



Literature review of HIV & STIs among MSM in Europe

*Work Package 1 (WP1), ESTICOM Project
(European Surveys and Training to Improve MSM
Community Health)*

ESTICOM Project

- ESTICOM aims to deliver evidence about the sexual health of MSM across Europe, and includes 3 inter-linked projects or objectives taking place between 2016 and 2019
- Objective 1 includes a literature review of the sexual health of MSM (WP1), and an online survey: the European MSM Internet Survey (EMIS) 2017 (WPs2-4), expected to go live in September 2017

WP1: Literature review of the sexual health of MSM

Aims:

- To identify some of the gaps in the literature which EMIS 2017 might help to address, and to inform the design of the EMIS 2017 questionnaire, by making modifications to an earlier version of the questionnaire used for the first EMIS in 2010

Specific objectives:

- To review data on the prevalence and incidence of HIV and other STIs among MSM in Europe
- To perform a rapid socio-behavioural review on sexual risk behaviours among MSM
- To assess access to HIV & STI prevention, diagnostic and treatment services by MSM in Europe

Literature review: Methods

- Epidemiological review (HIV/STI prevalence and incidence): European level & national surveillance data were consulted, as were selected scientific publications and reports
- Socio-behavioural review: Two electronic databases (Embase, Global Health) were searched, and grey literature published by AIDS or LGBT organisations was consulted
- Access to HIV & STI prevention, diagnostic and treatment services by MSM in Europe: 2016 Dublin Declaration data (provided by ECDC) were analysed, reports from key European studies among MSM (EMIS 2010, Sialon II bio-behavioural study, HIV COBATEST) were consulted

Epidemiological Review - HIV

- Limited comparable data on HIV prevalence and incidence among MSM across Europe. Problems include lack of MSM population size estimates, no common definition for MSM, and under-reporting of cases (particularly in Eastern Europe, due to stigmatisation of homosexuality)
- Available data show higher HIV prevalence among MSM in Western (estimates ~10-20%) compared to Eastern (estimates ~0-8%) European countries (expected given that HIV epidemic started earlier in Western Europe)
- Trends in new diagnoses often taken as proxy for HIV incidence. These show trends in Western Europe largely stable between 2006 and 2015. Trends in Central and Eastern Europe rising over the same period

Epidemiological Review - other STIs

- Western Europe: After a period of decline, diagnoses of syphilis, chlamydia and gonorrhoea increased among MSM in late 1990s (HIV treatment became available, & numbers of sexual partners rose). Recent data show continued increases in syphilis and gonorrhoea among MSM since ~2010 (may be partly due to changes in testing rates and practices)
- Central & Eastern Europe: increase in bacterial STIs among general population in 1990s due to political & social changes. Declining rates since early 2000s. Data on infections among MSM limited, but opposite trends in this group may be masked by declines in the general population
- Outbreaks of 'non-traditional' STIs such as hepatitis C, lymphogranuloma venereum, hepatitis A and shigellosis among MSM (particularly HIV-positive MSM) observed with increasing frequency/intensity in recent years

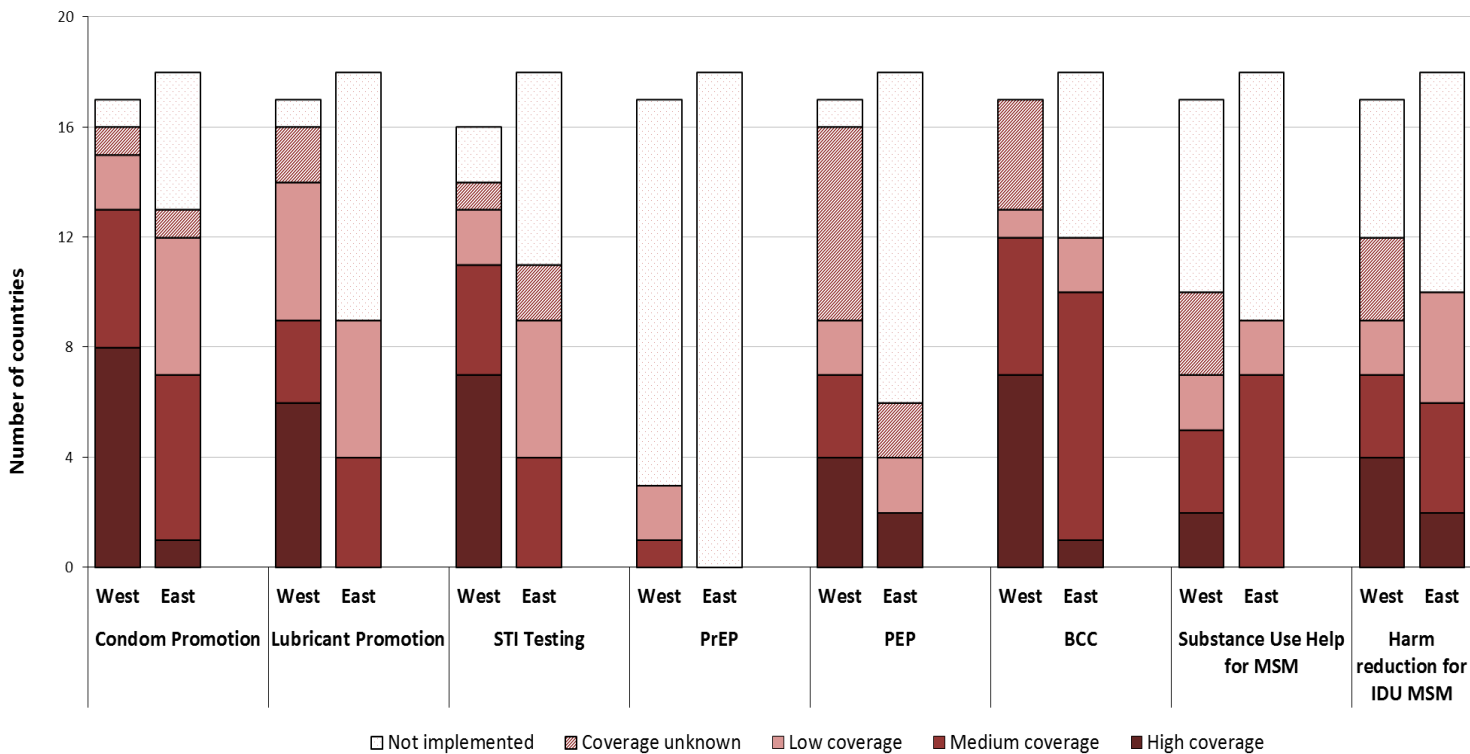
Socio-behavioural Review

Risk factors for HIV/STIs	Precautionary behaviours
<u>Individual level:</u>	<u>Individual level:</u>
High partner numbers	HIV/STI testing and treatment
Unprotected/condomless anal sex	Partner selection
Co-infection with other STIs	Condom use
Use of alcohol and/or drugs before sex	Oral chemo-prophylaxis
<u>Other:</u>	<u>Other:</u>
Biological factors: e.g. anal vs vaginal transmissibility	Level of engagement with prevention and treatment services (influenced by structural factors)
Structural factors: legal and socio-political factors (e.g. stigma/discrimination)	

Socio-behavioural Review: less well understood behaviours

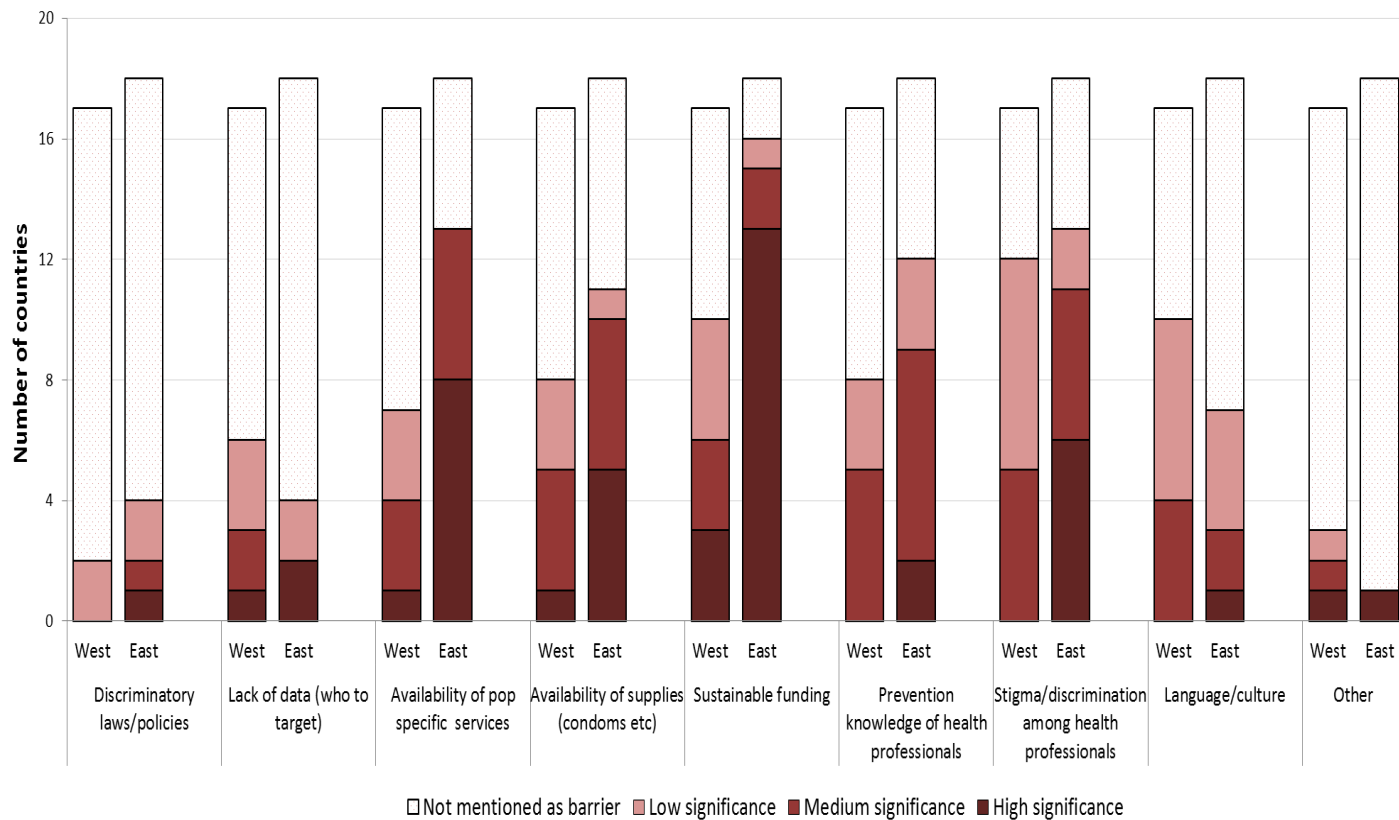
- 'Chemsex': Increasing chemsex practices among European MSM in recent years (use of specific psychoactive drugs before or during sex, taken in order to facilitate longevity of sexual contact). Limited available data, but cross-sectional studies suggest chemsex associated with increased sexual risk taking.
- Use of smartphone apps to find sexual partners: use of these apps popular since ~2010. Few studies have explored potential associations with sexual risk behaviour among European MSM.
- Mental health: MSM suffer poorer mental health compared to the general male population. Possible associations with sexual risk behaviour are complex and not well understood.

Implementation of HIV prevention interventions for MSM, by European region (West, East)



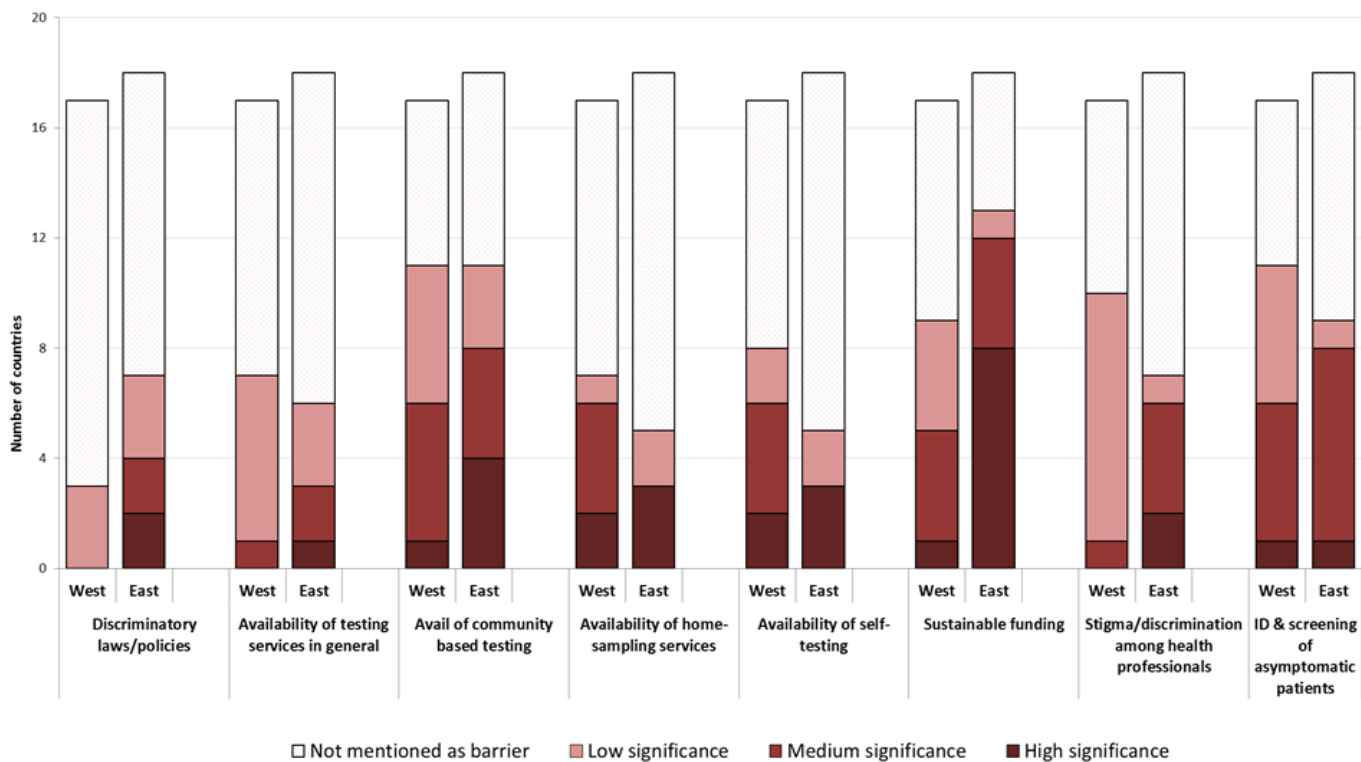
*Source: 2016 Dublin Declaration data, supplied by ECDC

Barriers to implementation of HIV prevention interventions for MSM, by European region (West, East)



*Source: 2016 Dublin Declaration data, supplied by ECDC

Barriers to implementation of HIV testing services for MSM, by European region (West, East)



*Source: 2016 Dublin Declaration data, supplied by ECDC

Provision of STI testing services for MSM

- Across Europe, large variation in provision of diagnostic services for STIs with regard to accessibility, type of services provided
- Blood and urine samples (for detection of syphilis, viral hepatitis, chlamydia) reasonably frequently collected
- Penile & anal inspection (detection of anal/genital warts, anal/genital herpes), anal & pharyngeal swabbing (detection of rectal/pharyngeal gonorrhoea, chlamydia) much more rarely performed
- Studies in UK have shown that home or self-sampling STI testing kits were acceptable to MSM, and increased uptake of testing for syphilis, gonorrhoea, chlamydia

HIV Treatment

ART initiation practices reported by countries in 2016 Dublin Declaration monitoring*

	Western Europe	Eastern Europe
Initiation regardless of CD4 count	Czech Republic, Denmark, Finland, Spain, Sweden, France, Portugal, Norway, Switzerland, Austria, Netherlands, Italy, UK	Croatia, Cyprus, Estonia, Hungary, Poland, Serbia, Slovakia, Slovenia, Malta, Romania
≤500 cells/mm ³	Luxembourg, Belgium	Bulgaria, Ukraine, Moldova
≤350 cells/mm ³	Germany**, Ireland	Bosnia & Herzegovina, Lithuania, Turkey
≤200 cells/mm ³		Latvia
No data reported	Greece	

*Data provided by ECDC, and represent reported treatment thresholds in practice, rather than what policy guidelines state.

**Germany policy guideline was updated to initiation regardless of CD4 count in March 2016. At the time of data collection, this may not have translated into a change in practice.

Reported barriers to getting HIV-positive MSM onto treatment:

- **Weak referral/linkage systems** (reported by 6 Western & 6 Eastern European countries)
- **Stigma & discrimination within MSM pop** (5 Western & 7 Eastern European countries)

Few available data on HIV continuum of care among MSM. Limited available data suggest greatest proportional drop-off between total number HIV-infected and those diagnosed.

In 2016 Dublin Declaration monitoring, **adherence** and **retention in care** the most frequently reported barriers to achieving viral suppression among people on treatment.

Conclusions

- Data on HIV and STI diagnoses among MSM limited or underreported in a number of European countries.
- 'Newer' behaviours potentially associated with sexual risk taking (e.g. chemsex, use of sexual networking apps) not well understood.
- EMIS 2017 will address some of these gaps by collecting information on self-reported HIV/STI testing behaviours and diagnoses, and on the level and distribution of risk and precautionary behaviours among MSM across Europe.

- Most European countries implement a range of HIV/STI prevention interventions. However currently only France and Norway provide HIV pre-exposure prophylaxis (PrEP) through their public health services.
- Commonly reported barriers to implementing HIV/STI testing and prevention services for MSM included a lack of sustainable funding, and lack of community-based and self-testing options.
- EMIS 2017 will generate data useful for the planning of HIV and STI prevention, diagnostic and treatment programmes for MSM.