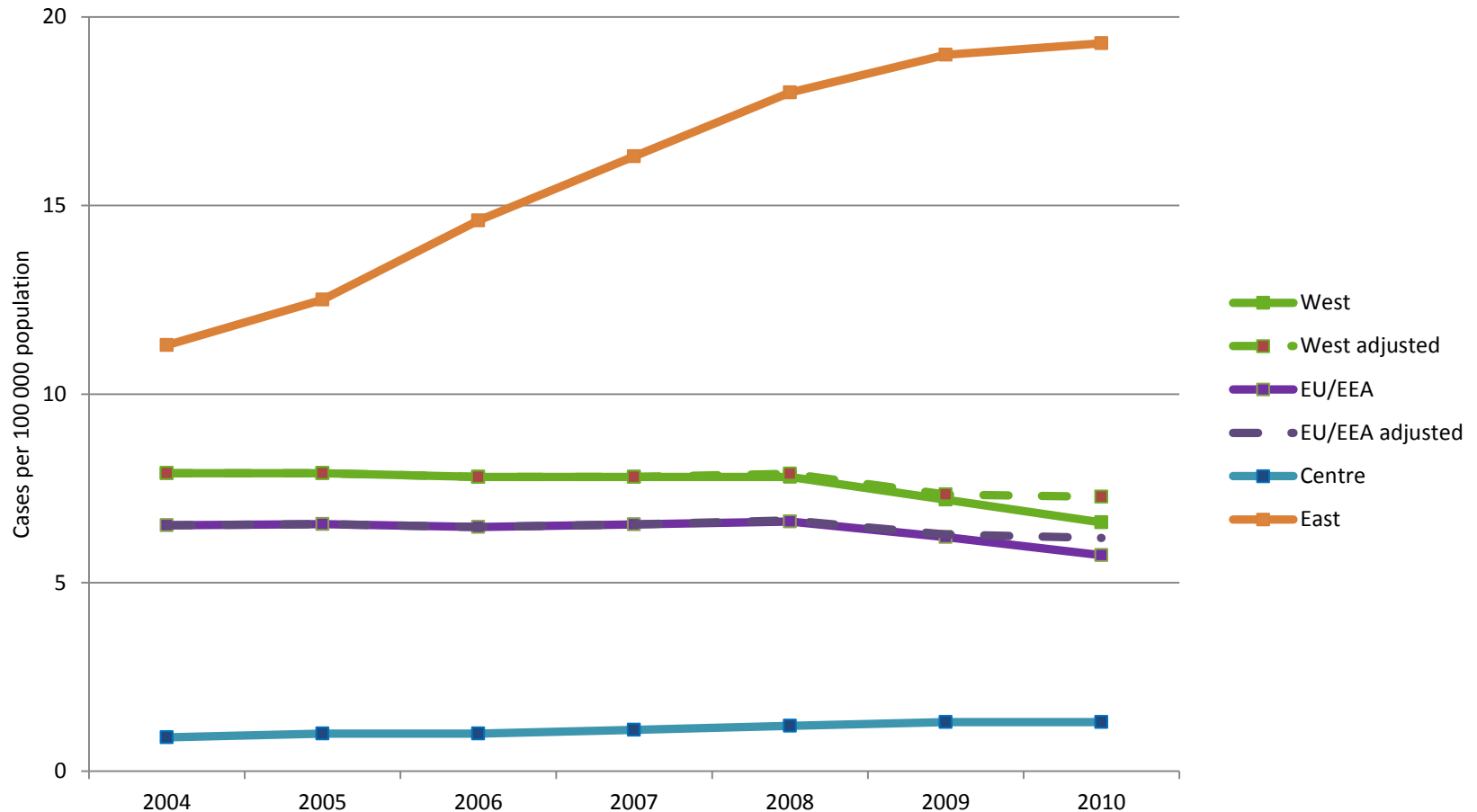


WHO Regions

Geographical and epidemiological areas in the WHO European Region

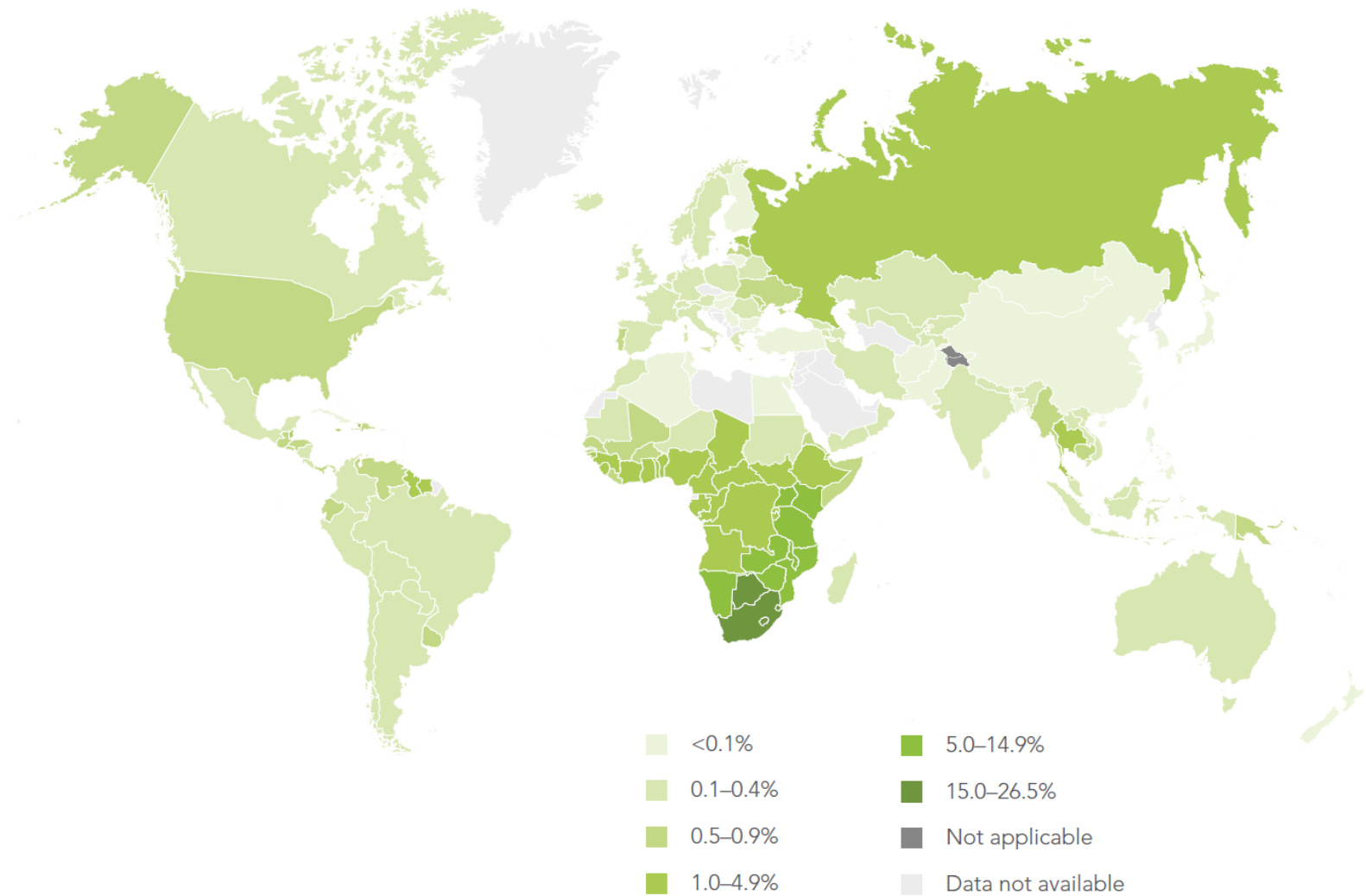


HIV infection in the three geographical areas EU/EEA, WHO European Region, 2004–10



Data not reported or not available from Austria, Russia, Monaco.

HIV prevalence among adults (15-49) % | 2012



- UNAIDS has recently proposed a 90 / 90 / 90 target in order to reduce transmission and obtain the maximum benefit from antiretroviral therapy.
- The target calls for 90% of people living with HIV to be diagnosed, for 90% of those diagnosed to be linked to care and taking antiretroviral treatment, and for 90% of people taking antiretroviral therapy to have undetectable viral load.
- If this target could be achieved, around three-quarters of all people living with HIV would have suppressed viral load (73%).
- Raymond A., 4th Nov. Glasgow 2014

Background

Antiretroviral treatment lowers the risk of HIV transmission in sero-discordant couples (HPTN 052 trial)

Mathematical modelling studies suggest that HIV transmission could be significantly reduced if more than 80% of HIV infected people are treated with antiretrovirals

Research question

Do countries who treat more people with antiretrovirals have lower rates of new HIV infections, and lower rates of HIV-related death?

Methods

UNAIDS database. For each country, standardised estimates for 2012:

- Total with HIV-infection

- Receiving antiretroviral treatment

- New HIV infections

- HIV-related deaths

36 African countries were included, plus 15 non-African low and middle-income countries with at least 50,000 HIV-infected individuals.

Data from 7 high-income countries were extracted from published references, but were not included in the correlations of ART coverage versus incidence

Methods

Weighted least squares and linear regression methods were used to investigate the association between:

% Treated: percentage of all people with HIV who received ART in 2012

% Incidence: percentage increase in total HIV infections in 2012

% Deaths: percentage of people with HIV who died from HIV in 2012

This analysis looks at ART coverage of the whole population, not just from people eligible for treatment

Countries with over 45% HIV-infected people on antiretroviral treatment

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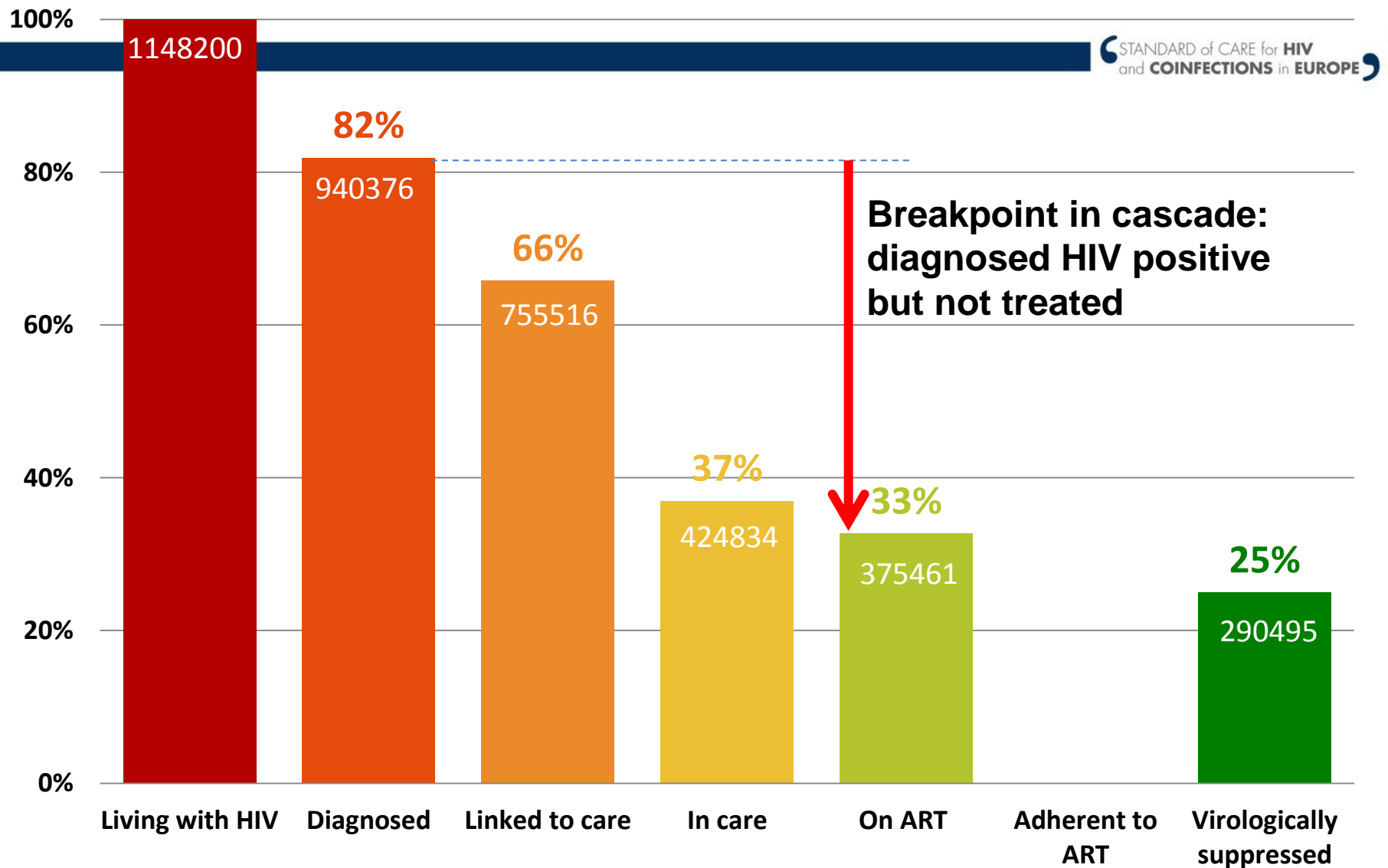
Country	Infected	Treated	%
United Kingdom	98,400	65,928	67.0
Botswana	340,000	212,083	62.4
Denmark	6,500	4,029	62.0
France	149,900	89,940	60.0
Netherlands	25,000	14,817	59.0
Rwanda	210,000	114,978	54.8
Thailand	440,000	239,090	54.3
Namibia	220,000	116,687	53.0
Brazil	595,000	313,175	52.6
Argentina	98,000	50,725	51.8
British Columbia	11,700	5,975	51.1
Mexico	170,000	83,800	49.3
Cambodia	110,000	48,913	44.5



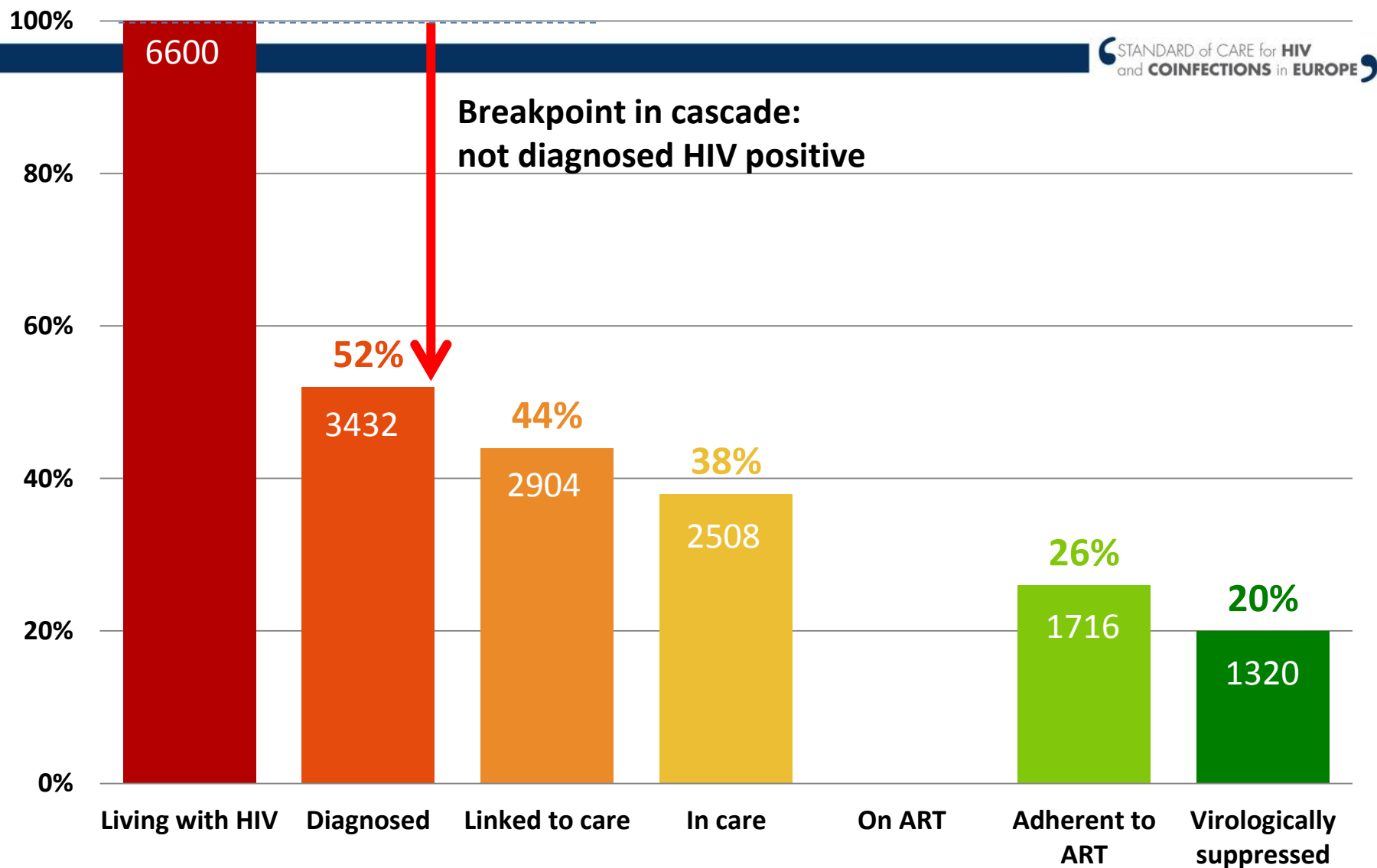
Countries with <20% HIV-infected people on antiretroviral treatment

Country	Infected	Treated	%
Chad	210,000	40,856	19.5
Mozambique	1,600,000	309,851	19.4
Ukraine	230,000	40,350	17.5
Angola	250,000	42,607	17.0
Guinea-bissau	41,000	6,101	14.9
Nigeria	3,400,000	491,021	14.4
Sierra Leone	58,000	8,259	14.2
DR Congo	480,000	64,219	13.4
Indonesia	610,000	31,655	5.2
Somalia	29,000	1,450	5.0
South Sudan	150,000	4,929	3.3
Madagascar	59,000	371	0.6

Cascade of HIV care – United States



Cascade of HIV care – Georgia



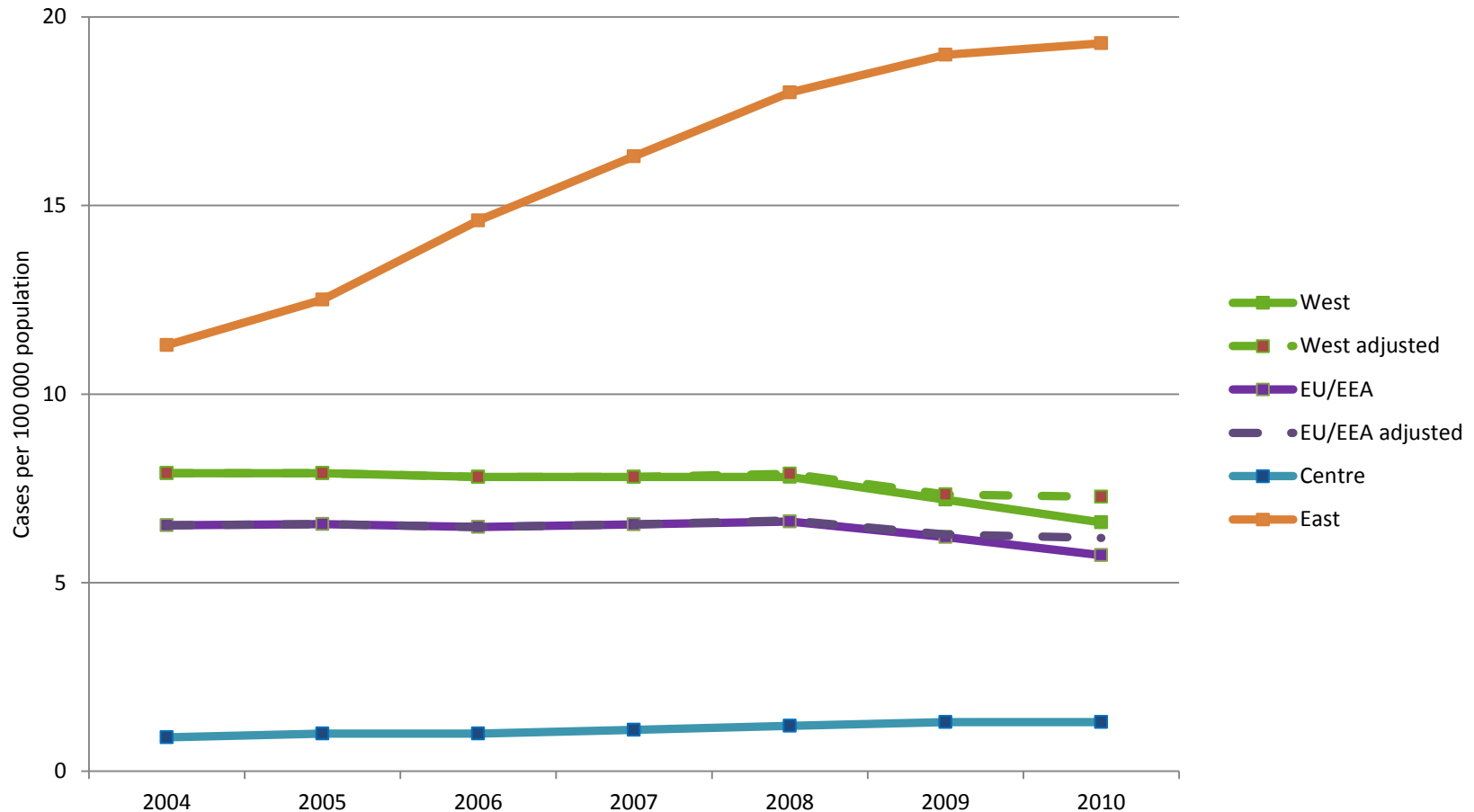
Results

- Weighted least squares regression analysis showed that

countries with higher ARV coverage rates had
 - lower rates of new HIV infections ($p < 0.0001$)
 - lower HIV-related death rates ($p < 0.0001$)
- In multivariate analyses, these correlations were independent from GDP per-capita, African / non-African regions and PEPFAR support

HIV infection in the three geographical areas EU/EEA, WHO European Region, 2004–10

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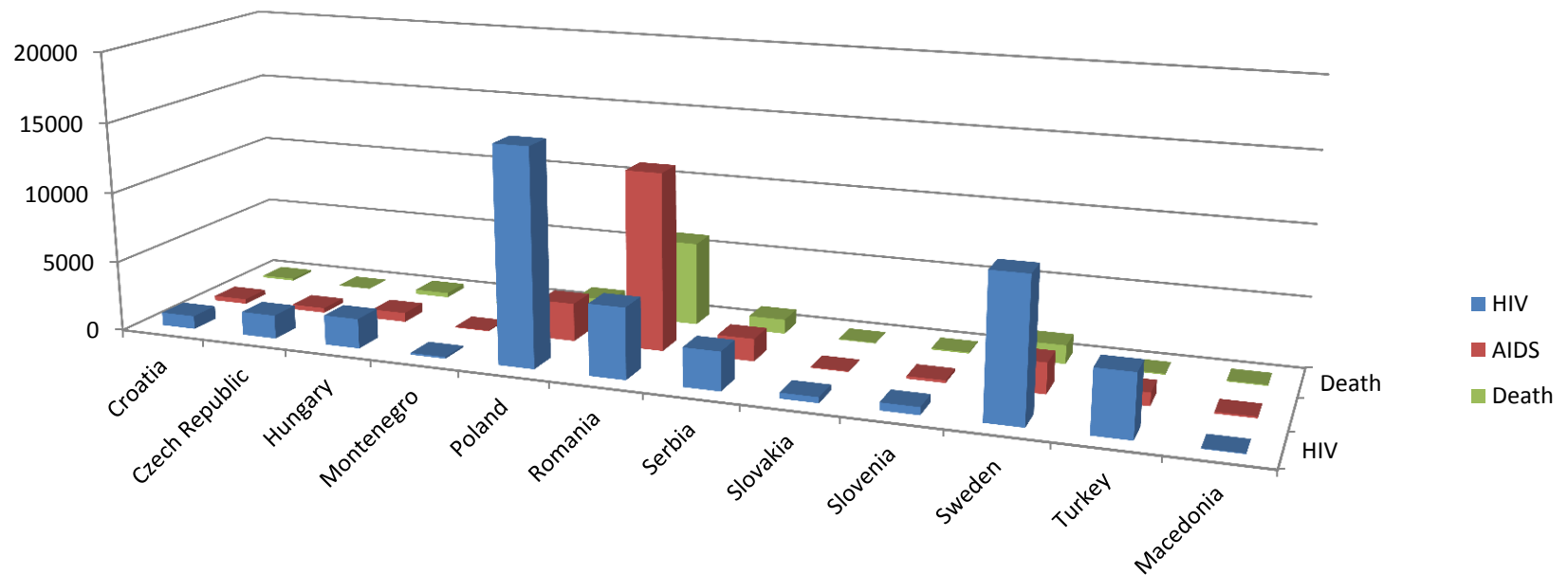
Data not reported or not available from Austria, Russia, Monaco.



Central Europe

Country	HIV	AIDS	Death
Croatia	938	342	151
Czech Republic	1675	344	9
Estonia	8062	354	99
Hungary	2115	656	327
Latvia	5192	1068	447
Lithuania	1900	295	121
Poland	15295	2704	1130
Romania	5003	12572	5950
Serbia	2725	1591	1029
Slovakia	406	61	46
Slovenia	543	190	87
Macedonia	41	113	67

Central Europe

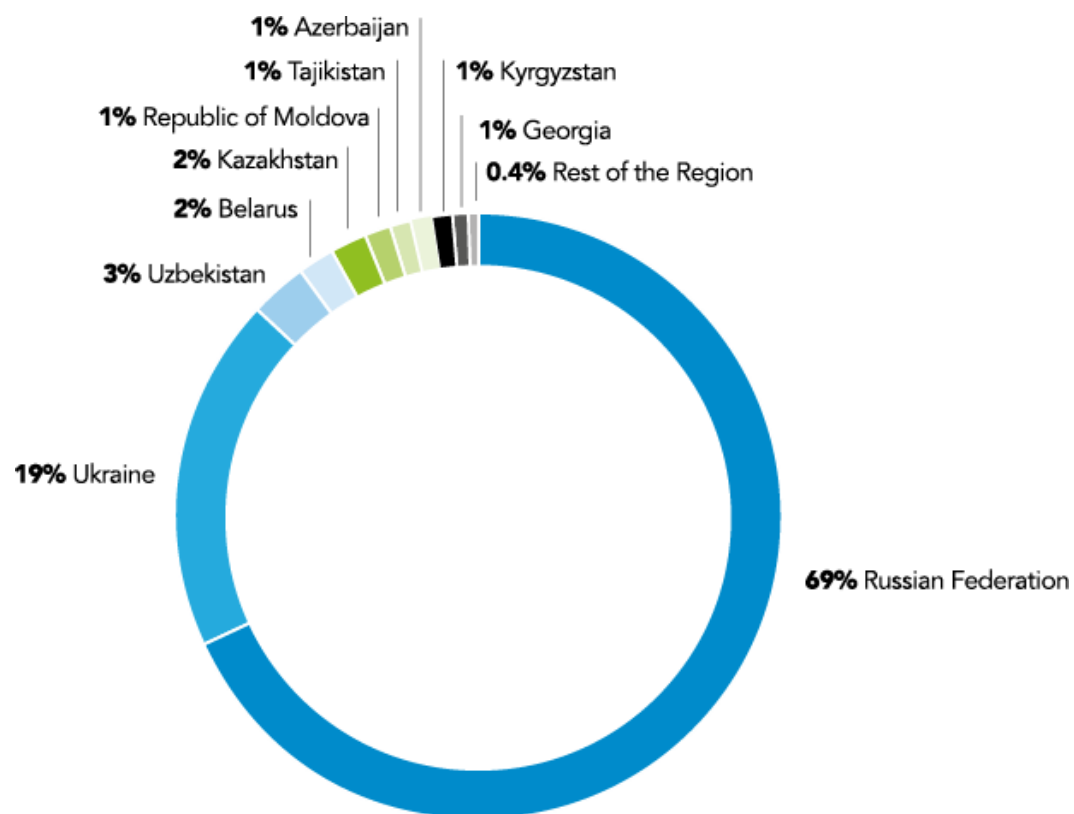


Eastern Europe

Country	HIV	AIDS	Death
Belarus	16 451	4500	3800
Georgia	3115	2002	536
Kazakhstan	17760	1476	1034
Kyrgystan	3886	435	165
Moldova	7077	1595	627
Russia	668 032	130000	52000
Turkey	4382	921	74
Ukraine	245 216	67 733	31 995
Uzbekistan	24057	651	333

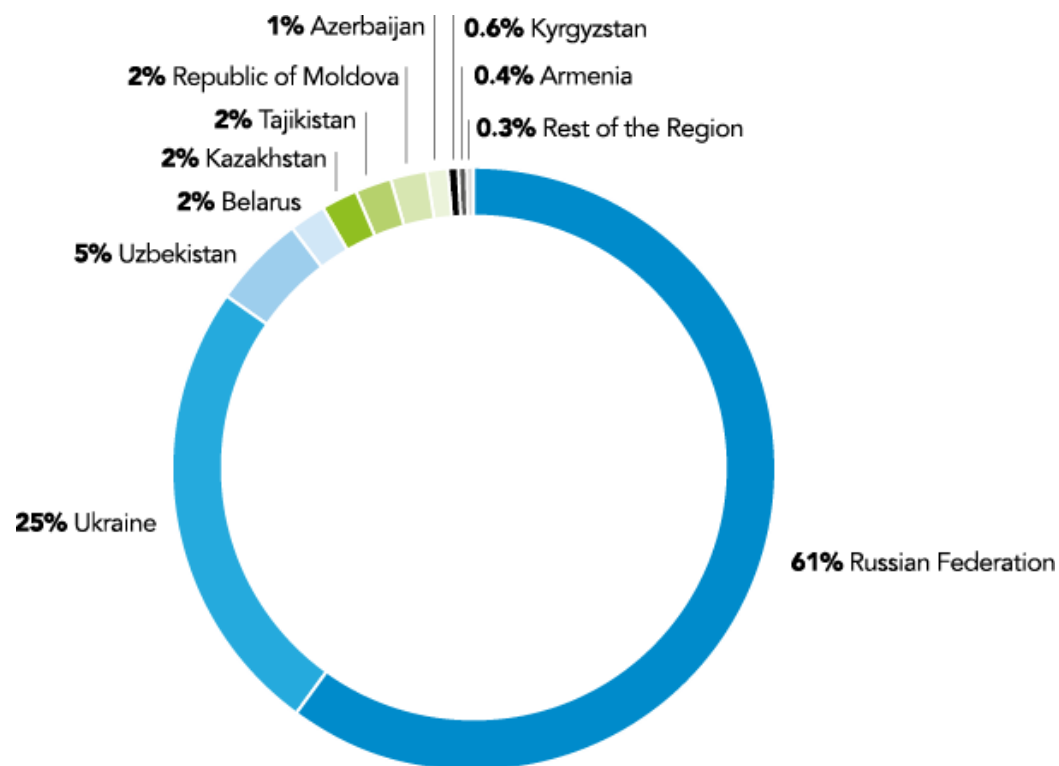
People living with HIV in Eastern Europe and Central Asia, 2013

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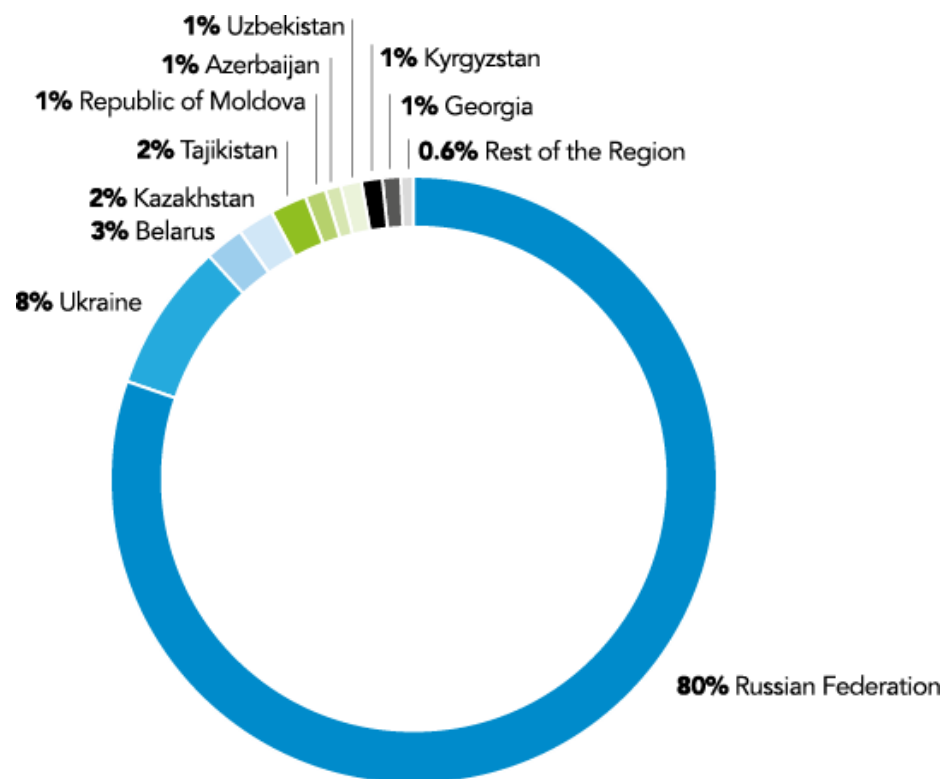
AIDS-related deaths in eastern Europe and Central Asia, 2013

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New HIV infections in eastern Europe and central Asia, 2013

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Central Europe

Country	HIV	AIDS	Death	ART.	Coverage
Bulgaria	1473	334	113	383	24
Croatia	938	342	151	510	83
Czech Republic	1675	344	9	760	
Hungary	2115	656	327	630	
Montenegro	128	62	32	40	
Poland	15295	2704	1140	4897	
Romania	5003	12572	5950	7536	69
Serbia	2725	1591	1029	300	
Slovakia	406	61	46	118	
Slovenia	543	190	87	157	
Sweden	9888	2168	1323	5016	
Macedonia	41	113	67	45	
Turkey	4382	9221	74	1000	56

Eastern Europe

Country	HIV	AIDS	Death	ART.	Coverage
Belarus	12400	2925	1087	3223	51
Estonia	8062	354	99	1793	
Georgia	3115	2002	536	1122	65
Kazakhstan	17760	1476	1034	1336	30
Kyrgystan	3886	435	165	548	12
Latvia	5192	1068	447	560	27
Lithuania	1900	295	121		25
Moldova	7077	1595	627	1665	
Uzbekistan	24057	651	333	3800	

Eastern Europe

Country	HIV	AIDS	Death	ART.	Coverage
Russia	alive 668 032			156 858	19% VL<500
Ukraine	245 216	67 733	31 995	55 784	24

Central Europe

Country	When to start ART (CD4 cell count /cmm	When to start (other responder)
Romania	<500 (Ro guidelines)	<350 (other region)
Czech Republic	<350	<500
Slovakia	<500	
Serbia	<350	
Albania	<350	
Croatia	350-500	
Slovenia	any CD4	
Poland	<500	
Bosnia & Herzegovina	<500	
Macedonia	<350	
Moldova	<500	



Eastern Europe

Country	When to start ART (CD4 cell count /cmm	When to start (other responder)
Armenia	any CD4	
Georgia	<350	
Uzbekistan	<350	
Tadjikistan	<350	
Kirghizstan	<350	
Russian Federation	<200	any CD4



- Which guidelines are used ?

HIV Care in Central Europe

Deniz Gökengin

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Infectious Diseases



HIV clinics and guidelines

- Specific HIV clinics
 - 43.7% Yes
 - 56.3% No
- National guidelines
 - 68.8% Yes
 - 31.3% No (Slovenia, Kosovo, Hungary, Bulgaria, Montenegro)
- Update frequency
 - Annually—every five years—none

- Clinicians are
 - Trained for the guidelines 76.9%
 - Not trained for the guidelines 23%
- Clinicians adhere to the guidelines 100%
- Countries without guidelines use
 - DHHS 12.5%
 - EACS 100%

ART initiation threshold

- CD4 <200—none
- CD4 <350—53.3%
 - Albania, Serbia, Kosovo, Hungary, Macedonia, Bulgaria, Montenegro
- CD4 <500—40%
 - Romania, Czech Rep., Slovakia, Bosnia, Poland, Turkey
- Any CD4—13.3%
 - Slovenia, Poland
- Croatia-no answer

Most preferred ARV regimens

- TDF + FTC + EFV
- ABC + 3TC + EFV
- TDF + FTC + LPV/r
- Many other combinations are used

ART initiation in Ukraine

- The regulatory document for ART in Ukraine is:
 - ” Order of the Ministry of Health of Ukraine №580 from 12.12.2003 , when the HIV care Clinical Protocol have been created based on "Scaling up Antiretroviral Therapy in Resource-Limited Settings 2003",
 - "Consultation for the development of protocols for HIV care for Ukraine and other Commonwealth Independent States countries. WHO HQ 2004”.

Galina Kutsyna – personal communication



ART initiation in Ukraine

- In 2013 only 12,2% of patients started ART with CD4 count > 350 cells/mm³
- VL < 50 copies achieved 78.1% of patients in 2013
- 93.6% pts had first line regimen, 6 % second and 0.4% the third.
- 1st line regimen is based on NNRTI (EFV/AZT/3TC or NVP / AZT/3TC) or PI (47% pts) mostly - NFV/AZT/ 3TC.
- Financial coverage of ART budget – 82% the government and 17% Global Fund

Galina Kutsyna-peronal communication

ART initiation in Belarussia

- 5112 on ART
- national guidelines based on WHO 2010
- CD4 in the beginning <350 c/mcL, for additional indication with CD4 350-500 c/mcL
- 2997 (59%) had VL<500 copies/ml — the most often using threshold
- first line regimen is NNRT based TDF+FTC+EFV, or ABC+3TC+EFV, or AZT+3TC+EFV
- in 2014 government pay for 40%, since 2015 it will pay for all.

Anna Vasilenko – personal communication

ART initiation in Russia

- 516 409 pts were linked to care
- 163 822 (25%) were eligible for ART
- CD4 < 250 ??
- The proportion of pts in ART increased from 24% in 2011 to 34% in 2013%
- Viral suppression VL<1000 cp/ml in week 48
- 81% of treated had viral suppression according to used definition

Pokrovskaya A. & cow ; Glasgow 2014, O236, The cascade of HIV care in Russia 2011-2012



People left behind: People who inject drugs

[Link with the pdf, People who inject drugs](#)



Summary

- In most Central European countries it is possible to achieve WHO goals even now

Summary

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- In most Central Asia countries it is possible to achieve WHO goals in the nearest future

Summary

- In most Central European countries it is possible to achieve WHO goals even now
- In most Central Asia countries it is possible to achieve WHO goals in the nearest future
- In most affected East Europe countries it is possible to achieve WHO goals , but it will take time

Thank you

Deniz Goekengin
Mike Youle, Ben Collins

- Aleksandra Marjanovic (Montenegro)
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- Anna Vassilenko (Belarussia)

