



European
AIDS Treatment
Group

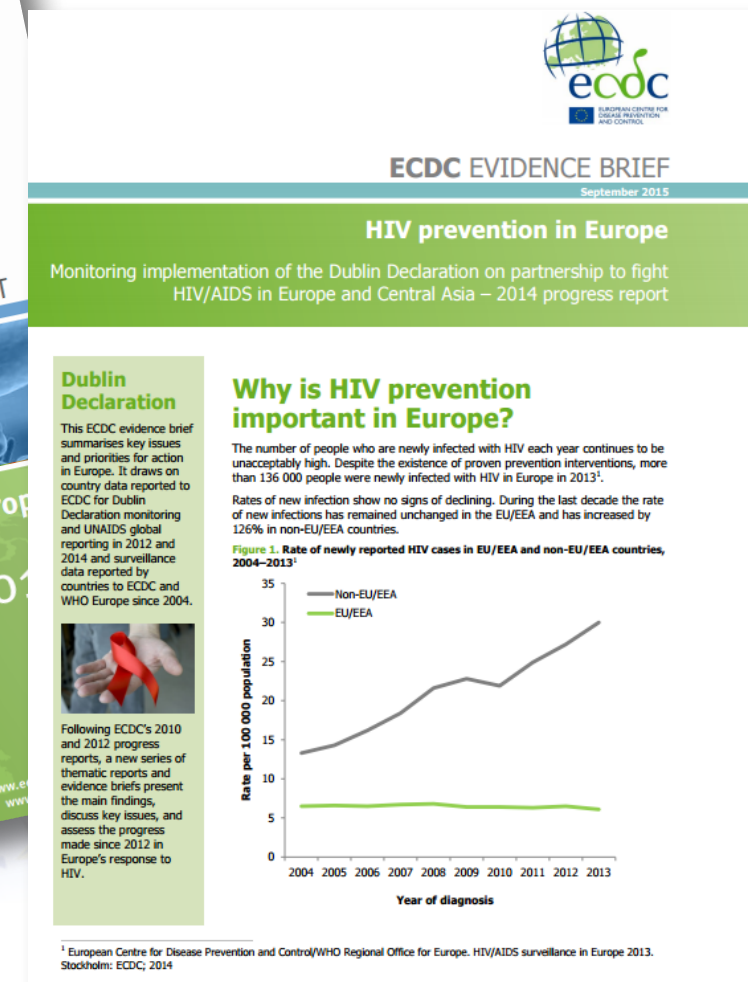


HIV infection in children and adolescents in EU/EEA

Dr. Otilia Mardh, ECDC

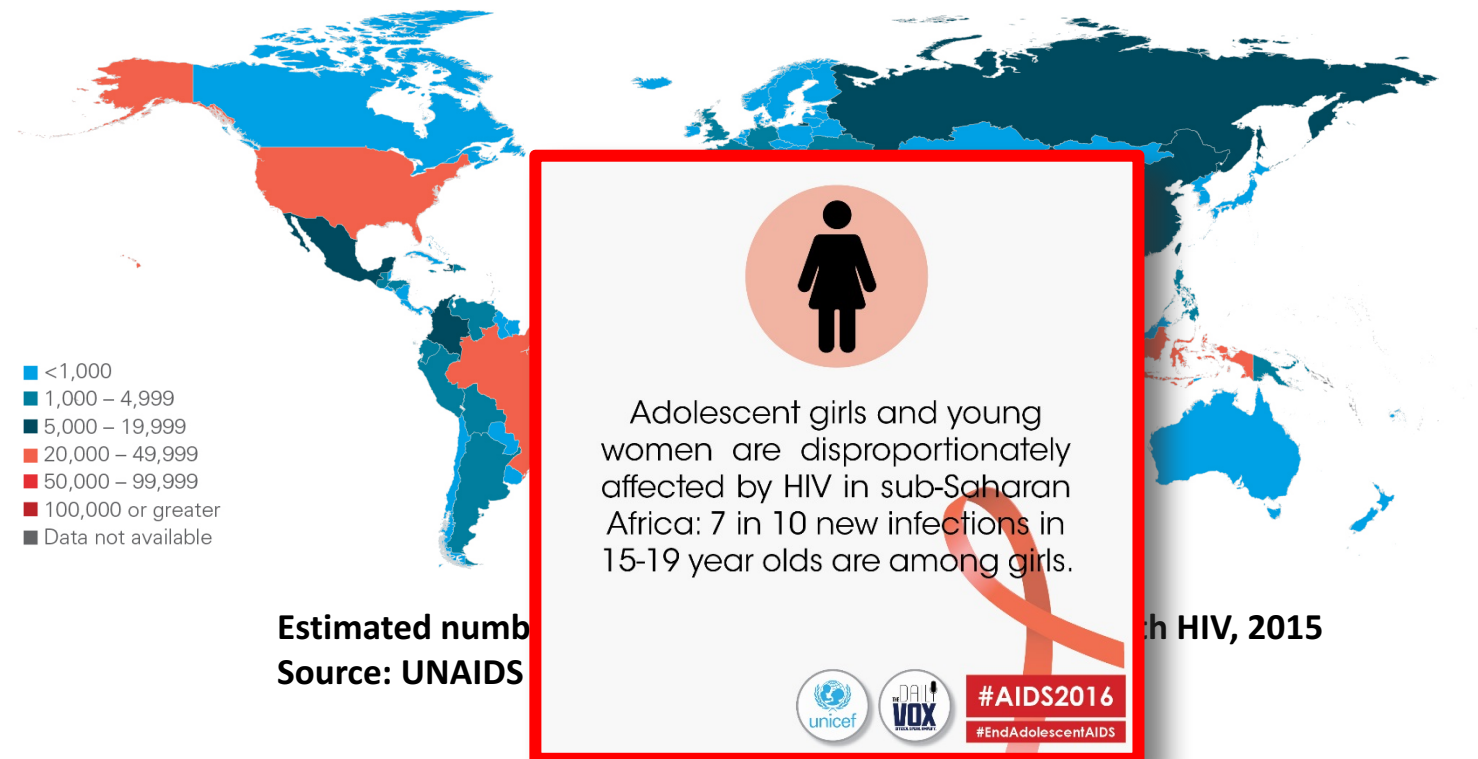
What is ECDC?

- European Union independent agency active since 2005
- Our mission is to strengthen EU/EEA defences against infectious diseases through surveillance, scientific advice, technical assistance
- Collects HIV data from the 31 EU/EEA countries (up to 54, jointly with WHO Europe)



In 2015,

- Living with HIV: 1,8 million children and 1,8 adolescents
- New HIV infections: 150,000 children and 250,000 adolescents
- AIDS-related deaths: 110,000 children and 41,000 adolescents
- Sub-Saharan Africa most affected (low access to ART, 20%; testing, 9%-13%)
- 70% reduction in new HIV infections among children (0-14) since 2001, PMTCT



We need a people-centred response to the AIDS epidemic that removes all obstacles in the path of people's access to HIV prevention and treatment services.

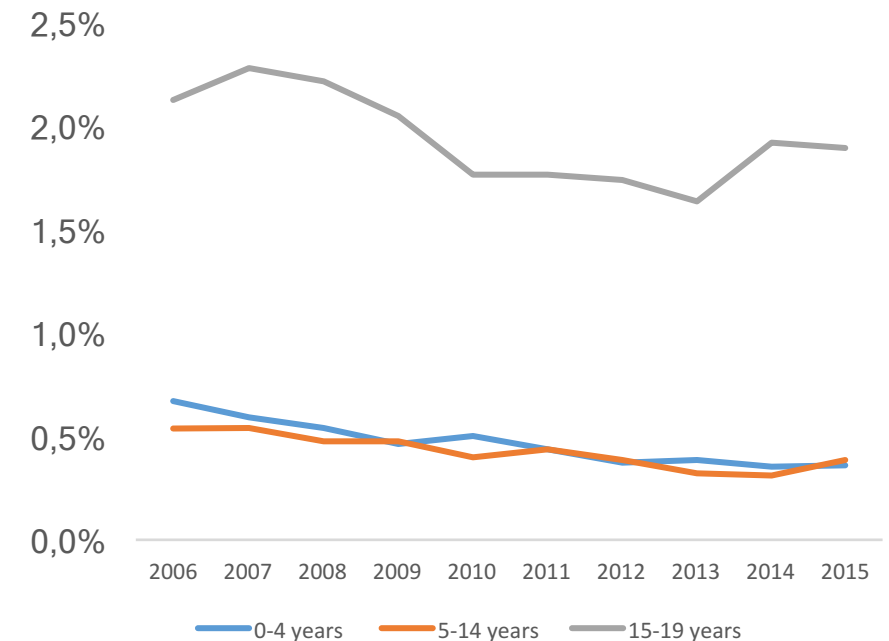
Michel Sidibé, Executive Director of the Joint United Nations Programme on HIV/AIDS (UNAIDS) and Under-Secretary-General of the United Nations

In EU/EEA, HIV diagnoses among children and adolescents (0-19 years)



EU/EEA: 31 Member States
>500 million population

- In 2015: **787** new HIV diagnoses (2.6% of total **29 747** HIV reports)
- Between 2006-2015: **8617** new HIV diagnoses
 - 1418 (16%) 0-4 years
 - 1293 (15%) 5-14 years
 - 5906 (69%) 15-19 years



Source: The European Surveillance System, 30 EU/EEA reporting countries

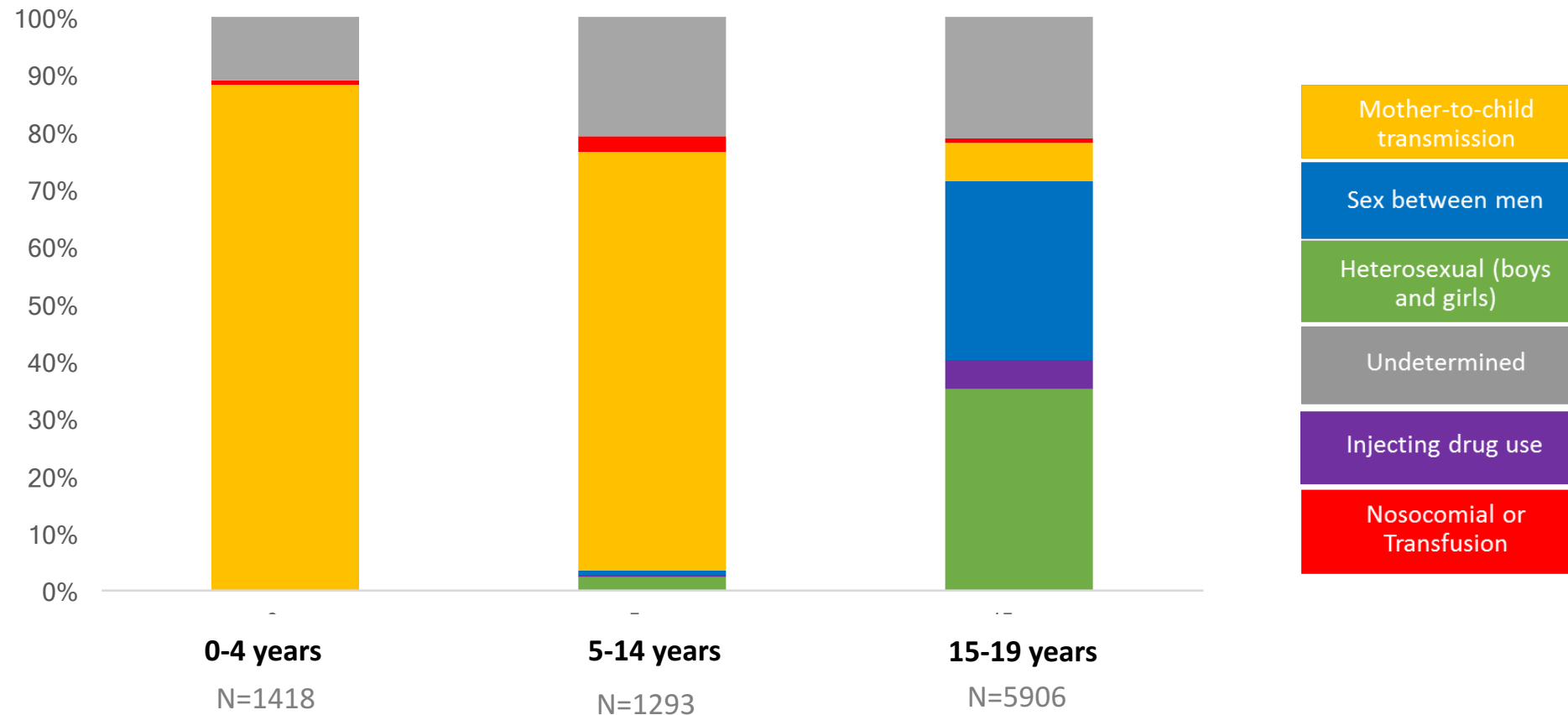
8617

Several questions to answer:

- How did they get infected?
- Who are the HIV-positive children and adolescents?
- Trends?
- Public health implications?

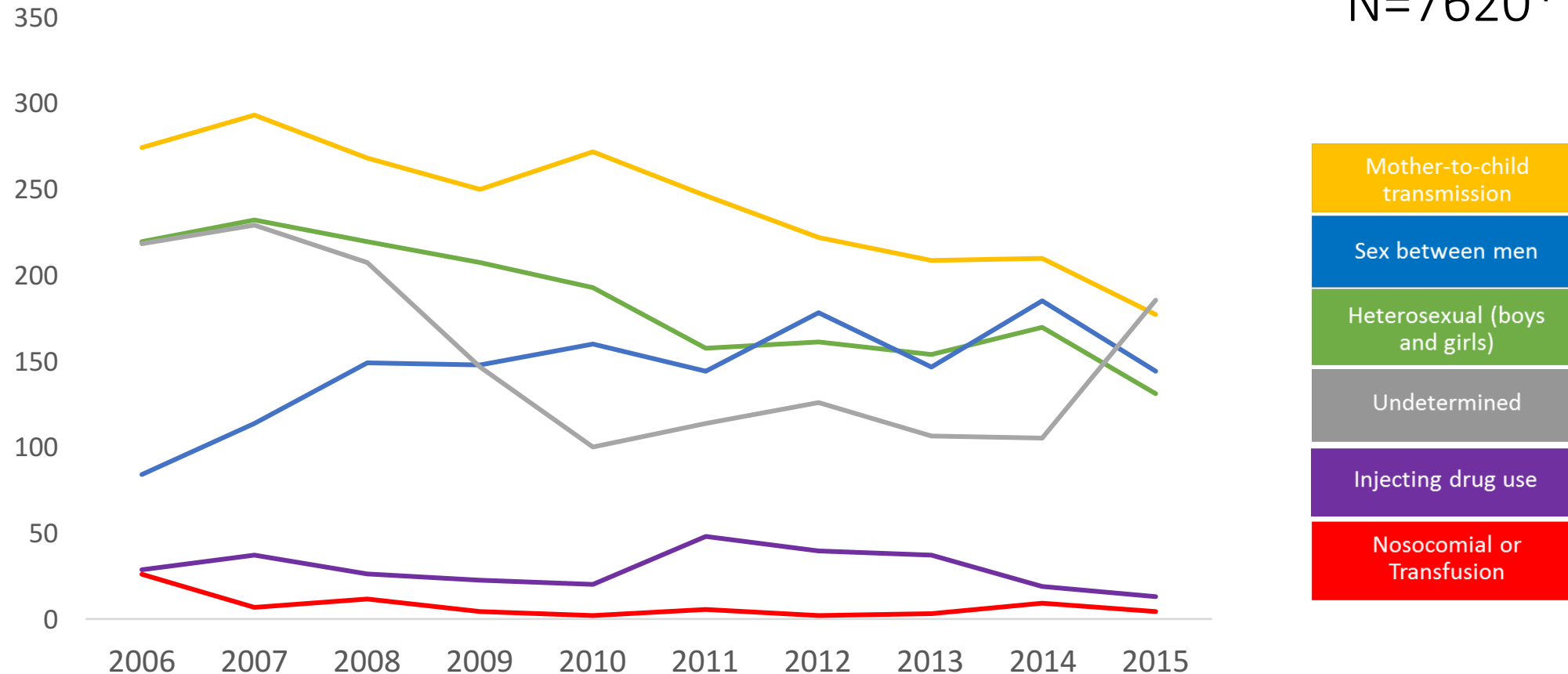
How did the children and the adolescents get infected?

Modes of transmission of HIV infections diagnosed among children and adolescents (0-19 years), 2006-2015, EU/EEA, N=8617



Source: The European Surveillance System, 30 EU/EEA reporting countries

Trends of HIV diagnoses among children and adolescents (0-19 years), by mode of transmission, 2006-2015, EU/EEA N=7620*

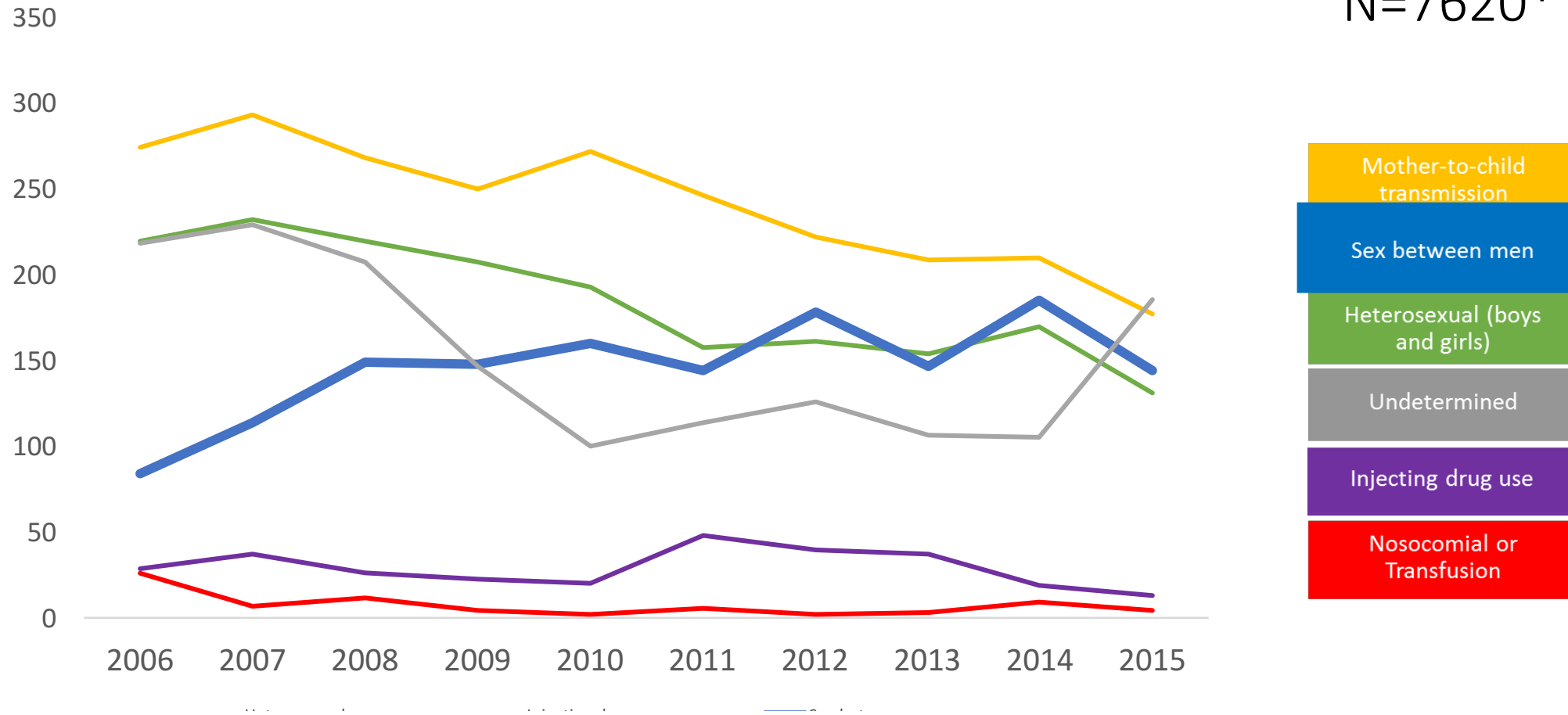


**Italy and Spain not included due to changes in surveillance systems*

Source: The European Surveillance System, 30 EU/EEA reporting countries

Trends of HIV diagnoses among children and adolescents (0-19 years), by mode of transmission, 2006-2015, EU/EEA

N=7620*



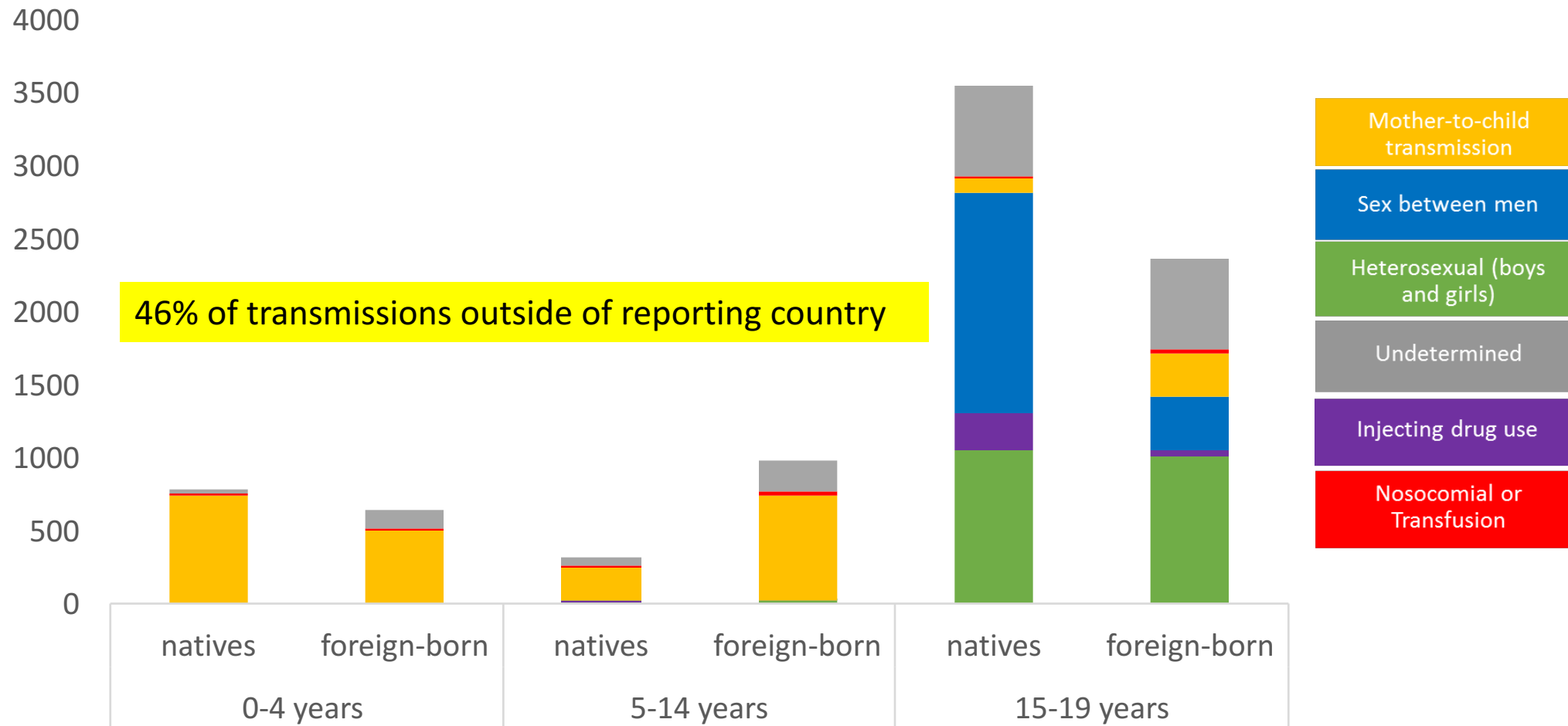
*Italy and Spain not included due to changes in surveillance systems

Source: The European Surveillance System, 30 EU/EEA reporting countries

Not all the cases were born in EU/EEA!

“Native” vs. “migrant” children diagnosed in EU/EEA

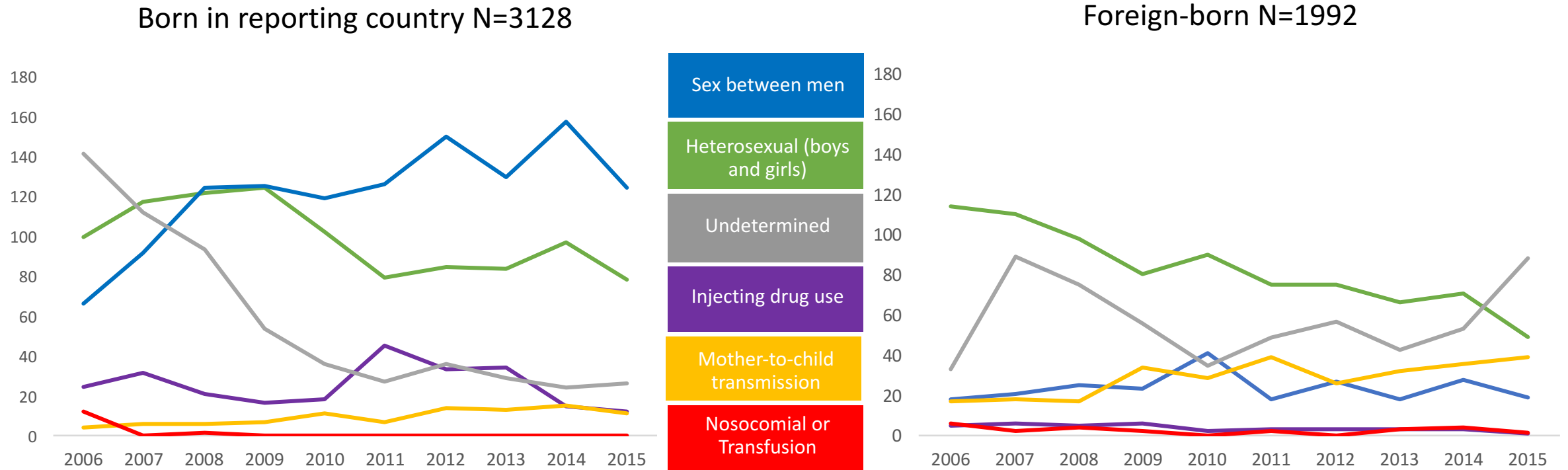
HIV-infections diagnosed among children and adolescents (0-19 years),
by region or origin and modes of transmission 2006-2015, EU/EEA, N=8617



Source: The European Surveillance System, 30 EU/EEA reporting countries

Trends in adolescents?

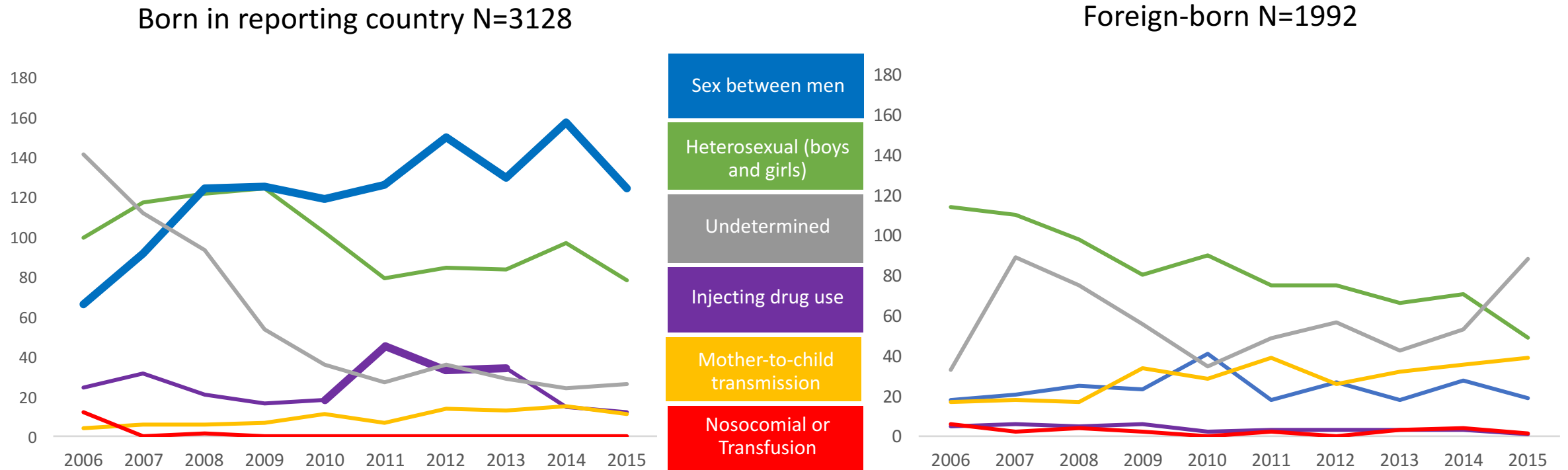
Modes of transmission of HIV infection diagnosed among adolescents (15-19 years), **by region or origin** 2006-2015, EU/EEA, N=5120



Note: Italy and Spain not included due to changes in surveillance systems
Source: The European Surveillance System, 30 EU/EEA reporting countries

Trends in adolescents?

Modes of transmission of HIV infection diagnosed among adolescents (15-19 years), **by region or origin** 2006-2015, EU/EEA, N=5120

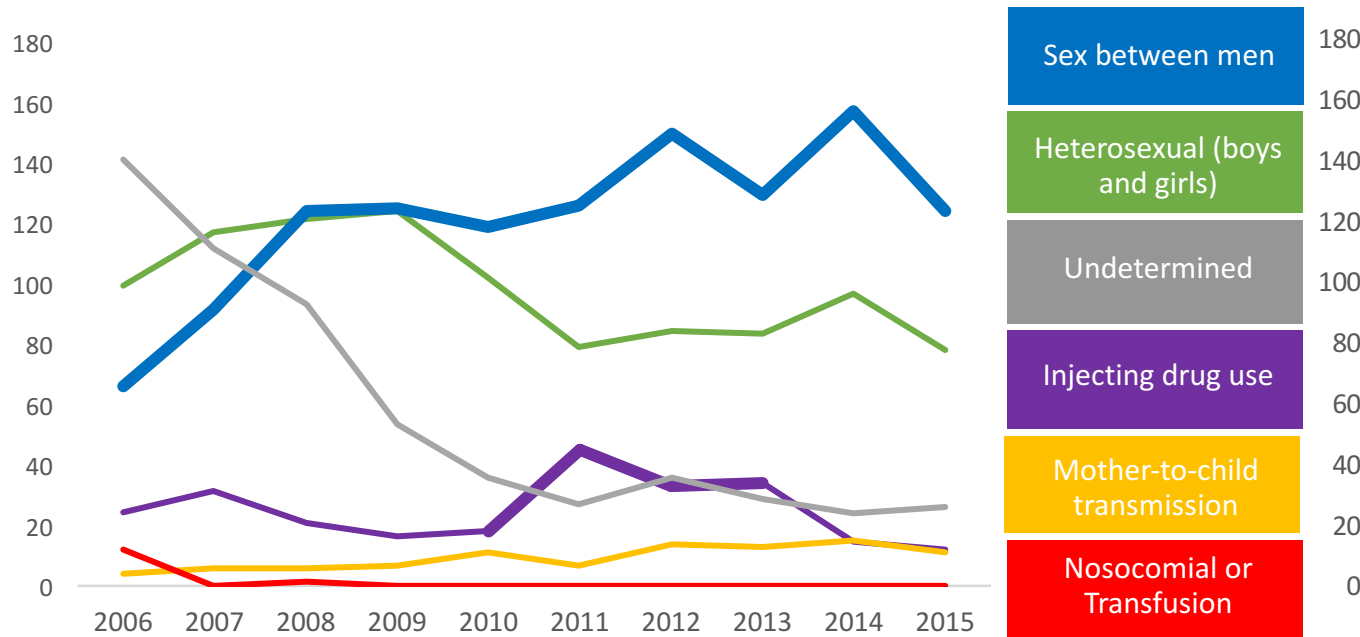


Note: Italy and Spain not included due to changes in surveillance systems
Source: The European Surveillance System, 30 EU/EEA reporting countries

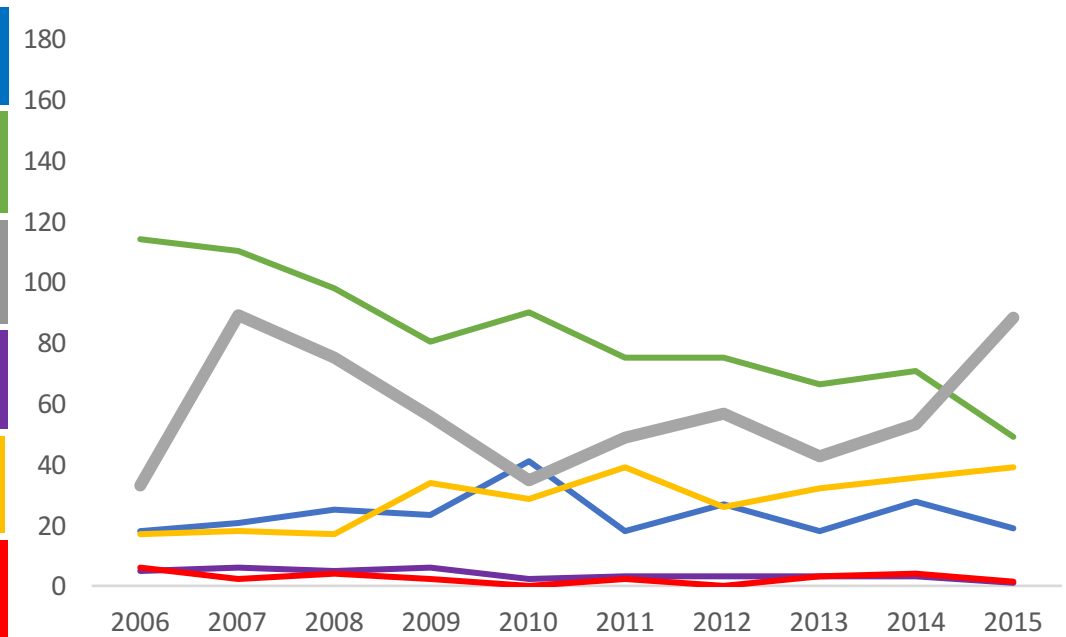
Trends in adolescents?

Modes of transmission of HIV infection diagnosed among adolescents (15-19 years), **by region or origin** 2006-2015, EU/EEA, N=5120

Born in reporting country N=3128



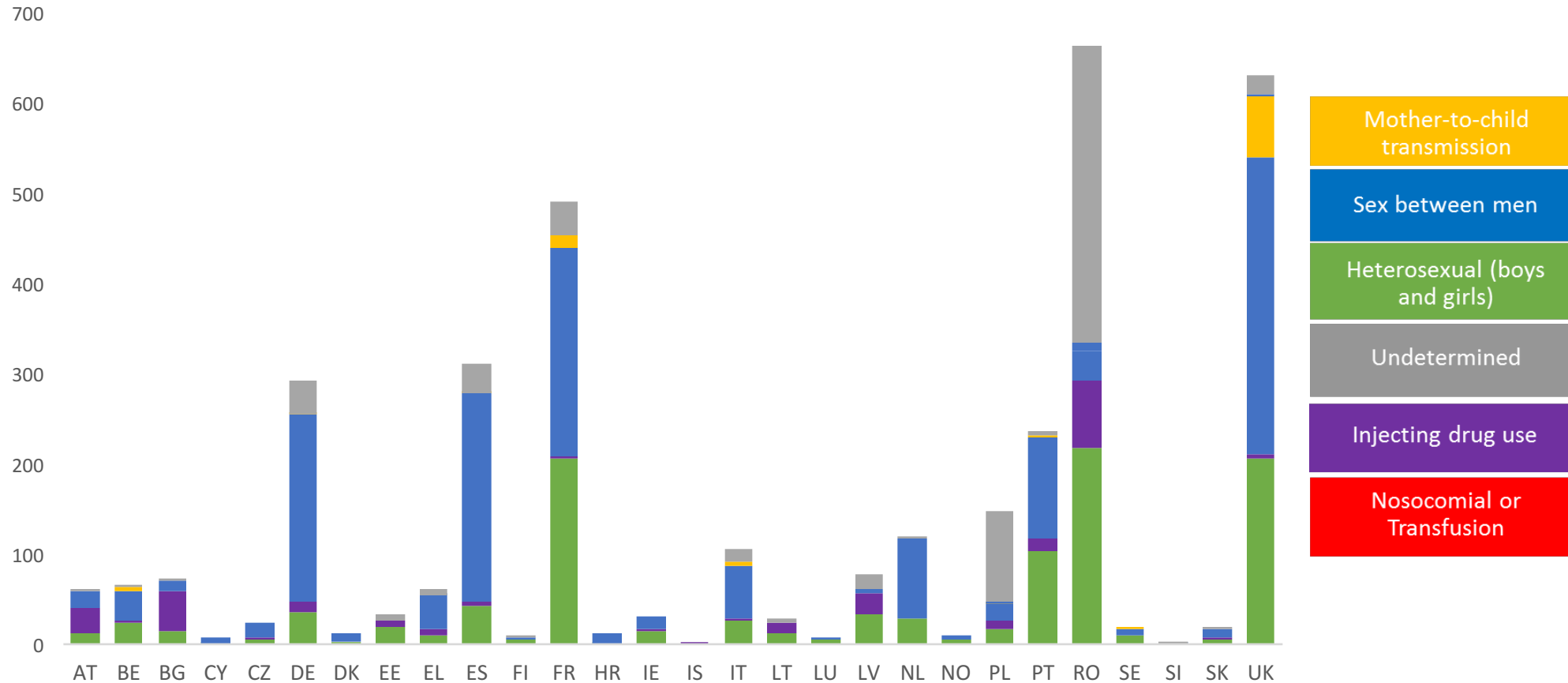
Foreign-born N=1992



Note: Italy and Spain not included due to changes in surveillance systems
Source: The European Surveillance System, 30 EU/EEA reporting countries

Any differences between countries?

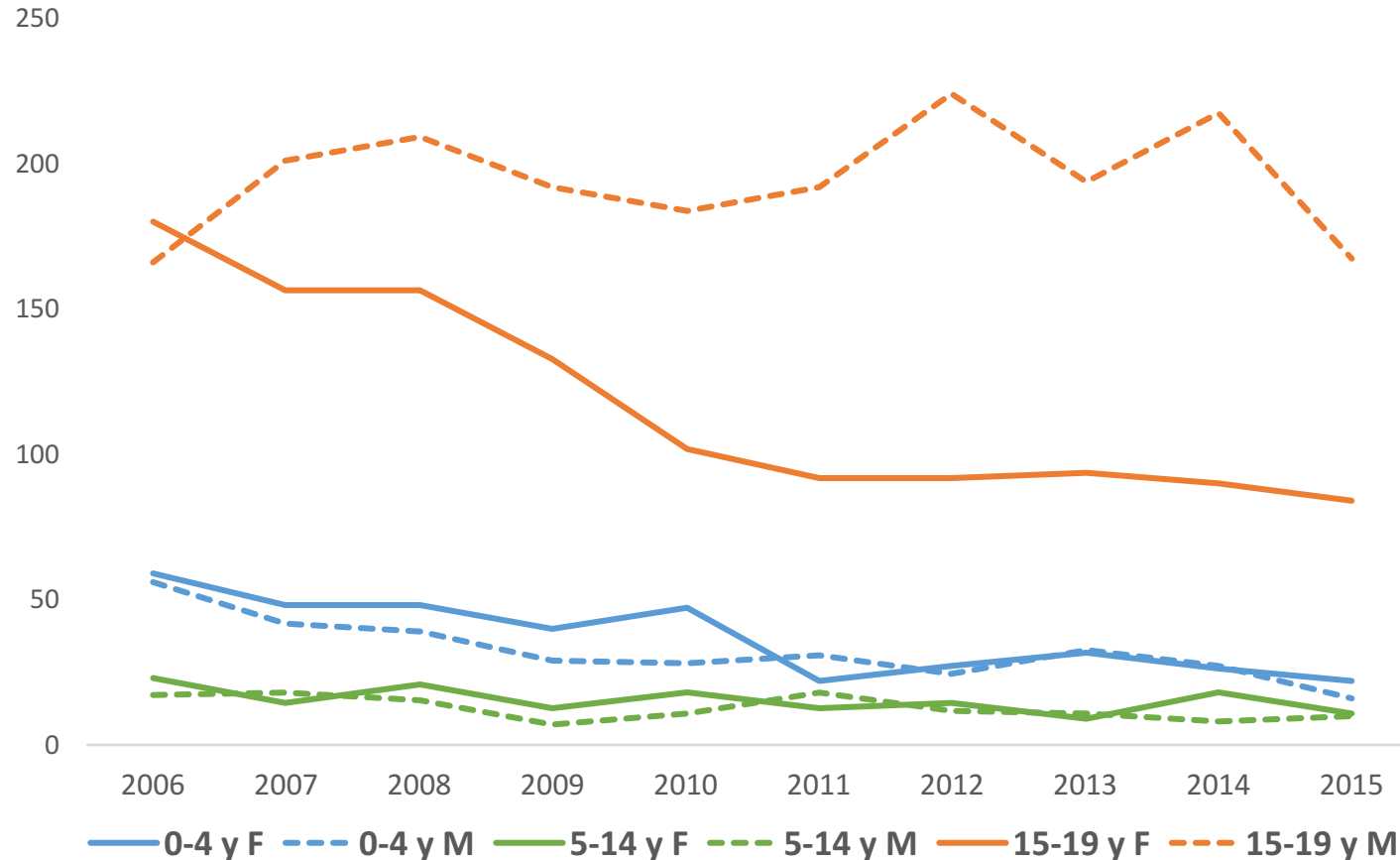
Numbers of HIV diagnoses among 15-19 years olds born in reporting country, by mode of transmission, EU/EEA, 2006-2015 N=3544



Source: The European Surveillance System, 30 EU/EEA reporting countries

Any differences between genders?

HIV diagnoses by age group and **gender** in “native” cases in EU/EEA, 2006-2015
N=4102



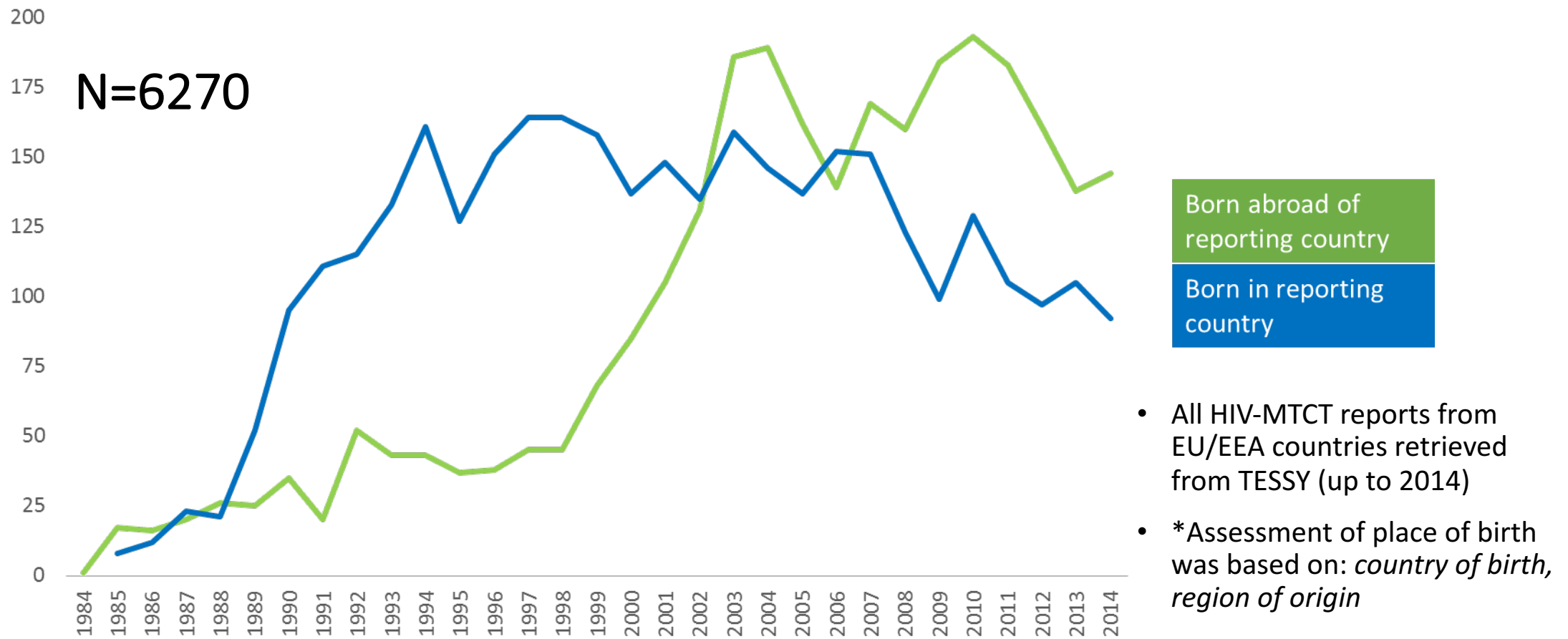
Young men at sustained higher risk!

Note: Italy and Spain not included due to changes in surveillance systems
Source: The European Surveillance System, 30 EU/EEA reporting countries

Mother-to-child transmission of HIV in EU/EEA

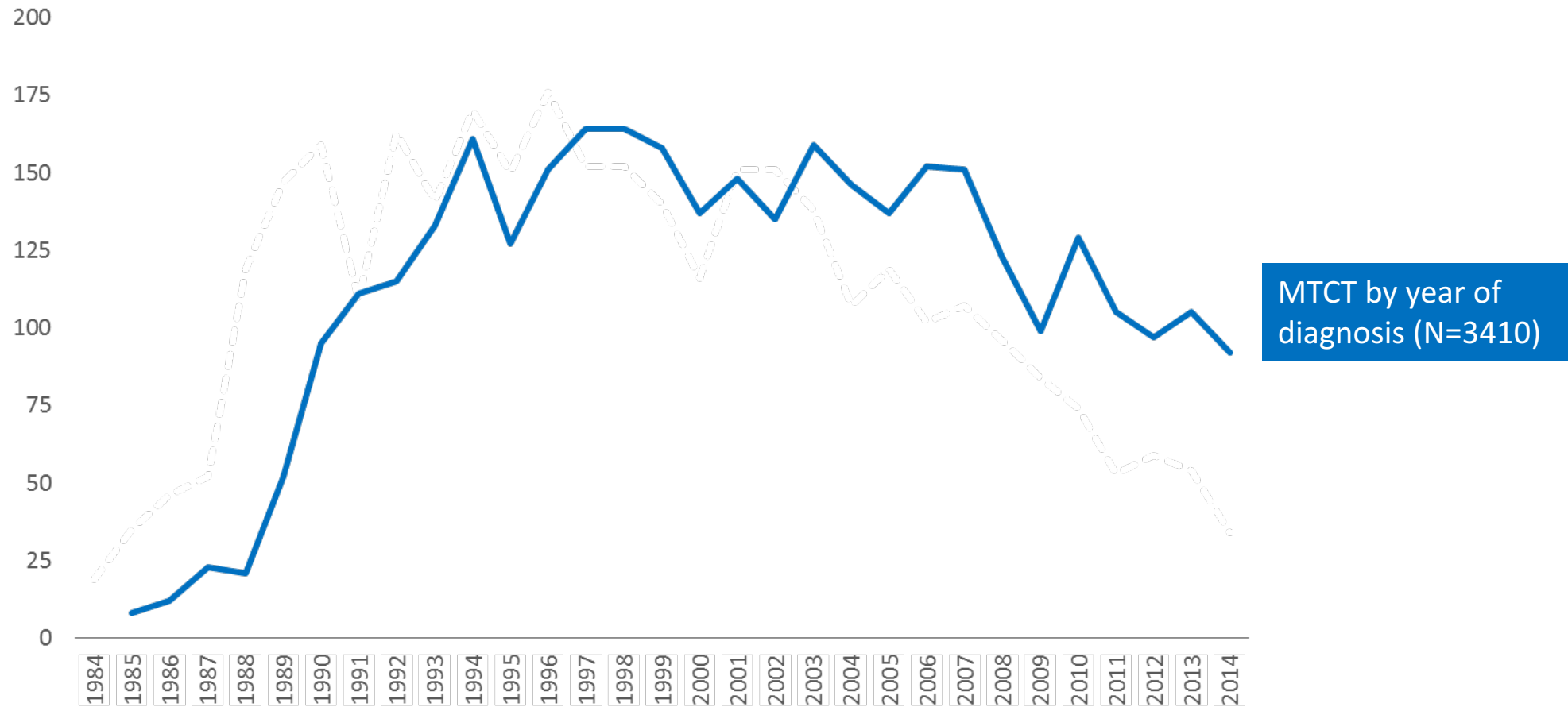
Analysis of 30-years of surveillance data on HIV diagnoses

Numbers of HIV-MTCT cases reported by EU/EEA countries, by place of birth* and by year of diagnosis; 1984-2014



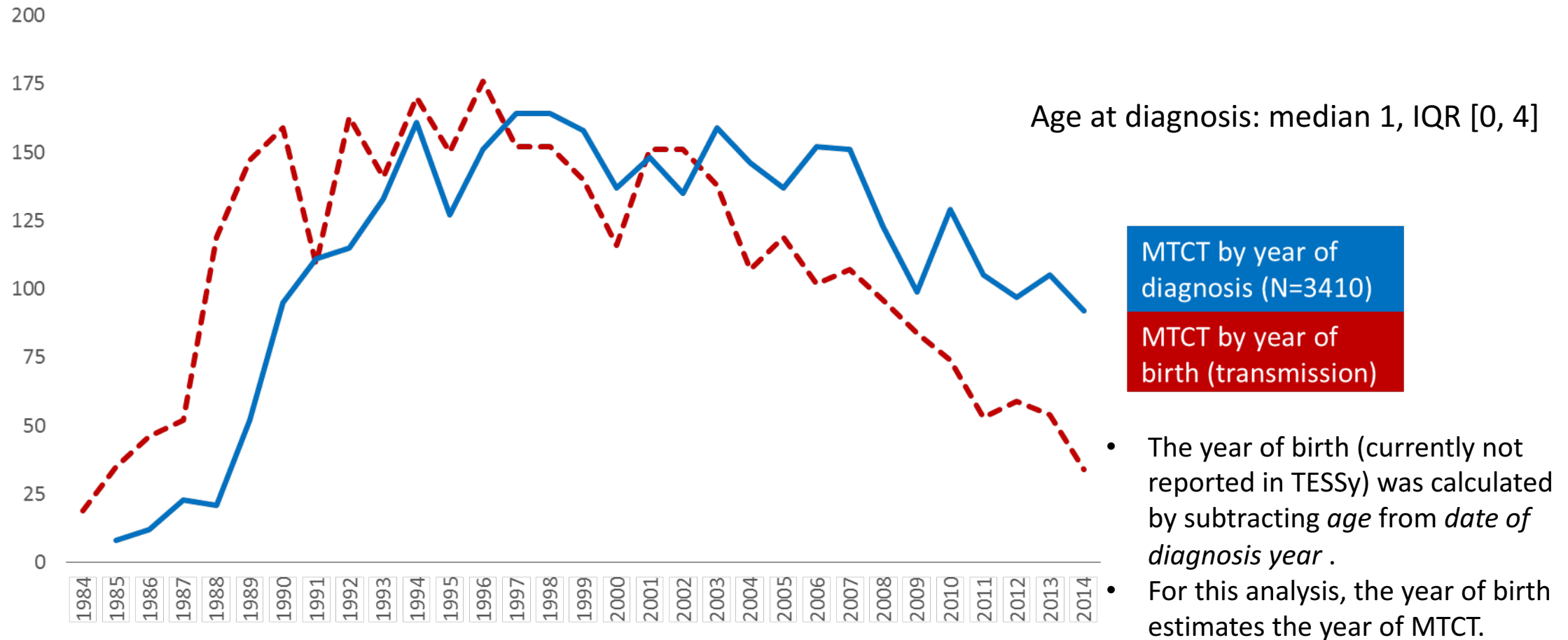
Source: The European Surveillance System, 30 EU/EEA reporting countries

HIV-MTCT cases **born in reporting** EU/EEA countries by year of diagnosis



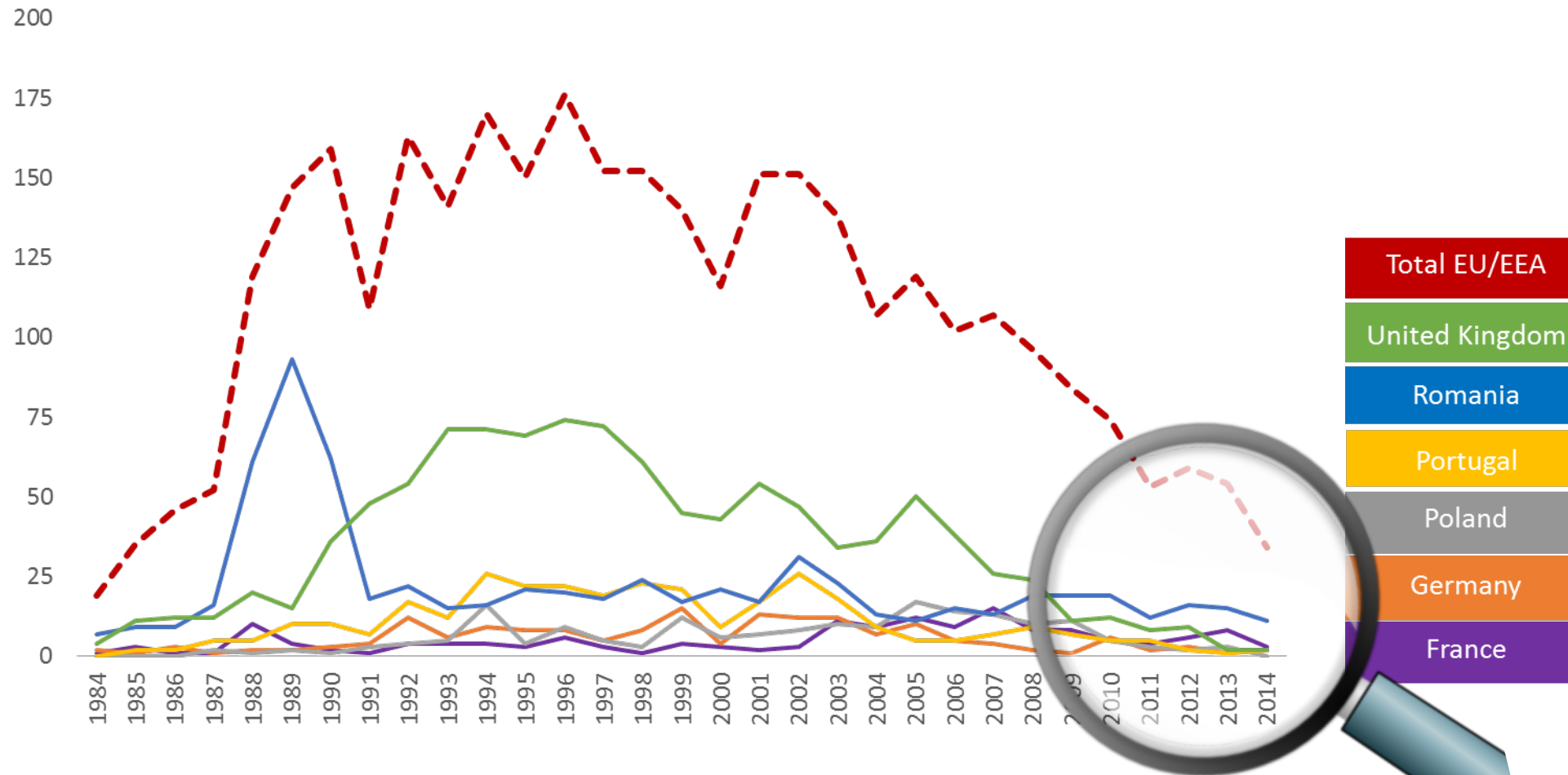
Source: The European Surveillance System, 30 EU/EEA reporting countries

HIV-MTCT cases **born in reporting** EU/EEA countries by year of diagnosis and by calculated* year of birth



Source: The European Surveillance System, 30 EU/EEA reporting countries

HIV-MTCT “native” cases reported by five countries accounting for 2/3 of all reports, by year of birth (transmission)

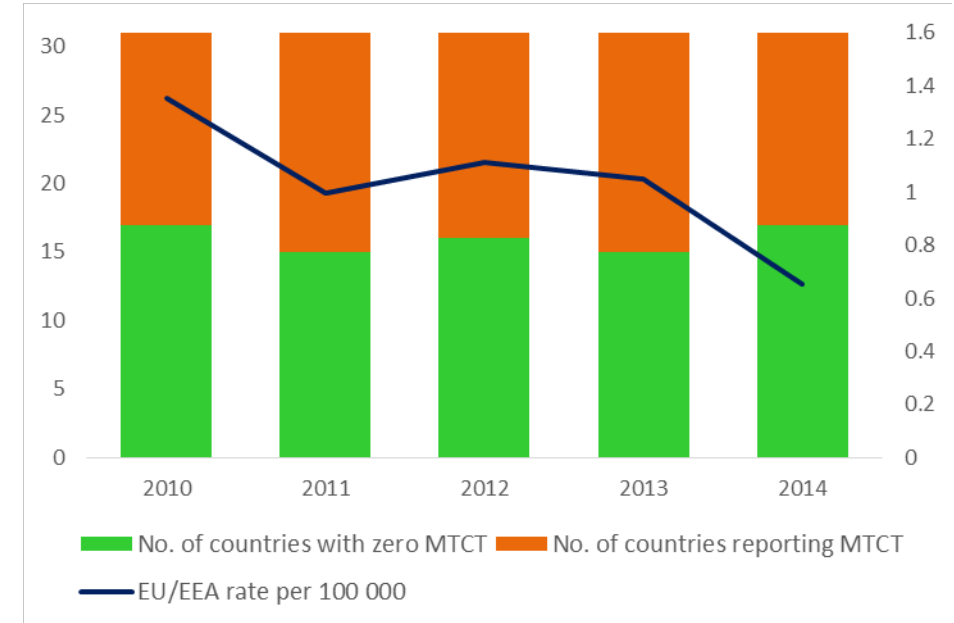
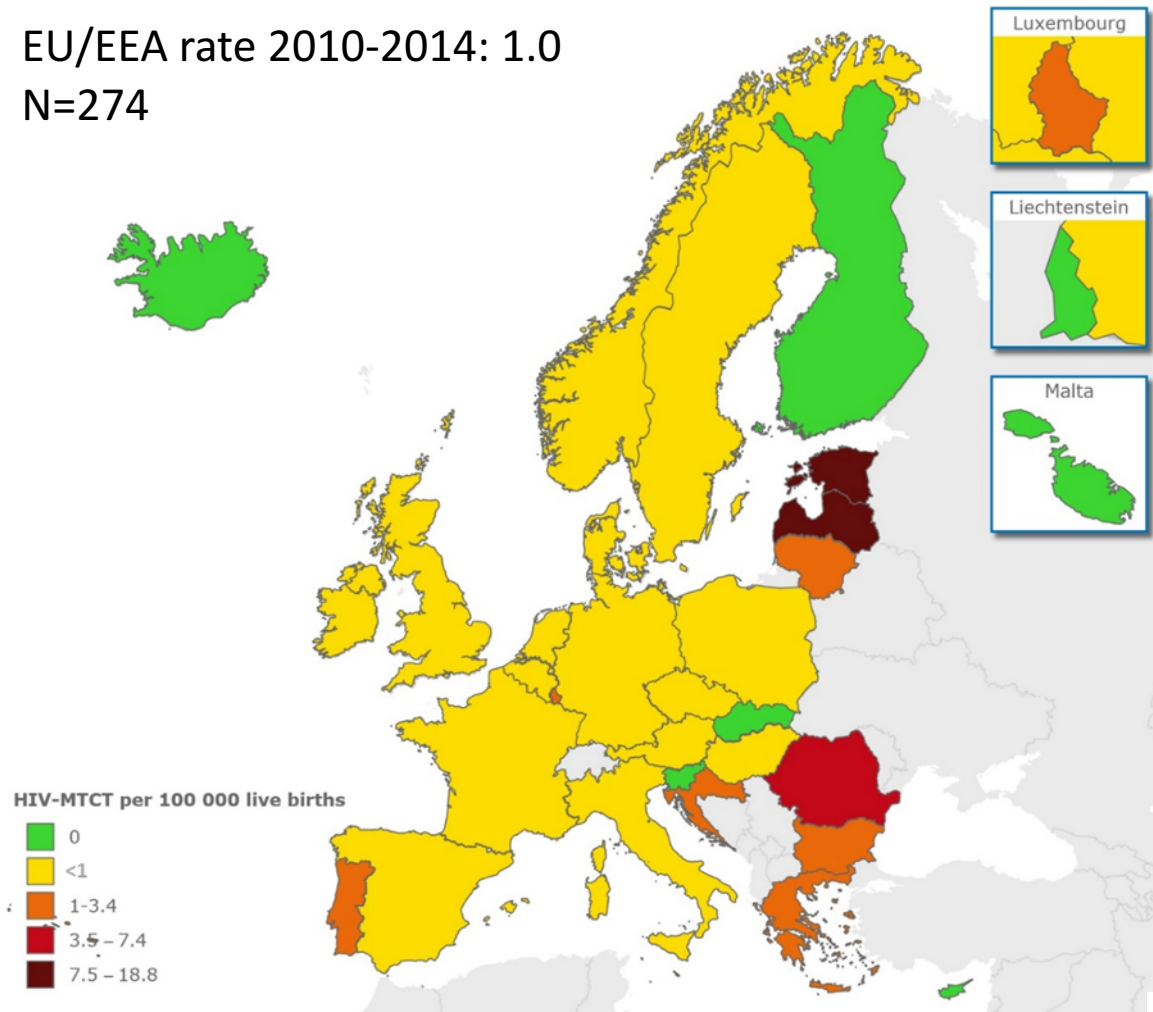


Source: The European Surveillance System (ESS) of EU/EEA reporting countries

HIV-MTCT in persons **born in reporting** EU/EEA countries, rates per 100 000 live births 2010-2014

EU/EEA rate 2010-2014: 1.0

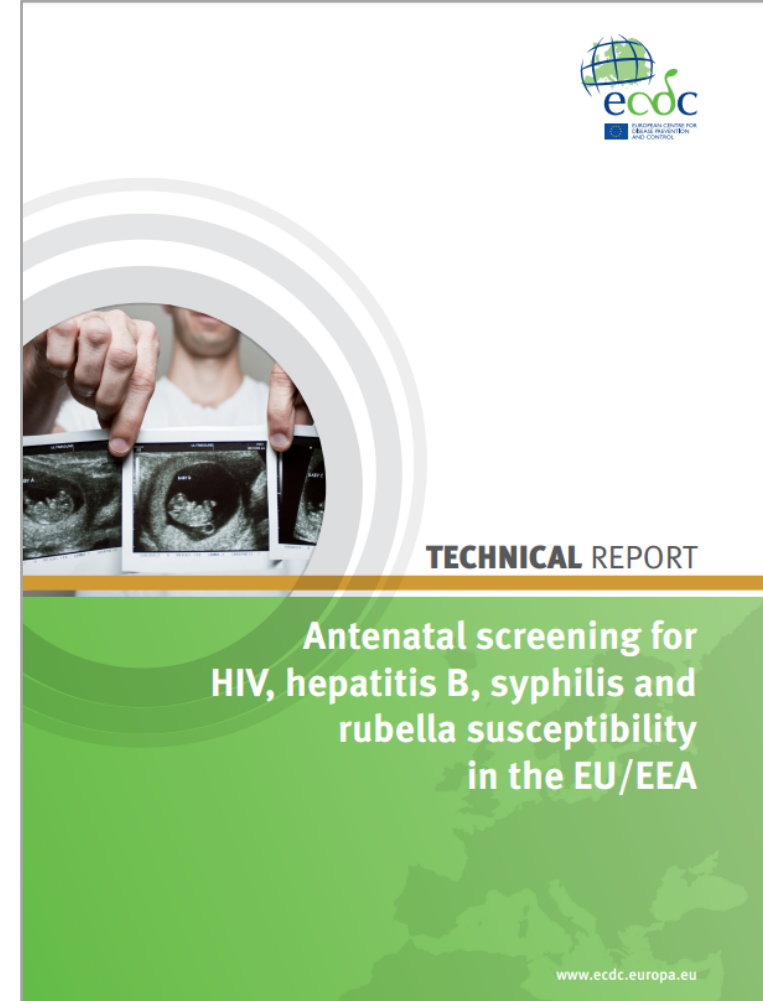
N=274



- National HIV-MTCT rates per 100 000 live-births (vertical transmission rates) calculated by dividing the number of HIV-MTCT cases born in the reporting country by the number of live births (Eurostat) for the period 2010-2014

Source: The European Surveillance System, 30 EU/EEA reporting countries

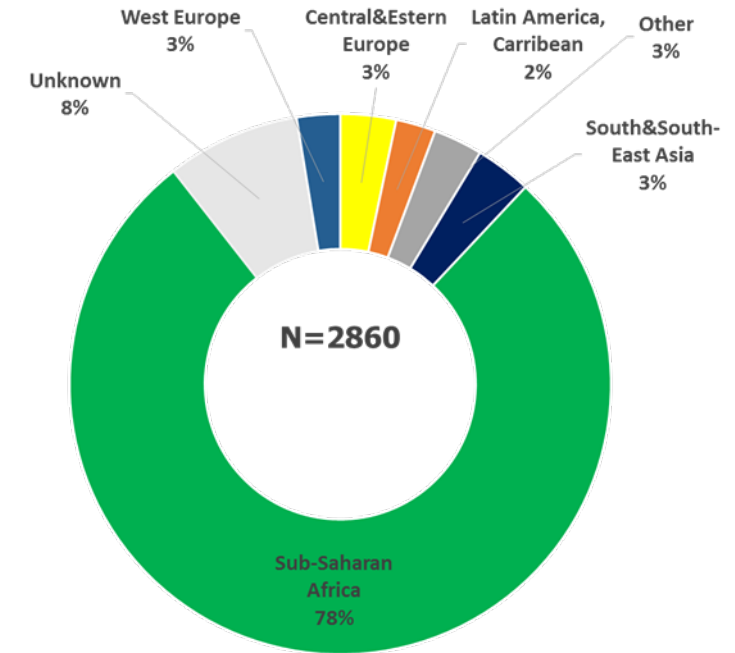
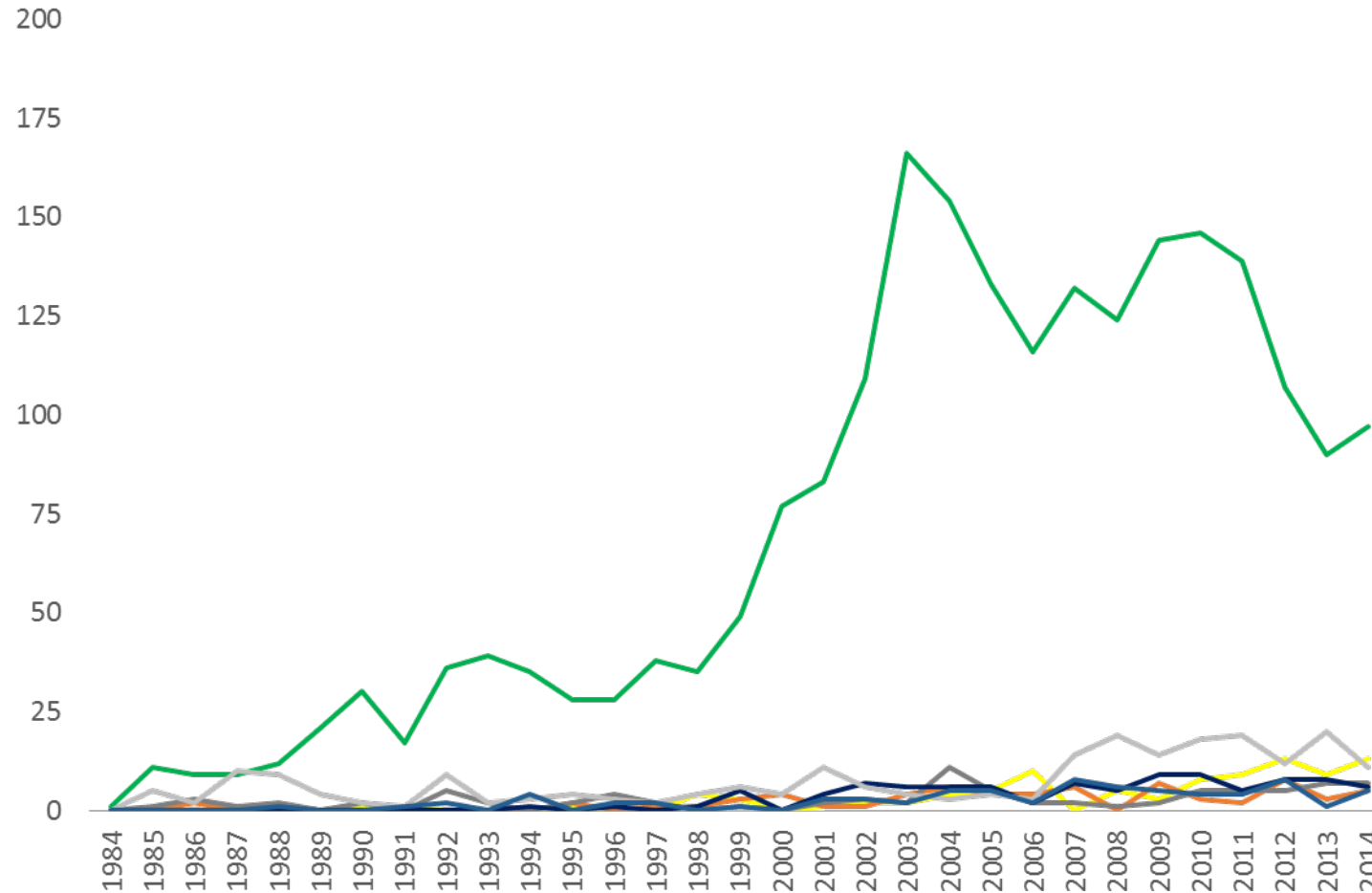
- More on antenatal screening for infections in:



Where are the migrant MTCT cases coming from?

HIV-MTCT foreign-born cases diagnosed in EU/EEA

by region of origin and year of diagnosis in the reporting country

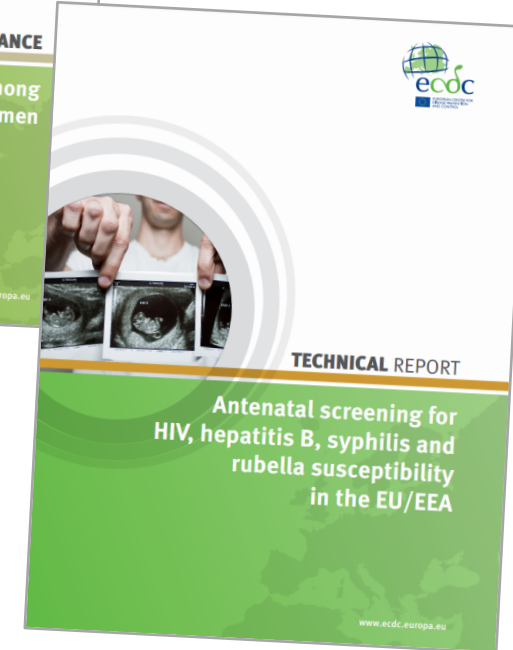
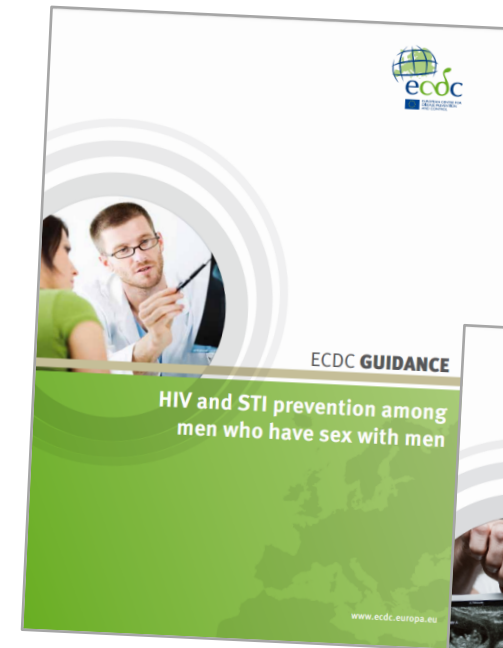


Age at diagnosis in EU/EEA:
median 6, IQR [2, 12]

Source: The European Surveillance System, 30 EU/EEA reporting countries

Key findings and public health implications

- 2.6% of new HIV diagnoses in 2015 among 0-19 years olds
- HIV diagnoses increasing among young MSM (European-born). Targeted prevention strategies, youth-friendly prevention and health-care services (ECDC Guidance *HIV and STI prevention among men who have sex with men*. 2015)
- HIV-MTCT in EU/EEA-born children is declining and is below the WHO elimination target (<50 per 100,000 LB)
- Antenatal screening to be targeted at subpopulations at risk* (ECDC Guidance *Antenatal screening among vulnerable groups*, in press)



*ECDC Technical report. *Antenatal screening for HIV, hepatitis B, syphilis and rubella susceptibility in the EU/EEA*. Stockholm: ECDC; 2016.



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- Anastasia Pharris, Teymur Noori, Caroline Daamen, ECDC
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The average time between [#HIV](#) infection and diagnosis is nearly 4 years in the EU/EEA. It's always [#time2test](#) bit.ly/ECDCEstimate

