



## **TECHNICAL** REPORT

# Mapping of HIV/STI behavioural surveillance in Europe

**ECDC TECHNICAL REPORT**

# **Mapping of HIV/STI behavioural surveillance in Europe**



This report was commissioned by ECDC and coordinated by Marita van de Laar and produced by the Institute for Social and Preventive Medicine (IUMSP), Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland, with the following international team of experts:

<b>Name</b>	<b>Affiliations</b>	<b>Population focussed</b>
Françoise Dubois-Arber	Institute for Social and Preventive Medicine (IUMSP), University of Lausanne, Switzerland, team leader	Behavioural surveillance systems Youth
Brenda Spencer	IUMSP	General population
André Jeannin	IUMSP	Organisation of survey in Member States
Jean-Pierre Gervasoni	IUMSP	Organisation
Bertrand Graz Marie-Jeanne Pellaz	IUMSP IUMSP	Literature review Secretarial assistance
Vivian Hope	London School of Hygiene and Tropical Medicine, UK	Injecting Drug Users (IDU)
Jonathan Elford	City University, London, UK	Men who have sex with Men (MSM)
France Lert	Institut national de la santé et de la recherche médicale, France	People Living With HIV/AIDS (PLWHA)
Helen Ward	Imperial College, London, UK	Sex industry.
Nicola Low	Institute for Social and Preventive Medicine, Bern, Switzerland	STI clinic patients
Mary Haour-Knipe	Freelance Consultant (formerly IOM)	Migrant and ethnic minorities.

The IUMSP team had overall responsibility for designing and carrying out the research protocol, for leading and coordination the research and for the synthesis of the results and the production of the final draft of the report.

*Acknowledgements:*

The organisers of this project would like to thank all countries involved for their collaboration in filling in the questionnaires and providing relevant material for this report.

Stockholm, September 2009

ISBN 978-92-95009-86-8

doi 10.2900/24767

© European Centre for Disease Prevention and Control, 2009

Reproduction is authorised, provided the source is acknowledged.

# Table of contents

Abbreviations .....	V
1 Summary .....	1
1.1 Background.....	1
1.2 Methods .....	1
1.3 Results .....	1
2 Introduction .....	3
2.1 Background.....	3
2.2 HIV and STI surveillance in EU/EFTA countries.....	3
2.3 Ongoing work related to behavioural surveillance systems in EU/EFTA countries .....	4
3 Methods.....	6
4 HIV/STI behavioural surveillance systems in EU/EFTA countries .....	7
4.1 Overview .....	7
4.1.1 Systems.....	7
4.1.2 Organisation and functioning of behavioural surveillance in countries .....	9
4.2 HIV/STI second generation systems in EU/EFTA countries .....	10
4.2.1 Overview .....	10
4.2.2 Barriers in establishing or maintaining SGS .....	11
4.2.3 Use of data .....	11
5 Behavioural surveillance in specific populations.....	13
5.1 General population .....	13
5.1.1 Introduction.....	13
5.1.2 Systems and surveys reported .....	13
5.1.3 Topics currently covered .....	14
5.1.4 Behavioural surveillance indicators .....	15
5.1.5 Discussion.....	15
5.2 Young people.....	17
5.2.1 Introduction.....	17
5.2.2 Systems and methods reported .....	17
5.2.3 Topics currently covered .....	18
5.2.4 Behavioural surveillance indicators .....	19
5.2.5 Discussion.....	21
5.3 Men who have sex with men (MSM) .....	22
5.3.1 Introduction.....	22
5.3.2 Systems and methods reported .....	22
5.3.3 Topics currently covered .....	24
5.3.4 Current behavioural surveillance indicators .....	24
5.3.5 Discussion.....	25
5.4 Injecting drug users (IDU) .....	27
5.4.1 Introduction.....	27
5.4.3 Topics currently covered .....	29
5.4.4 Current behavioural surveillance indicators .....	29
5.4.5 Discussion.....	30
5.5 Migrants and ethnic minorities.....	32
5.5.1 Introduction.....	32
5.5.2 Systems and methods reported .....	33
5.5.3 Topics currently covered .....	35
5.5.4 Current behavioural surveillance indicators .....	35
5.5.5 Discussion.....	36
5.6 Sex work (SW) .....	39
5.6.1 Introduction.....	39
5.6.2 Systems and methods reported .....	40
5.6.3 Topics currently covered .....	40
5.6.4 Current behavioural surveillance indicators .....	41
5.6.5 Discussion.....	42
5.7 People living with HIV/AIDS (PLWHA).....	43
5.7.1 Introduction.....	43
5.7.2 Systems and methods reported .....	43

5.7.3 Topics currently covered .....	46
5.7.4 Current behavioural surveillance indicators .....	47
5.7.5 Constructing a surveillance system among PLWHA .....	47
5.7.6 Discussion.....	48
5.8 Sexually transmitted infection clinic attenders .....	49
5.8.1 Overview .....	49
5.8.2 Systems and methods reported .....	50
5.8.3 Discussion.....	53
6 Conclusions and suggestions on behavioural surveillance systems and indicators.....	54
6.1 On behavioural surveillance systems: from data collection on behaviour to behavioural surveillance systems .....	54
6.2 On indicators: from diversity to harmonisation .....	55
7 References .....	62
8 Appendix 1 – Overview of HIV/STI related behavioural data collected in Europe .....	71
9 Appendix 2 – Main behavioural surveillance indicators in use .....	129
10 Appendix 3 – Questionnaires: population specific and surveillance system .....	143
11 Appendix 4 – Behavioural surveillance system in Bulgaria – Second Generation HIV Sentinel Surveillance (SGSS) among most-at-risk groups.....	158
12 Appendix 5 – Discussions in the migrants groups, Behavioural Surveillance Expert Meeting, Montreux, February 2009.....	161

## Abbreviations

AI	Anal Intercourse
AIDS	Acquired Immune Deficiency Syndrome
ANRS	Agence Nationale de Recherches sur le Sida et les Hépatites virales/National Agency for Research on AIDS and Hepatitis
APROCO-COPILOTE	Cohort of Patients followed up since Initiation of Protease Inhibitors
ART	Antiretroviral Treatment
ARV	Antiretroviral
BASS line survey	African Health and Sex Survey
BSS	Behaviour Surveillance System
CAPI	Computer-Assisted Personal Interviews
CASCADE	Concerted Action on SeroConversion to AIDS and Death in Europe
CASI	Computer-Assisted Self-Interview
CATI	Computer-Assisted Telephone Interview
CD4	Cluster Differentiation 4
COHERE	Collaboration of Observational HIV Epidemiological Research Europe
CompNet	Patient Cohort of Competence Network for HIV/AIDS, Germany
COPANA	Patients Naive of Antiretrovirals at Inclusion
DRID	Drug-Related Infectious Disease
ECDC	European Centre for Disease Prevention and Control
EU/EFTA	European Union/European Free Trade Association
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
ESPAD	European School Survey on Alcohol and other Drugs
ESSTI	European Surveillance of Sexually Transmitted Infection
EU	European Union
FOPH	Federal Office of Public Health, Switzerland
FSW	Female Sex Worker
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HAART	Highly Active Antiretroviral Therapy
HBSC	Health Behaviour in School-aged Children
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HIV/STI	Human Immunodeficiency Virus/Sexually Transmitted Infections
HIV+	HIV positive
IDP	Internally Displaced Persons
IDU	Injecting Drug Users
IOM	International Organization for Migration

IP	Information Technology
ISCED	International Standard Classification of Education
IT	Information Technology
IUMSP	Institut Universitaire de Médecine Sociale et Préventive/University Institute of Social and Preventive Medicine
IV	Intravenous
KABP	Knowledge, Attitude, Beliefs and Practices
LaSPAD	National School Survey on Alcohol and Drugs (Latvia)
LGV	Lymphogranuloma Venereum
M&E	Monitoring & Evaluation
MANIF	Cohort of Patients Infected by Sharing of Drug Use Equipment
MAYISHA	Swahili for 'lifestyle or life choices'
MS	Member State
MSM	Men having Sex with Men
MSW	Male Sex Worker
NGO	Non-Governmental Organisation
PEP	Post-Exposure Prophylaxis
PLWHA	People Living with HIV/AIDS
PrEP	Pre-Exposure Prophylaxis
PRIMO	Patients Diagnosed During Primary Infection
RDS	Respondent-driven sampling
SBS	Structure à Bas Seuil/Needle Exchange Programmes
SEROCO-HEMOCO	Cohort of HIV Infected Patients with a Known Date of Infection; Hemoco: Patients Infected by Blood Products
SGS	Second Generation Surveillance
STARHS	Serologic Testing Algorithm for Recent HIV Seroconversions
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infections
SW	Sex Worker
TB	Tuberculosis
TDI	Treatment Demand Indicator
TSW	Transvestite/Transsexual Sex Worker
UAI	Unprotected Anal Intercourse
UK	United Kingdom
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
VCT	Voluntary Counselling and Testing
VESPA	VIH: Enquête sur les Personnes Atteintes/HIV Study of Persons Living with HIV
WHO	World Health Organization
WHOQOL-HIV	WHO Quality of Life Instrument

# 1 Summary

## 1.1 Background

The epidemics attributable to the Human Immunodeficiency Virus (HIV) and to other sexually transmitted infections (STI) remain a significant public health problem in Europe. The European Centre for Disease Prevention and Control (ECDC) was established in 2005 with the objective of strengthening the capacity of the European Union (EU) to prevent and control infectious diseases, with HIV and other STI being among the priority diseases. Surveillance is an important task in this respect, and ECDC has a strong mandate to maintain and coordinate the databases for EU-wide surveillance of communicable diseases. Second generation surveillance (SGS) refers to surveillance that combines both the monitoring of biological (new cases of HIV/AIDS and STI) and behavioural indicators (e.g. sexual behaviour, use of protection). This approach is of importance both in informing policy development and in evaluating its outcome.

In 2008, the ECDC tasked an international team of experts to produce an in-depth analysis of the current state of the art regarding behavioural surveillance programmes related to HIV and STI in European countries and to develop a proposal for a framework for the implementation of a key set of behavioural indicators related to HIV and STI in Europe. This report presents a mapping of behavioural surveillance systems related to HIV and STI in the EU Member States and in the European Free Trade Association (EFTA) countries. Surveillance is examined in the following populations: general population, youth, injecting drug users (IDU), men who have sex with men (MSM), people living with HIV/AIDS (PLWHA), sex workers, STI clinic clients, migrant and ethnic minorities.

## 1.2 Methods

A questionnaire set was sent to all EU and EFTA countries. This consisted of nine separate questionnaires: one on the national behavioural and second generation surveillance system as a whole, and one questionnaire for each specific population. In the questionnaire regarding the surveillance system as a whole, information was requested on the existence and definition of:

- a national or regional behavioural surveillance system;
- the functioning of the second generation system at national or regional level; and
- potential or experienced barriers to establishing sustainable second generation surveillance systems.

In the questionnaires regarding specific populations, it was first asked whether a surveillance system was in place for this population and information was then requested on the existence of behavioural surveys (or other types of data collection) conducted in the different populations of interest since 1985, regarding:

- the methodology used in each survey or data collection system;
- the main indicators currently followed; and
- related publications.

The questionnaire was sent by email to the contact points for HIV surveillance in each country; these persons had the possibility of arranging to have each population specific questionnaire completed by the relevant specialists in that country. The responsible persons then collected the questionnaires and sent them back for analysis by the expert team. A draft report was discussed in the Behavioural Surveillance Expert Meeting in Montreux (Switzerland) in February 2009, and was also sent for validation to the contact points for HIV surveillance in each country, who had initially collated the questionnaires for their country.

## 1.3 Results

Twenty-eight of the 31 countries surveyed completed and returned the questionnaire set (non-respondents: Bulgaria, Romania and Portugal). The mapping of behavioural surveillance activities in EU/EFTA countries demonstrates considerable diversity across countries regarding the state of development of behavioural surveillance: 15 countries reported having an established HIV/STI behavioural surveillance system (Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Poland, Slovenia, Spain, Sweden, Switzerland and the United Kingdom), and one additional country (the Netherlands) reported established surveillance in several specific populations but no formal national overall behavioural surveillance system.

The degree of formalisation of behavioural surveillance in a 'system' is very unequal across the countries. Among the 16 countries reporting behavioural surveillance, only eight declared the existence of a document describing this system or formalising its existence. In many countries reporting a behavioural surveillance system, this system



has been constructed progressively, with the addition of new populations surveyed over time, sometimes without a clear surveillance objective. In addition, in many countries, even in those with formalised behavioural surveillance, there is often no established regularity or routine in the timing of behavioural surveillance in the diverse populations. The organisation of behavioural surveillance also shows diversity: in countries with formalised behavioural surveillance, organisation and coordination is based in the Ministry of Health, a national health agency, or a university. In countries with less formalised systems, informal coordination occurs through a network of institutions: government agencies, universities, non-governmental organisations (NGOs), etc. As regards adequacy of the system (i.e. the type of population included in the surveillance), in many cases the identification and surveillance of at risk populations have not been done or are incomplete. The most surveyed populations are the general population and youth, MSM and IDU. Behavioural surveillance in sex workers and their clients, migrants and ethnic minorities, PLWHA and STI clinic patients is done only in a few countries.

As regards second generation surveillance systems, among the 16 countries reporting behavioural surveillance, 13 also report the existence of SGS, two others report SGS in one population only. Formal organisation of this system, with a management or coordinating body, is present in six countries.

For each of the populations considered, the countries that provided information on their priority indicators are less numerous than those having mentioned collecting information on the corresponding topics. This is probably due to the fact that only countries operating within a surveillance paradigm have made specific choices on indicators to be collected regularly and are in a situation to define them clearly. In terms of the topics generally monitored, the level of agreement on the priority topics is quite high across the populations; this may guide the choice of indicators common to countries and to populations surveyed. As great diversity still exists, a process of harmonisation of indicators, specific to each population, should be continued at the European level. In populations where behavioural surveillance is, or could be, conducted using service- or cohort-based sampling, preliminary discussions should be conducted with stakeholders with respect to the establishment of behavioural surveillance in such settings.

Where European consensus already exists, indicators already agreed upon should be proposed, and those chosen should be 'translatable' into internationally agreed indicators. Resulting from the overall analysis, core indicators, common to all populations, are proposed. These relate to the number of sexual partners, use of a condom at last intercourse, having had an HIV test, having paid for sex, and HIV knowledge. Core indicators should also address systematically level of education, nationality/ethnic origin and sexual orientation.

## 2 Introduction

The present study was carried out to investigate the current state of the art regarding behavioural surveillance programmes related to HIV and STI in Europe, to provide an in-depth analysis of behavioural surveillance in different populations, and to develop a framework for the implementation of behavioural surveillance and second generation surveillance related to HIV and STI in Europe.

The first step has been a survey conducted in EU Member States (MS) and EFTA countries with the aim of:

- Identifying activities of behavioural surveillance (formalised or not) and behavioural surveys conducted in the past and currently.
- Identifying key informants, experts, and persons responsible for behavioural surveillance/surveys (in academia, government departments or agencies, NGOs).
- Collecting survey protocols and questionnaires used in the different populations.
- Constructing an inventory and a database of surveillance activities and surveys conducted in EU/EFTA countries.
- Mapping behavioural surveillance activities and identifying methods and indicators used in behavioural surveillance.
- Proposing suggestions as regards the further development of behavioural surveillance systems in EU/EFTA countries and common indicators to be used for this purpose.

This report presents a map of behavioural surveillance systems related to HIV and STI in EU/EFTA countries. Surveillance is examined in the following populations: general population, youth, IDU, MSM, PLWHA, sex workers, STI clinic clients, migrant and ethnic minorities.

### 2.1 Background

HIV/AIDS is still a significant public health problem in Europe, though the situation has markedly changed since the beginning of the epidemic in the 1980s. The epidemic has very different characteristics across the different countries[1]. In Western Europe, where the epidemic is mainly of a concentrated type, being predominantly among MSM and IDU, wide-ranging prevention programmes and the subsequent advent of antiretroviral treatment have reduced HIV/AIDS morbidity and mortality. However, recent trends show a steady increase in new HIV cases reported, mainly among MSM and heterosexuals. In several countries, individuals from countries with generalised epidemics (mainly Sub-Saharan Africa)[2-4] represent a significant proportion of new cases among heterosexuals. In Central Europe, where the epidemic is mainly at a low level, recent trends indicate that new cases have been mainly among MSM and heterosexuals, with a decline in new cases reported among IDU[3]. In the European Union countries of Eastern Europe, there was a dramatic increase in new cases from 1994 to 2001, mainly among IDU in Latvia, Lithuania and Estonia. However, since 2001 there was a decrease in these countries, although recent years have seen an increase in Latvia[3,5,6].

Trends in STI show a similar picture: after a period of decreasing incidence in the late 1980s and early 1990s, the incidence of most STI is once again increasing in Europe and remains a major public health problem[7-9]. This has been most visible in outbreaks of syphilis[10-12] and Lymphogranuloma venereum (LGV)[13-16] in MSM in several European countries. These outbreaks intersect with the spread of HIV infection because many of those affected are MSM living with HIV. For other STI the situation is more complex[17]. First, the groups among whom STI are increasing are not necessarily those associated with transmission of HIV infection. For example, people who acquired HIV in Sub-Saharan Africa do not appear to have high rates of concurrent STI. Second, STI and HIV can show diverging trends in groups such as MSM, who are at high risk for both[18]. Third, not all STI are increasing and there are differences between countries. Cases of gonorrhoea reported from national surveillance systems have fallen in the United Kingdom[17], and remained stable in Sweden and Denmark but have increased in Switzerland. Trends in Chlamydia are difficult to interpret because they are so dependent on levels of Chlamydia testing. There are also large differences between countries in the prevalence of viral STI. In a comparison of adult general population samples over seven Western European countries, herpes simplex type 2 seroprevalence ranged from 4% to 24%[19].

### 2.2 HIV and STI surveillance in EU/EFTA countries

ECDC was established with the objective of strengthening the capacity of the EU to prevent and control infectious diseases, with HIV and other STI being among the priority diseases[20]. Surveillance is an important task in this respect, and ECDC has a strong mandate to maintain and coordinate the databases for EU-wide surveillance of

communicable diseases. MS have developed national biological surveillance systems (the reporting of new cases of infection) for HIV and STI in Europe. The HIV/AIDS surveillance programme in Europe was launched in 1984 as the European Centre for the Epidemiological Monitoring of AIDS, and continued in 1999 under the title of EuroHIV. In January 2008, this responsibility was transferred to ECDC and the World Health Organization Regional Office for Europe (WHO/Europe). This commitment to enhanced surveillance is a consequence of the commitment of Europe to the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) — the Declaration of Commitment on HIV/AIDS<sup>1</sup> — and the Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia<sup>2</sup>.

As regards STI, the European Surveillance of Sexually Transmitted Infections (ESSTI) network was established in 2001. This network was a collaboration between STI surveillance heads and STI reference microbiologists in 25 countries (22 EU MS plus Iceland, Norway and Turkey). As of January 2009, the ECDC has taken over responsibility for coordinating the enhanced surveillance of STI in the EU/EFTA countries, covering both the epidemiological and microbiological components of surveillance.

As HIV can remain asymptomatic for many years, and some STI can result in asymptomatic infection or remain unrecognised, biological surveillance can not always convey the true situation; in this context, the surveillance of risk and protective behaviours related to HIV/STI can provide a very useful public health tool. In the late 1990s, through review of the HIV epidemics and existing surveillance, and following the availability of Highly Active Antiretroviral Therapy (HAART) for HIV, UNAIDS/WHO developed the concept of second generation surveillance systems, combining biological surveillance with the surveillance of behaviour[21,22]. Behavioural surveillance allows monitoring the population level of risk related to transmission of HIV/STI and provides a key source of information for understanding the drivers of epidemics, for planning and for evaluating prevention interventions[23-26].

The type of behavioural surveillance to be conducted depends of the type of HIV epidemic (generalised, concentrated, low intensity). In generalised epidemics, where HIV prevalence is over 1% in the general population, surveillance systems should concentrate on monitoring HIV infection and high-risk behaviour in the general population, and should include groups such as sex workers and their clients. In concentrated epidemics, where HIV is below 1% in the general population and over 5% in specific subgroup(s) such as MSM or IDU, surveillance should monitor HIV infection and behaviour in these groups, and particularly in subgroups that can act as 'bridging populations' to the general population. In low-level epidemics, where prevalence in any subpopulation is less than 5% and below 1% in the general population, surveillance should focus on behaviour in high risk groups[27].

## 2.3 Ongoing work related to behavioural surveillance systems in EU/EFTA countries

Since the beginning of the HIV/AIDS epidemic, several countries have conducted behavioural surveys in a number of different populations in order to identify risk behaviour in these populations and to monitor progress in prevention. In some cases, these surveys were undertaken and repeated with the clear intention of constituting a coherent behavioural surveillance system, centred on one or several populations in the same country [24,28,29]. In others, this 'system' was constructed progressively in a more opportunistic way, surveys being conducted and 'added' although sometimes these were analysed together as a periodic review exercise[30]. Some countries have conducted only one or two consecutive surveys in specific populations. However, the functioning of second generation systems in Europe, in particular their coverage and sustainability over time, is not known.

As regards indicators, several harmonisation initiatives have taken place and lists of recommended indicators exist at different levels. For example, at the European level, an EC concerted action on HIV/AIDS evaluation at the beginning of the 1990s provided opportunities for collaborative studies and harmonisation of indicators, especially in MSM surveys[31]. In 2007, an international workshop on behavioural surveillance in MSM was organised in Germany<sup>3</sup> and ECDC organised a workshop on MSM surveys in 2008. Other EC concerted actions directed by Hubert et al. in Brussels led to common reflection on sexuality surveys and to the conception and use of a common module in general population sexuality surveys[32,33]. As regards IDU, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has developed Drug-related Infectious Disease (DRID) indicators<sup>4</sup>, including the development of standards for behavioural surveillance related to blood-borne viral infections. The United Nation's system is also providing various sets of indicators, the most recent being the revised UNGASS indicators guide[34].

<sup>1</sup> [data.unaids.org/publications/irc-pub03/aidsdeclaration\\_en.pdf](http://data.unaids.org/publications/irc-pub03/aidsdeclaration_en.pdf).

<sup>2</sup> [www.aids.gov.pl/files/inter\\_docs/dublin\\_declaration.pdf](http://www.aids.gov.pl/files/inter_docs/dublin_declaration.pdf).

<sup>3</sup> Report of the workshop at <http://skylia.wzb.eu/pdf/2007/i07-306.pdf>.

<sup>4</sup> <http://www.emcdda.europa.eu/themes/key-indicators/drid>.

This present report is structured as follows: the methods of data collection and analysis used for the mapping survey are presented in chapter 3. Chapter 4 gives an overview of data regarding HIV/STI behavioural and second generation surveillance systems in operation in EU/EFTA countries. Chapter 5 presents a more detailed analysis of the situation for each of the concerned populations groups. Chapter 6 provides conclusions on the current situation regarding behavioural surveillance in Europe and details suggestions for further development.

## 3 Methods

The survey consisted of nine separate questionnaires: one on the national behavioural and second generation surveillance system, and one questionnaire for each specific population group (general population, young people, MSM, IDU, migrant and ethnic minorities, sex workers, PWLHA, STI clinic attenders). In the questionnaire regarding the national surveillance system, information was requested on the existence and definition of:

- A national or regional behavioural surveillance system (type of populations included) and agreed or accepted national key behavioural indicators (and the definitions/parameters used for these).
- The functioning of the second generation system at national or regional level (formalisation and documentation of the system, interlinking of systems, attribution of responsibility, financing, type of analysis performed, formal meetings, dissemination of results).
- Potential or experienced barriers to establishing sustainable second generation surveillance systems.

In the questionnaires regarding specific populations (see Appendix 3), it was first asked whether a surveillance system was in place for this population and information was then requested on the existence of behavioural surveys conducted (or other types of data collection used for surveillance) in the different populations of interest since 1985 on details regarding:

- The methodology used in each survey/data collection system: year, sampling method, data collection method, and main topics covered. These were selected from a proposed list, grouped under the main topic areas of knowledge and attitudes, sexual relationships and sexual partners, sexual activity and lifestyle, exposure to risk of infection, HIV and STI, drugs and substance use.
- The main indicators currently followed.
- Related publications.

The questionnaire was sent by email to the national contact points for HIV surveillance in each country; these persons had the possibility of arranging to have each population specific questionnaire completed by the relevant specialists in that country. The responsible persons then collected the questionnaires and sent them back. All returned questionnaires and accompanying material, such as reports, articles, and data collection instruments<sup>5</sup>, were included in a database accessible via internet to all expert members of the team.

The analysis for each specific population was conducted separately by each expert member, but with a commonly agreed overall structure. The procedure was to document as closely as possible all surveys or other forms of routine data collection (for example, data collected within the context of clinical cohorts) and to produce a descriptive analysis of the different topics on which information was collected. In view of the fact that surveillance is often not yet organised into a formal system, information provided on indicators being followed was scanty. For this reason, those topics cited by a majority of countries as being regularly covered in surveys on each population at question were considered as *de facto* indicators<sup>6</sup>, and were used as a basis for the proposed set of indicators to be included in all European studies, these being either transverse (common to all populations) or population-specific (see chapter 6.2). The choice of indicators was also guided by the integration of international guidelines on key indicators as produced by UNAIDS[34], and EMCDDA.

Despite the standard approach to analysis, the chapters on specific populations differ slightly in form, in view of the diversity of issues and contexts presenting in different populations.

A first draft of the report was discussed in a Behavioural Surveillance Expert Meeting in Montreux (Switzerland) on 12–13 February 2009. Fifty experts, including specialists in behavioural surveys in the various populations and experts from international organisations (ECDC, EMCDDA, WHO, UNAIDS) and from the civil society, reviewed and debated the indicators proposed for each population and gave advice on the priority indicators. Finally, the draft report was sent to the national contact points for HIV surveillance for validation. Eleven countries provided complementary information. Bulgaria provided a summary of their behavioural surveillance activities after the report was drafted (see Appendix 4).

<sup>5</sup> Few primary data collection instruments were provided by the countries.

<sup>6</sup> For this reason, in the current report, we have differentiated between three levels of description regarding indicators, moving from the least to the most specific:

- topics covered in data collection (e.g. knowledge on HIV/AIDS transmission, condom use);
- indicators referred to as 'generic' indicators or simply as 'indicators' (e.g. condom use at last intercourse); and
- detailed indicators (e.g. percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15).

# 4 HIV/STI behavioural surveillance systems in EU/EFTA countries

## 4.1 Overview

Twenty-eight of the 31 countries (90%) returned the questionnaire, and three countries did not respond (Bulgaria, Romania and Portugal)<sup>7</sup>.

Table 4.1 gives an overview of existing systems in the EU/EFTA countries. In this table, the term surveillance refers to data collection through several consecutive surveys; this surveillance may include organised surveillance through repeated surveys as well as less organised 'systems' based on consecutive data collections in the same type of population.

Among the 31 countries surveyed, 15 reported having an established HIV/STI behavioural surveillance system (Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Latvia<sup>8</sup>, Lithuania, Poland, Slovenia, Spain, Sweden, Switzerland and the United Kingdom), and one additional country (the Netherlands) reported established surveillance in several specific populations but no formal national overall behavioural surveillance system. The remaining 12 countries reported having no behavioural surveillance system (Austria, Czech Republic, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Luxembourg, Malta, Norway and Slovakia). In most of these countries, however, data collection on behaviour is nonetheless reported for one or more populations. It would appear that only Hungary, Liechtenstein and Slovakia are not collecting data on behaviour.

There are wide differences among countries as regards the year of initiation of behavioural surveillance: this extends from 1985 (France: among MSM) to the early 2000s (e.g. Poland 2000, Estonia 2004).

The populations most regularly surveyed are the general population, youth, MSM and IDU. Sex workers, STI clinic attenders and PLWHA are surveyed less regularly and in only a small number of countries, and few countries have undertaken behavioural surveys among migrant or ethnic minority populations.

### 4.1.1 Systems

On the basis of the survey, it is possible to outline the following typology of behavioural surveillance systems in EU/EFTA countries:

**Early national comprehensive systems:** established early (late 1980s/1990s), mainly in Western Europe with early concentrated epidemics: France, Germany, the Netherlands, Switzerland and the United Kingdom generally have established surveillance in four or more populations, mostly the general population, youth, MSM and IDU. The region of Catalonia in Spain also established a system in the beginning of the 1990s. These systems have different levels of coordination and integration: high in Switzerland and Catalonia; lower in France, Germany, the Netherlands and the United Kingdom.

**Recent comprehensive systems:** established recently, mainly in collaboration with international agencies, and often with small scale surveys in 2-4 populations in countries with recent concentrated epidemics, mainly in IDU (Estonia, Lithuania, and, to a certain extent, Poland).

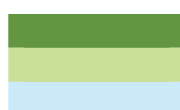
**Less organised, mixed, systems:** established during the 1990s, they combine national and regional/local surveillance and/or a small number of populations: Belgium, Cyprus, Denmark, Finland, Latvia, Slovenia, Spain, and Sweden.

<sup>7</sup> Very few survey protocols and questionnaires were sent back by the respondents.

<sup>8</sup> Only for IDU.

**Table 4.1** Behavioural surveillance systems in EU/EFTA countries

Country	Epi	BSS	Start	GenPop	Youth	MSM	IDU	SW	STIp	PLWHA	Migr	Other
Austria	C	No		No	No	No	No	No	No	No	No	
Belgium	C	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	No	Prison
Bulgaria	LL											
Cyprus	C	Yes	1988	Yes	Yes	No	No	No	No	No	No	
Czech R	LL	No		No	No	No	Yes	No	No	No	No	
Denmark	C	Yes		No	No	Yes	No	No	No	No	No	
Estonia	C	Yes	2004	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Prison
Finland	C	Yes	1995	No	Yes	No	Yes	No	Yes	No	No	
France	C	Yes	1985	Yes	No	Yes	Yes	No	Yes	Yes	No	
Germany	C	Yes	1987	Yes	Yes	Yes	No	No	Yes	Yes	No	
Greece	C			Yes	No	No	Yes		No		No	
Hungary	LL	No		No	No	No	No	No	No	No	No	
Iceland	C	No		No	No	No	Yes	No	No	Yes	No	
Ireland	C	No		No	No	Yes	Yes	No	No	No	No	Prison
Italy	C	No		No	No	No	No	No	Yes	No	No	
Latvia	C	Yes	1997	No	No	No	Yes	No	No	No	No	
Liechtenstein	C	No		No	No	No	No	No	No	No	No	
Lithuania	C	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	No	
Luxembourg	C	No		No	Yes	No	Yes	Yes	No	No	No	
Malta	C	No		No	No	No	No	No	No	No	No	
Netherlands	C	Y/N	80s	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
Norway	C	No		Yes	No	Yes		No	No	Yes	No	
Poland	C	Yes	2000	Yes	Yes	No	Yes	No	No	No	No	
Portugal	C											
Romania	LL											
Slovakia	LL	No		No	No	No	No	No	No	No	No	
Slovenia	LL	Yes	1996	No	No	Yes	Yes	No	No	No	No	
Spain	C	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Prison
Sweden	C	Yes	1987	Yes	Yes	Yes	No	No	No	No	No	
Switzerland	C	Yes	1987	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Condom
UK	C	Yes	1990	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	



established surveillance: 3 and more surveys

beginning of surveillance: 2 surveys or one and the next planned

planned surveillance: first survey only

- Epi** Type of HIV epidemic: concentrated (C), low level (LL) (There are no HIV generalised epidemics in Europe)
- BSS** Existence of a behavioural surveillance system (yes/no)
- Start** Year of initiation of system
- GenPop** Surveillance/surveys in general population
- Youth** Surveillance/surveys in youth
- MSM** Surveillance/surveys in men having sex with men
- IDU** Surveillance/surveys in injecting drug users
- SW** Surveillance/surveys in sex workers
- STIp** Surveillance/surveys in STI clinics patients
- PLWHA** Surveillance/surveys in people living with HIV/AIDS
- Migr** Surveillance/surveys in migrants and ethnic minorities
- Other** Surveillance/surveys in other populations

### 4.1.2 Organisation and functioning of behavioural surveillance in countries

The degree of formalisation of behavioural surveillance in a 'system' is very unequal across the countries. Among the 16 countries reporting or having de facto behavioural surveillance, only eight declared the existence of a document describing this system or formalising its existence: Cyprus, Estonia, Latvia, Lithuania, Poland, Switzerland and the United Kingdom (Table 4.2). Most of these countries have 'recent' concentrated HIV epidemics. Generally, this system is mentioned in the national strategic plan or in the Monitoring and Evaluation Plan (M&E plan). The existence of reported behavioural surveillance does not necessarily imply systematisation. In many countries reporting a behavioural surveillance system, this system has been constructed progressively, with the addition of new surveyed populations over time, sometimes without a clear surveillance objective. In addition, in many countries — even in those with formalised behavioural surveillance — there is often no established regularity or routine in the timing of behavioural surveillance in the different populations, possibly indicating instability of the system. Consequently, the term 'system' itself has to be used with caution.

The organisation of behavioural surveillance also shows diversity: in countries with formalised behavioural surveillance, organisation and coordination is based in the Ministry of Health (e.g. Lithuania), or in a National Health Agency (e.g. Estonia), or, in one case, in a university (Switzerland). In countries with less formalised systems, informal coordination occurs through a network of institutions: government agencies, universities, NGOs, etc. (e.g. United Kingdom, France).

In Western Europe, the government is always the main, or at least one of, the sources of funding for behavioural surveillance. In certain cases, additional resources come from research. International agencies — such as the Global Fund on AIDS, Tuberculosis and Malaria (GFATM) — are mentioned as partners in the funding of behavioural surveillance in a few countries.

Twelve of the 16 countries with established behavioural surveillance reported that sustainability is either assured or probably assured.

**Table 4.2 Organisation and functioning of BSS in EU/EFTA countries**

Country	Formalisation Document	Organisation, coordination	Financing	Sustainability
<b>Belgium</b>	No	Informal, mix of national and regional small scale one/off studies	–	–
<b>Cyprus</b>	Strategic plan 1998-2008	–	Government, International Agency	Unknown
<b>Denmark</b>	No	–	Government	No
<b>Estonia</b>	In M&E system <sup>9</sup> and strategic plan 2006-2015	National Institute for Health Development	Government, International Agency	Yes
<b>Finland</b>	No	National Public Health Institute	Government, Research	Yes
<b>France</b>	No	Informal: many government agencies/research agencies involved	Government, Research	Yes
<b>Germany</b>	No	Informal coordination between government and research/health agencies	Government, Research	Yes
<b>Latvia</b>	Yes, for surveillance in IDU only	Public Health Agency	Government, Research, International Agencies	Yes
<b>Lithuania</b>	Yes, national HIV/AIDS program 2003-2008	Ministry of Health	Government	Yes
<b>Netherlands</b>	No	National Institute for Public Health and the Environment and HIV/STI Agency	Government, Research, International Agency	No
<b>Poland</b>	Yes, national program 2007-2011	Network of agencies, no centralised body	Government	Yes

<sup>9</sup> [www2.tai.ee/teated/GF/Estonian\\_GFATM\\_Program\\_10.2003-09.2007.pdf](http://www2.tai.ee/teated/GF/Estonian_GFATM_Program_10.2003-09.2007.pdf).



Country	Formalisation Document	Organisation, coordination	Financing	Sustainability
<b>Slovenia</b>	Yes	Institute of Public Health	Government	Probable
<b>Spain</b>	Yes, multisectoral. Plan 2008-2012	Secretariat of the National Plan on AIDS, Ministry of Health	Government, Research	Yes
<b>Sweden</b>	No	National Board for Health and Welfare	Government	Yes
<b>Switzerland</b>	Yes, national program 2004-2010	University Institute of Social and Preventive Medicine	Government	Probable
<b>UK</b>	Yes	Network of institutions, no centralised body	Government, Research	Yes

## 4.2 HIV/STI second generation systems in EU/EFTA countries

### 4.2.1 Overview

Among the 16 countries reporting behavioural surveillance, 13 also reported the existence of Second Generation Surveillance (SGS), i.e. a combination of biological and behavioural surveillance of HIV/STI (Table 4.3).

Six countries (Estonia, France, Lithuania, Slovenia, Spain and Switzerland) report a formalised organisation of this system with a management or coordinating body. The organisation can be of diverse types:

- Management at the level of the Ministry of Health or at the level of a governmental agency with collection of information from diverse sources, synthesis of information, production and dissemination of reports. This model is found in Estonia, France, Slovenia and Spain.
- Coordination by the Ministry of Health, discussion of SGS information in a group including diverse stakeholders: agencies/universities producing the data, representatives of Ministry of Health (epidemiology, AIDS prevention, evaluation), NGOs. This model is in use in Switzerland.

Two additional countries reported SGS mainly in one population: Latvia (IDU) and Sweden (general population). In Latvia, the system is managed by the Public Health Agency; in Sweden, coordination and reports are the responsibility of the National Board of Health and Welfare.

Five countries reported having a SGS system that is not formally organised:

- In Germany, the Netherlands and the United Kingdom, SGS is carried out by a network of institutions without centralised coordination. Reports are produced regularly (the Netherlands) or their production and dissemination is left to participating individual institutions (United Kingdom).
- In Poland, SGS information may be used to interpret the epidemiological situation, but this is not done on a routine basis.
- In Cyprus, SGS is reported in place, but with no further mention of organisation.

**Table 4.3 Second generation surveillance in EU/EFTA countries**

Country	SGS in operation	Since	Formalisation in documents	Management/coordinating body
<b>Belgium</b>	No	–	–	–
<b>Cyprus</b>	Yes, partly (biological> behavioural)	1990	Strategic plans	No, information analysed and interpreted informally by the program officials Recent report[35]
<b>Denmark</b>	No	–	–	–
<b>Estonia</b>	Yes, partly	2005	Description of results in documentation	Separate bodies for behavioural and biological surveillance, coordination by National Institute for Health Development Agency with centralised production and dissemination of reports[36]
<b>Finland</b>	No	–	–	–
<b>France</b>	Yes	2003	No	Governmental agency: Institut de Veille Sanitaire (InVS). Reports or syntheses of studies issued periodically[30,37,38]

Country	SGS in operation	Since	Formalisation in documents	Management/coordinating body
<b>Germany</b>	Yes, partly	1987	No	Organised informally by a network of institutions
<b>Latvia</b>	Yes, for IDU	1997	Yes	Public Health Agency[39]
<b>Lithuania</b>	Yes, partly		Yes	Ministry of Health
<b>Netherlands</b>	Yes, partly		Regular reports	Network of institutions[40]
<b>Poland</b>	Yes, partly		Reports issued on the government site	Information from different sources, sometimes used to interpret epidemiological situation, not routine
<b>Slovenia</b>	Yes	1996	Yes	Institute of Public Health responsible for the analysis, interpretation and dissemination of SGS information to many audiences[41,42]
<b>Spain</b>	Yes		Yes, multisectorial plan[43]	Secretariat of the National Plan on AIDS collects and publishes available information.
<b>Sweden</b>	Yes, general population	1987		Network of institutions, summary reports by the National Board of Health and Welfare to the government, and then to all health authorities in the country
<b>Switzerland</b>	Yes	1987	Yes	Coordination by Federal Office of Public Health (FOPH). All information pertaining to SGS is presented and discussed in a special working group – including FOPH, NGOs, partners from biological and behavioural surveillance[24,44]
<b>UK</b>	Yes, partly	1990	Yes	No central coordination and dissemination of data; this is left to individual institutions and/or research groups to synthesise and publish[28]

## 4.2.2 Barriers in establishing or maintaining SGS

Several countries mention the lack of resources (money and trained personnel) or of political will to establish and maintain a functional behavioural or second generation surveillance system. This is mainly the case in smaller countries. Coordination between the two components of SGS often seems to be insufficient and lack of harmonisation between partners was reported.

As stated by one country 'planning is not enough', since it may not be followed by proper implementation of a complete and sustainable system.

Some countries, particularly those with recent epidemics among marginalised and often stigmatised populations, mention technical and operational difficulties in conducting behavioural surveillance and representative surveys with a biological component among hard-to-reach populations.

The scaling up of behavioural surveillance is advocated by some countries. In particular, an increase in the regularity of surveys and the expansion from small scale behavioural surveillance among most at-risk populations to larger scale surveys with the inclusion of biological markers is called for.

In some countries, mainly in Western Europe, it is felt that there may be financial cut-backs in the coming years: a decrease in the prominence of HIV/AIDS as a societal problem may weaken political support for sustained funding.

## 4.2.3 Use of data

In countries with SGS, data seem to be used with a variety of purposes and audiences. The three most frequent categories of data use mentioned are: interpreting trends in HIV incidence and prevalence, identifying the drivers of the epidemic, and measuring indicators of progress in programme development. SGS is less used in programme planning, in projecting future interventions or as an advocacy tool to increase resources and expanded response.

Some examples of good experiences with the use of SGS were mentioned:

- Use in the evaluation of programmes (Cyprus, Latvia).
- Refinement of the interpretation of HIV and STI trends and planning of new interventions in high risk populations (the Netherlands).
- Use to estimate HIV incidence and analyse the results of introducing the test for recent infection as applied to all new HIV diagnoses in France. This was done through combining HIV case reporting with information on specific population testing patterns found in behavioural surveys (France).
- Use of a biological component in behavioural surveys in IDU (France, United Kingdom).
- Improvement of data collection among STI patients by adding more information on sexual behaviour (France).

- Advocacy (directed towards central and local government) to expand the network of low threshold centres and to broaden the range of services in existing centres (Latvia).
- Support for the implementation of prevention programmes in prisons (Spain).
- Better understanding of the populations (Estonia).
- Sustaining interest and use of data by wide audiences, such as those responsible for prevention, politicians, and NGOs (Switzerland).

## 5 Behavioural surveillance in specific populations

### 5.1 General population

- Thirteen countries reported having a surveillance system in place; another four countries, reporting no system, have nonetheless conducted surveys.
- Data collected in the context of surveys have different breadths of focus; diverse methods for data collection, sample size and age ranges were used.
- A wide range of topics are covered in surveys. Eight countries specified the indicators in use for surveillance. A considerable variation is observed in their precise formulation.
- There is clear need and scope for consensus on a minimum key set of indicators.

#### 5.1.1 Introduction

Surveys of the general population provide an overview of the national situation regarding behaviour related to HIV and STI and serve as a kind of baseline against which behaviour in specific populations may be compared to. By definition, the term 'general population' includes all the other specific populations, but given the size of these populations, few data may be obtained on these groups in a representative sample of the whole population. In addition, the methodology applied to contact respondents, where the reference population is generally based on households, means that these specific populations may be more difficult to reach and therefore under-sampled, due to certain aspects of their living conditions or lifestyle.

A key issue with general population surveys is to obtain a sample that represents as faithfully as possible the demographic and socio-economic structure of the reference population. Methodology with respect to contacting the population and applying corrective statistical procedures to obtain an appropriate sample has been considerably developed over recent years[45].

#### 5.1.2 Systems and surveys reported

Overall, 13 countries (Belgium, Cyprus, Estonia, France, Germany, Greece, the Netherlands, Norway, Poland, Spain, Sweden, Switzerland and the United Kingdom) reported having a system in place for general population surveillance, 15 did not have a system and three did not respond. Indicating that no system was in place did not necessarily imply that no surveys had been conducted; for example, Lithuania reported several studies since 1990 but considered that the system was in progress but not in place. Several different kinds of studies may provide behavioural data related to HIV and STI. Data on sexual behaviour are mainly reported as being obtained from general health surveys (six countries); surveys regarding Knowledge, Attitudes, Beliefs and Practices (KABP) relative to HIV/AIDS (eight countries); comprehensive surveys on sexuality (four countries) and surveys covering different aspects of sexual and reproductive health (four countries). Countries also indicated collecting data from surveys focussing on questions of addiction (Latvia, Poland) or to evaluate the impact of HIV prevention campaigns (Poland). Most countries (n=10) report only one approach, but five cite two, and France and the United Kingdom report three. Table 8.1 in Appendix 1 lists the studies as reported by each country. Most studies were cross-sectional household-based with national coverage, but some were conducted at a regional level. Some studies are not, strictly speaking, general population studies, but have a sample recruited from a venue (HIV testing centre) or have a specific segment of the general population, such as uniformed personnel or teachers. In the following analysis, only those studies that indicate the general population as a whole as their target population have been taken into account.

The age range of study populations varies widely. Not all countries provided information on this point; for those who did, a common core of 18–45 may be identified for all studies but one. At the lower limit, ages range from 12 to 18, and at the upper age, the limit ranged from 30 to no limit at all. The widest ranges tended to be found in general health studies; otherwise no particular rationale appears to emerge. For example, some countries have limited questions on sexuality and KABP to ages below 45, whereas others extend far beyond this age.

Some countries (such as Germany, Norway, Sweden and Switzerland) began collecting data already in the late 1980s; others, such as Greece (2007), began much more recently. Where studies have been repeated, the total number is not always known, since in some cases only the period of time over which the studies were conducted is provided. Where the number is indicated, the frequency with which studies are repeated varies; some are conducted annually, and others intermittently. Apart from Cyprus and the Netherlands, all countries with a system

in place indicated another study planned. Although not claiming to have a system, Ireland and Lithuania also had another study planned. Given the number of countries with repeated studies, a considerable number has trend data regarding changes in sexual behaviour and other KABP variables. Different modes of administration of the questionnaire are indicated, these being essentially paper questionnaire, telephone interview and face-to-face interview. The sample size also varies very widely, ranging at a national level from 700 to several thousands.

The main feature to emerge from the picture as a whole is the great diversity of all aspects of the methodology. This is true in the case of the focus of the study, the sample size, the frequency of conducting the study, and the age range of participants. It is also difficult to identify any particular pattern that gives structure to this diversity. Given this situation, it seems particularly important that a set of indicators be clearly defined so as to provide a common core to allow comparison between countries.

### 5.1.3 Topics currently covered

Eighteen countries provided information on the topics covered in behavioural surveillance. The topics most frequently covered in the general population, categorised by topic area as in the original questionnaire, are shown in Table 5.1 below and Table 6.1 in chapter 6.

**Table 5.1 Topics most frequently mentioned by countries<sup>10</sup> with behavioural surveillance among the general population (number of countries regularly or irregularly including this topic)**

Topic area Topics	Number of countries reporting use (total 18)
<b>Knowledge and attitudes</b>	
Knowledge about HIV/AIDS infection and/or treatments	16
Awareness of prevention activities	13
Knowledge about STI infection and/or treatments	11
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	16
Concurrency	12
<b>Sexual activity and lifestyle</b>	
Sexual activity, such as number of partners, frequency of sexual contacts	18
Sexual orientation	15
Contraception	15
Sexual practices	14
Recourse to prostitution (as client)	12
<b>Exposure to risk of infection</b>	
Condom use at last intercourse	18
Condom use with different types of partners	17
<b>HIV and other STI</b>	
HIV testing	15
Current or past STI other than HIV and hepatitis	13
<b>Drugs and substance use</b>	
Types of drugs consumed	11
Use of psychoactive substances (including alcohol) and intercourse	11
<b>Socio-demographic characteristics</b>	
Education	18
Employment	18
Nationality and/or ethnic origin	15
Housing conditions	12

<sup>10</sup> By 11 countries and more.

### 5.1.4 Behavioural surveillance indicators

Although 13 countries report having a surveillance system, only eight provided details on their main indicators. The United Kingdom indicated that trend data were followed for a wide variety of indicators on sexual behaviour, but did not provide further details. Three countries provided information on 15 indicators or more: Belgium (17), France (15), and Switzerland (15), while others provided on fewer: Poland (eight), Germany and Lithuania (five), Cyprus (three) and Sweden (one).

With the exception of 'Health and access to care', indicators were reported with regard to all topic areas — i.e. 'knowledge and attitudes', 'sexual relationships and sexual partners', 'sexual activity and lifestyle', 'exposure to risk of infection', 'HIV and other STI' and 'drugs and substance abuse'. Table 9.1 in Appendix 2 lists the indicators as they were described by each country and classes them by topic area and by topic. The following procedure was used in the table: the most specific description was used, i.e. where the numerator and denominator were provided for an indicator, these were combined to describe the indicator rather than simply using the name (used by the country) to label the indicator. Reported indicators were then grouped by topic area. An attempt was then made to assign to each indicator a topic, as these were defined in the original questionnaire. Where it was seen that separate topics distinctly and usefully emerged from one original topic, this topic was split into new ones. Remaining unclassified indicators were then assigned new topics.

The high rate of non-response among countries reporting a surveillance system suggests a certain lack of clarity regarding the monitoring of indicators. In addition, relatively few countries were able to state them clearly, and those indicators that were provided are often imprecise. A number of observations may be made from Table 9.1:

- A single 'topic area' includes indicators relating to a diversity of topics, including some 'new' topics, i.e. topics not proposed as options in the original questionnaire.
- Even given the relatively limited number of indicators provided by countries, several different indicators generally emerge for each topic. Considerable heterogeneity is therefore present in the indicators currently being used in Europe.
- A comparison of the table of indicators in Table 9.1 with Table 5.1 shows that several topics indicated as being covered in surveys do not figure in the list of main indicators requested, these being: awareness of prevention activities, recourse to prostitution (as sex worker), sexual orientation, how and where partners are met, sexual practices, condom use in different types of sexual practice (e.g. vaginal, anal, oral sex), disclosure of HIV status to sexual partners, result of HIV test (self-reported), hepatitis B vaccine, hepatitis B status (self-reported), hepatitis B status (measured), types of drug consumed, antiretroviral treatment, and access to care and support.

### 5.1.5 Discussion

Different types of survey are used to obtain information on HIV/STI-related behaviour in the general population. These surveys have different objectives, and, consequently, cover a different range of issues in greater or lesser depth. Some are conducted at a national level and others at a regional level. From a surveillance perspective, it is essential that a common block of indicators be defined, remaining the same whatever the type of study and whatever the source of finance. Provided there is adequate coordination at country level, maintaining this common block increases the efficiency of the surveillance system, allowing for savings to be made and for an overall increase in the reliability of results through pooling from different sources. This approach also has advantages from a research perspective, since a standardised set of data on behaviour may be related to variables in relation to other aspects of sexual and reproductive health or to other forms of health related behaviour or health outcomes.

Data obtained from the questionnaires indicated that the definitions of basic terms, such as 'surveillance' and 'indicators' remain variable. This again points to a need for consensus to be achieved and disseminated concerning the objectives and remit of HIV/STI-related behavioural surveillance.

The range of topics covered is wide, although indicators were not specified for all topic areas. Within specific topics, a number of different indicators are available. Specifying an indicator on any particular theme involves a series of decisions, such as regarding the reference time period, the precise denominator etc. Indicators have often been simply developed within a given context; decisions regarding their construction have not always been consciously made on the basis of reasoned arguments. Arguably, therefore, currently used indicators are open to review.

In countries that have been conducting surveys for a considerable time, existing indicators are already used for monitoring trends, and making changes may be difficult since the introduction of new indicators carries a risk of disrupting this trends. Ways in which systems may be adapted without prejudice to trend analysis need to be proposed.

Since the subject of the surveillance is human behaviour and not human biology, some indicators are inevitably more culturally sensitive than others. Although some, such as 'condom use at last sexual intercourse' present few problems of comparison over different countries and over time, others are less straightforward. For example, since the level of HIV/STI awareness in the general population varies from country to country, any one set of questions destined to define an indicator on knowledge cannot demonstrate equal sensitivity to change in all contexts. This implies that careful thought be given to the objectives of indicators proposed at a European level.

### ***Suggested set of indicators***

Considering the countries' replies concerning indicators used and topics covered, together with UNGASS recommendations, an initial set of items on which indicators may be based can be identified. These are listed below, beginning with UNGASS-related indicators (indicators that will permit for construction of UNGASS indicators). The proposed indicators are more precise on certain points than UNGASS and it should be noted, as specified in the footnotes, that for UNGASS several of these indicators are requested only for specific populations and not for the general population.

#### **HIV test**

Percentage of women and men who received an HIV test in the last 12 months<sup>11</sup>

#### **Age at first sexual intercourse (with penetration)<sup>12</sup>**

#### **Number and type of partners**

Number of sexual partners in the last 12 months<sup>13</sup> specified by type of partner (stable, casual, paid partner)

#### **Condom use**

Percentage of women and men reporting the use of a condom the last time they had sexual intercourse (with penetration)<sup>14</sup> by type of partner (stable, casual, paid partner)

#### **(HIV) knowledge**

Percentage of women and men who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission<sup>15</sup>

#### **Paid for sex**

Percentage of men who report having paid for sex in the last 12 months

#### **Concurrency**

Percentage of men and women regularly having sexual intercourse with more than one partner in the last 12 months<sup>16</sup>

Alongside behavioural indicators relating to the above items, it is important to collect data on **socio-demographic and other personal characteristics** in order to distinguish between different groups within the general population as a whole. It is suggested that data be obtained on level of education, employment, nationality and/or ethnic origin, housing conditions, and sexual orientation (heterosexual/bisexual/homosexual). Further information on this population is to be found in Table 8.1, Appendix 1.

<sup>11</sup> UNGASS indicator 7 also stipulates 'and who know their results'.

<sup>12</sup> Allows for the calculation of UNGASS 15: percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15.

<sup>13</sup> Allows for the calculation of UNGASS 16: percentage of women and men who have had sexual intercourse with more than one partner in the last 12 months.

<sup>14</sup> May be combined with information on number of sexual partners in order to construct UNGASS 17 and Millennium Development Goals indicator: percentage of women and men who have had more than one sexual partner in the last 12 months reporting the use of a condom during their last sexual intercourse.

<sup>15</sup> UNGASS indicators 13 and 14 destined respectively for 'young women and men aged 15–24' and 'most-at-risk populations'. This is also a Millennium Development Goal indicator.

<sup>16</sup> More research is required on the formulation of questions to obtain valid information for this indicator.

## 5.2 Young people

- Thirteen countries reported a national behavioural system in youth, five additional countries reported no surveillance system but have nonetheless conducted repeated data collection on youth behaviour.
- There is a great diversity in the methods used for behavioural surveillance (type of studies, sampling and data collection).
- The main topics covered are: knowledge about HIV/STI, sexual activity (number of partners), types of partners, condom use and contraception use.
- The indicators used in the countries show great diversity and harmonisation is needed.
- Behavioural surveillance is conducted among youth to follow up rates of risk behaviour, to estimate the potential for generalisation of the epidemic, to identify subgroups with higher risk and to verify that young people continue to receive appropriate sex education. These purposes imply that the age coverage of the surveillance has to begin in early adolescence (sexual debut) and end in early adulthood (i.e. from 15–24).
- As regards the methods in surveillance: few indicators are required but they should be collected in the highest possible number of persons. General health surveys, health barometers and multi-thematic surveys, that include a sexuality module, represent an interesting option.
- The proposed indicators should be transversal to other populations and mostly include UNGASS indicators and Health Behaviour in School Children indicators for the youngest, or should at least allow for 'translation' into corresponding indicators.

### 5.2.1 Introduction

In the early days of the HIV/AIDS epidemic in Europe, there were concerns regarding the generalisation of the epidemic. In several countries, especially in Western Europe, prevention campaigns targeted at the general population were launched at the end of the 1980s and there was a renewal of interest in sex education in schools. Surveys, mainly on Knowledge, Attitude, Beliefs and Practices (KABP), and then specific sexuality surveys were conducted, to evaluate the results of the campaigns and better understand sexual behaviour among youth. The number and coverage of surveys/studies then progressively increased and these began to be conducted with a surveillance objective. Increasingly, general health surveys were also used as supports for HIV/STI behavioural surveillance.

### 5.2.2 Systems and methods reported

#### *Coverage*

Twenty-eight countries sent back the youth questionnaire. A national behavioural surveillance system in youth is reported in 13 countries (Belgium, Cyprus, Estonia, Finland, Germany, Lithuania, Luxembourg, the Netherlands, Poland, Spain, Sweden, Switzerland and the United Kingdom). Five more countries reported no established surveillance system but have nonetheless (see Table 8.2 in Appendix 1):

- conducted many surveys including data collection on sexual behaviour in young people (France, Latvia);
- conducted repeated surveys in main cities (Iceland);
- conducted one big sexuality survey including young people (Ireland); and
- conducted a regional KABP in youth to comply with the UNGASS report (Greece).

In several of these countries, one-off studies or surveys with regional/local coverage only were also mentioned.

Most of the countries with low-level epidemics (Central Europe) do not have behavioural surveillance in youth.

The reported systems differ according to the duration of their existence: in general, Western European countries with concentrated epidemics began first, followed by Eastern European countries with concentrated epidemics.

- A first group of countries started their systems in the 1980s (Belgium, Germany, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom). In Belgium and Spain, however, this system was initially restricted to the regularly conducted WHO study on Health Behaviour in School Children (HBSC) with few questions on sexual behaviour, only put to 15-year-olds.
- A second group of countries initiated their studies in 1990s (Finland, France, Latvia and Lithuania). Latvia and Lithuania also began with HBSC<sup>17</sup> surveys.
- The last group (Cyprus, Estonia, Greece, Iceland, Ireland and Poland) conducted their first studies in 2000 and after.

<sup>17</sup> WHO study on Health Behaviour in School Children.



### Surveillance strategy, sampling and recruitment

There is great diversity in the strategies used for sexual behaviour surveillance in young people and in the natural history of the development of studies increasingly constructing a behavioural surveillance system. This is true as regards the type of studies conducted (general health surveys, specific studies, etc.), the sampling and the data collection methods. Eleven countries combine two or more sources of information contributing to their behavioural surveillance among young people:

- **Sexuality module included in a general health survey among the general population:** four countries (Belgium, France, Switzerland and the United Kingdom) include questions on sexual behaviour in national general health surveys, 'health barometer' or 'omnibus' surveys representative of the general population. Young people are a subsample of these studies. The age groups covered are different across countries, ranging from 10 to 24 years, as are the data collection methods: face-to-face questionnaires or Computer-Assisted Telephone Interviews (CATI).
- **Specific KABP survey among the general population:** four countries (Germany, the Netherlands, Sweden and Switzerland) have regularly repeated HIV/AIDS-related national KABP surveys, in which young people are a subsample. The age groups vary from country to country (from 15 to 35), and the data collection methods include CATI, postal mail questionnaire and internet.
- **Specific KABP survey in a random sample of school classes (age 10–18)** using a paper questionnaire, coupled with a KABP in a random sample of the general population aged 19–29 with a mailed questionnaire: Estonia uses this system.
- **Sexuality module in a general health survey among a sample of school classes:** two main models exist in this group: national general health/social surveys, in three countries (Finland, Spain and Switzerland), and the HBSC, which contains sexuality questions for 15-year-olds, in seven countries<sup>18</sup> (Belgium, Iceland, Latvia, Lithuania, Luxembourg, Spain and Switzerland). All studies use paper questionnaires.
- **A multi-thematic survey among youth aged 15–24** (youth barometer) has been conducted in Sweden, using internet.
- **Comprehensive sexuality studies conducted among adolescents** exist in six countries (France, Ireland, the Netherlands, Switzerland and the United Kingdom). These studies have been conducted once or twice, and may be specific to adolescents (France and Switzerland), to young people (the Netherlands) or addressed to the general population with a sub-sample of young people (Ireland, Spain and the United Kingdom). Here a diversity of methods has been used as well (paper questionnaire, Computer-Assisted Self-Interview (CASI), CATI, face-to-face questionnaire).
- **Programme evaluation oriented surveys:** three countries report this type of study as part of their behavioural surveillance (Cyprus, Poland and the United Kingdom).

One country (the United Kingdom) has conducted a survey among ethnic minority youth.

Four countries mention the European School Survey Project on Alcohol and Other Drugs (ESPAD) for behavioural surveillance regarding drug use<sup>19</sup> (France, Latvia<sup>20</sup>, Lithuania and Poland), and one country (Spain) has conducted seven repeated cross-sectional school surveys for behavioural surveillance regarding alcohol and drug use.

### 5.3.3 Topics currently covered

Sixteen countries provided information on topics covered in behavioural surveillance. The topics most frequently covered by behavioural surveillance in young people are shown in Table 5.2. A table comparing all proposed topics across the diverse subgroups of populations can be found in Table 6.1, chapter 6.

<sup>18</sup> Several other countries participate in the HBSC study without mentioning this study as part of their behavioural surveillance system. In 2005, the participating countries in EU/EFTA countries were: Austria, Belgium, Bulgaria, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Norway, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom (Scotland and Wales only) ([www.hbsc.org](http://www.hbsc.org)).

<sup>19</sup> Several other countries participate in the ESPAD study (e.g. Slovenia) without mentioning it as part of their behavioural surveillance system.

<sup>20</sup> Latvia included a sexual behaviour module in ESPAD (National School Survey on Alcohol and Drugs – LaSpad) in 2007.

**Table 5.2 Topics most frequently mentioned by countries with behavioural surveillance among youth (number of countries regularly or irregularly using this topic)**

Topic area Topics	Number of countries reporting use (total 16)
<b>Knowledge and attitudes</b>	
Knowledge about HIV/AIDS infection and/or treatments	13
Awareness of prevention activities	14
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	15
<b>Sexual activity and lifestyle</b>	
Sexual activity, such as number of partners, frequency of sexual contacts	15
Contraception	14
<b>Exposure to risk of infection</b>	
Condom use at first intercourse	11
Condom use at last intercourse	16
Condom use with different types of partners	10
<b>HIV and other STI</b>	
HIV testing	10
<b>Drugs and substance use</b>	
Types of drugs consumed	11
Use of psychoactive substances (including alcohol) and intercourse	11
Injecting drug use	9
<b>Health and access to care</b>	
Access to sex education	11
<b>Socio-demographic characteristics</b>	
Nationality and/or ethnic origin	11
Housing conditions	10

Not surprisingly, these main topics are more or less the same as those mentioned for surveillance in the general population. It should be noted that 11 countries collect data on nationality or ethnic origin, and can therefore compare subgroups in their young population.

## 5.2.4 Behavioural surveillance indicators

Only nine of the 18 countries provided the main indicators as part of their behavioural surveillance system among young people (Belgium, Cyprus, France, Germany, Lithuania, Luxembourg, Poland, Sweden and Switzerland) (Table 9.2 in Appendix 2).

Diversity is also a key word as regards the indicators in use: even within the same topic, many different indicators are used, with diverse age categories (15, 15–24, 15–19, 16–17, 17–20, 18–20, or not mentioned) and periods of reference (lifetime, five years, 12 months, six months).

Six main generic indicators are used by more than two countries as main indicators:

- Knowledge about HIV infection and protection
- Sexual activity
- Sexual relationships
- Number of partners
- Condom use
- Contraception use

### *Knowledge about HIV infection and protection*

The specific indicators reported are:

- Correct identification of false statements on HIV-infection
- Correct identification of false protection methods against HIV
- Knowledge about HIV transmission
- Proportion of people able to cite at least two acceptable ways of protecting themselves from HIV
- Percentage of youth who both correctly identify ways of preventing the sexual transmission of HIV and who

- reject major misconceptions about HIV transmission
- Knowledge of means for protecting oneself against HIV/AIDS infection (unaided recall of means of protection)
- Correct estimation of the seriousness and curability of HIV/AIDS

### **Sexual activity**

Two main indicators are mentioned:

- Proportion of sexually active at a given age (15)<sup>21</sup>
- Mean age at first sexual intercourse<sup>22</sup>

### **Sexual relationships**

Many indicators are categorised in the sexual relationships topics:

- Percentage of young people who had one or more casual partners during the last 6 or 12 months
- Percentage of young people who acquired a new steady partner during the last 6 or 12 months
- Percentage of sexually active single (age 15–24)
- Percentage of respondents who have had sexual intercourse with more than one partner in the last 12 months<sup>23</sup>

### **Number of partners**

The indicators reported are:

- Lifetime number of sexual partners
- Number of partners in the last 12 months

### **Condom use**

Many indicators are used. The reference period is generally 6 or 12 months.

- Condom use at the first sexual intercourse
- Condom use at last sexual intercourse<sup>23</sup>
- Condom use at last sexual intercourse among those who had more than one partner in the last 12 months<sup>24</sup>
- Condom use during the most recent act of sexual intercourse with a non-regular sex partner
- Use of condoms by sexually active single
- Condom use in new relationships
- Condom use with casual partners
- Condom use in spontaneous sexual contacts
- Condom use in spontaneous sexual contacts on holiday
- Consistent condom use with casual partners
- Condom use with steady partner

### **Contraception use<sup>25</sup>**

- Use of contraception by sexually active women during the last 12 months
- Use of emergency contraceptive pills (ever) interpreted as indicator of risky behaviour among young people
- Use of contraceptive pill at last sexual intercourse (15-year-olds)

### **Other main indicators mentioned (by two countries or less)**

- Attitudes towards PLWHA
- Having had sexual education in school and topics discussed
- Percentage of young people who can acquire a condom
- Condom possession as an intention to protect

<sup>21</sup> This generic indicator is similar to one of the UNGASS indicators (indicator 15): percentage of young women and men aged 15–24 who have had sexual intercourse before the age of 15. Also similar to HBSC indicator: percentage of sexually active in 15-year-olds.

<sup>22</sup> HBSC indicator.

<sup>23</sup> This generic indicator is similar to one of the UNGASS indicators (indicator 16): percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months.

<sup>24</sup> This generic indicator is similar to one of the UNGASS indicators (indicator 17): percentage of women and men aged 15–49 who had more than one sexual partner in the past 12 months reporting the use of a condom during last sexual intercourse.

<sup>25</sup> Although not directly related to HIV/STI, these indicators are regularly collected in young people and have been mentioned by some countries as main indicators.

- HIV testing
- Percentage of young people declaring a STI in the past five years
- Prevalence of drug use among young people
- Injecting drug use
- Prevalence of abortion

### 5.2.5 Discussion

Young people are one of the most surveyed populations in Europe as regards HIV/STI related behaviour: 18 countries collect data on sexual behaviour, some on a regular basis and others more sporadically, with surveillance as a main or secondary objective. Few countries mentioned drug-consuming behaviour, except countries with recent epidemics concentrated in IDU (Eastern European/Baltic countries), although many European countries regularly collect data on drug consumption in youth surveys (HBSC, ESPAD).

There is great diversity in the coverage of the surveys (age groups), in the methods and indicators used. We can infer from this diversity that the use of the information collected also varies greatly across the countries.

In the countries with old established systems, it seems that the surveillance has been constructed progressively under the pressure of the AIDS epidemic. However, behavioural surveillance was probably not the primary aim in conducting these surveys: evaluation of prevention and research to better understand the sexuality of young people were certainly the first aims of these studies, surveillance being a product of these not necessarily concerted efforts. The total cost of these studies is high and therefore not sustainable over time if destined only for surveillance. In some of these countries, simplified systems seem to be being progressively set up.

In countries with more recent systems, surveillance appears to be a more primary aim, with less diversity in studies conducted and less need to change to assure sustainability.

Several questions emerge from this picture, if we take into account only HIV/STI surveillance needs:

- Which part of this population has to be the object of the surveillance?
- For which purpose?
- With which intensity?
- What are the best (mix of) methods to be used?
- What are the main indicators to be proposed?

Regarding purpose, in concentrated and low level epidemics it is suggested that behavioural surveillance be conducted among youth to follow up rates of risk behaviour and to estimate the potential for generalisation of the epidemic[21]. Subgroups with higher risk should be identified. It is also necessary to verify that young people continue to receive appropriate sex education. These purposes imply that the age coverage of the surveillance has to begin in early adolescence (sexual debut) and end in early adulthood (i.e. ages 15–24).

In this population, where high-risk behaviour exists in a small part of the population and changes slowly, it may not be necessary to have frequent surveys: a period of four to five years may be sufficient[21].

As regards the methods, following initial studies that allow the situation in a defined country to be explored and understood, specific surveys (KABP) and sexuality surveys are no longer required to fulfil surveillance objectives: few indicators are required, but should, however, be collected in the highest possible number of persons. General health surveys, health barometers and multi-thematic surveys that include a sexuality module represent an interesting option (large samples, many variables of interest as regards the analysis of subgroups, reduced cost of surveillance). These surveys may be general population surveys with (if possible) overrepresentation of youth aged 15–24, or adolescent/young adult surveys. Combining two or more surveys (for example HBSC for 15-year-olds and a general population survey for young adults) is also an option. The use of representative samples of the population should remain the rule for surveillance in this population, although it may be interesting to explore more in-depth comparisons with sampling techniques using the internet. This poses the question of how to sample sites in order to have reasonably stable youth samples.

#### *Suggested set of indicators*

The proposed indicators should include UNGASS or HBSC indicators for the youngest or should at least allow for 'translation' into a corresponding international indicator. The minimum list of generic indicators proposed to fulfil the purposes of surveillance in young people includes:

##### **a) Indicators that may be used in youth and in other populations (transversal indicators)**

- A composite indicator of knowledge of HIV transmission and protection (UNGASS 13<sup>26</sup>)

<sup>26</sup> Percentage of young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (UNGASS 13).

- Age at first intercourse or, at least, proportion of sexually active at age 15 (UNGASS 15)
  - Number of partners in the last 12 months (UNGASS 16)
  - Condom use or contraceptive method at last intercourse (possible to construct UNGASS 17)
  - It would be useful to add a way of differentiating the use of condoms with different partners (type of partner at last intercourse or questions on condom use asked for steady and casual partners)
  - HIV testing (ever) may be added
- b) An indicator of special interest for youth**
- Condom use/contraceptive method at first intercourse
- c) In countries with concentrated epidemics among drug users, the following indicators should be added in the surveillance system:**
- Drug(s) use
  - Lifetime injection experience.

Further information on this population is to be found in Table 8.2, Appendix 1.

## 5.3 Men who have sex with men (MSM)

- Fourteen EU/EFTA countries conduct behavioural surveillance among MSM and another four countries have conducted behavioural surveys of some kind among this subpopulation.
- All EU/EFTA countries use convenience samples for behavioural surveillance among MSM since there is no sampling frame.
- Most EU/EFTA countries use the internet for recruiting and surveying MSM for behavioural surveillance.
- General consensus exists on main indicators: unprotected anal intercourse, condom use, number of partners, HIV testing.
- However, there is considerable diversity in the specific indicators actually used.

### 5.3.1 Introduction

In many European countries MSM are at higher risk for HIV and STI than other populations. Even though there has been an increase in the number of new HIV diagnoses among heterosexual men and women in some European countries in recent years, MSM still remain at greatest risk of acquiring HIV in those countries. In response to the high risk experienced by MSM, a number of countries have established behavioural surveillance programmes to monitor the behaviours that underlie the elevated HIV and STI risk in this population.

In February 2008, the ECDC held a workshop in Stockholm to discuss behavioural surveillance among MSM. Experts from 11 Western European countries attended the meeting (Belgium, Denmark, Germany, France, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom). The aims of the meeting were: (i) to discuss the results of behavioural surveys among MSM conducted in countries, (ii) to recommend a key set of harmonised indicators for behavioural surveillance among MSM in Europe.

The workshop's report summarised the indicators that are currently used for behavioural surveillance among MSM in Western Europe and proposed a set of harmonised indicators<sup>27</sup>. This chapter extends the workshop's report by including countries from Eastern Europe, as well as providing more comprehensive data on current surveillance activities based on the questionnaire each country completed.

One of the challenges for conducting behavioural surveillance among MSM is that there is no sampling frame from which to draw a probability sample. To date, it has been impossible to enumerate the MSM population since questions on sexual identity or sexual behaviour are not routinely included in national censuses. Questions on sexual behaviour or identity may be included in some national probability surveys, but these studies usually recruit relatively small numbers of MSM. As a consequence, behavioural surveillance among MSM usually relies on 'convenience samples' recruited through a number of channels including the gay press, bars and gyms. In recent years the internet has increasingly been used for recruiting MSM.

### 5.3.2 Systems and methods reported

#### Coverage

Of the 27 countries that returned a questionnaire, 14 said that there was a system of behavioural surveillance among the MSM population in their country<sup>28</sup>: Belgium, Denmark, Estonia, France, Germany, Ireland, Lithuania,

<sup>27</sup> <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=18853>

<sup>28</sup> The references for this chapter are to be found in Table 3.1, Appendix 1, and are listed in the bibliography of the report.

the Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

An additional four countries did not consider that they had such a system but nonetheless had conducted behavioural surveys among MSM (Finland, Greece, Latvia and Poland). Latvia has conducted repeat surveys among MSM while Finland, Greece and Poland have only conducted one survey to date. These 18 countries are included in this mapping report. For simplicity, they are all described as conducting behavioural surveillance since 15 countries have conducted repeat surveys, although Finland, Greece and Poland have not done so yet (Table 8.3 in Appendix 1).

The remaining nine countries did not consider that there was a system of behavioural surveillance among MSM in their country, nor have they conducted behavioural surveys among this population: Austria, Cyprus, Czech Republic, Hungary, Iceland, Liechtenstein, Luxembourg, Malta and Slovakia. No information was available for Bulgaria, Italy, Portugal and Romania since they did not return a questionnaire for MSM.

In general, Western European countries established behavioural surveillance among MSM before Central and Eastern European countries. France was the first country to introduce behavioural surveillance among MSM in 1985, followed by Switzerland and Germany (1987), Belgium (1992), United Kingdom (1993) and Spain (1995). Other Western European countries started later: Denmark, Ireland and the Netherlands in 2000, followed by Finland and Sweden (2006), and Norway and Greece (2007). Behavioural surveillance among MSM in Central and Eastern Europe was established from the mid 1990s. The first Eastern European country to introduce behavioural surveillance among MSM was Latvia (1997), followed by Slovenia (2000), Lithuania (2003), Poland and Estonia (2004).

### **Sampling and recruitment**

All countries used convenience samples for behavioural surveillance among MSM.

Twelve of the 18 countries recruited MSM from community venues such as gay bars, clubs and saunas, or had done so in the past (Belgium, Denmark, France, Ireland, Latvia, Lithuania, the Netherlands, Poland, Slovenia, Spain, Switzerland and the United Kingdom). In the United Kingdom, men were also recruited through gyms. Four countries used the gay press for recruitment (Finland, Germany, France and Switzerland).

Fourteen of the 18 countries recruited men through the internet, reflecting increased use of the internet by MSM for meeting sexual partners. Only Finland, Latvia, Poland and Slovenia have not yet recruited MSM through the internet. The first country to use the internet for recruiting MSM was Belgium in 1998.

Respondent driven sampling<sup>[46]</sup> has been used in two countries only (Estonia and Greece). In Estonia this approach was not successful — only 60 men were recruited using this method.

In most countries (n=14), national samples were recruited although local and regional samples were often included, too. In the other four countries (Belgium, Greece, Lithuania and Slovenia) only local or regional samples were recruited. The local samples were often recruited in cities with large MSM populations such as London, Paris, Geneva or Ljubljana.

Sample size varied between countries. This is not surprising, since the size of the general population, and therefore the MSM population, also varies between countries. But an additional factor was the sampling method. Samples recruited through the internet were generally larger than those recruited in the community (e.g. in bars, clubs and other venues). For community samples, sample size ranged from 100 (Slovenia, Latvia and Lithuania) to 2 000 (London), while for internet samples it ranged from 900 (Ireland and Spain) to 15 000 (France).

### **Data collection**

Surveys conducted in community venues (e.g. bars, clubs, gyms, saunas) or through the gay press used pen-and-paper questionnaires for data collection (n=13 countries), but increasing use of the internet for recruitment has led to the use of web surveys completed online.

In the last five years, 14 countries have conducted behavioural surveillance among MSM using web surveys (Belgium, Denmark, Estonia, France, Germany, Greece, Ireland, Lithuania, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom). Only Finland, Latvia, Poland and Slovenia have not done so. Of these 14 countries, three (Greece, Norway and Sweden) only used online surveys for data collection while 11 had also used pen-and-paper questionnaires for their community samples. Greece, Norway and Sweden all introduced behavioural surveillance after 2000.

The four countries that have not yet used the internet for recruitment (Finland, Latvia, Poland and Slovenia) used pen-and-paper questionnaires only.

Thirteen countries said that they collected behavioural surveillance data regularly, while five did not (Belgium, Finland, Greece, Latvia and Poland). In those five countries, the cross-sectional surveys were conducted on an ad hoc basis.

In the 13 countries that conducted surveys regularly, the interval between surveys varied widely. Some countries (e.g. United Kingdom) conducted cross-sectional surveys annually among MSM while others only conducted their surveys every 3–5 years.

Ten countries said they will repeat the survey between 2009 and 2012 (Denmark, France, Greece, Ireland, the Netherlands, Norway, Slovenia, Sweden, Switzerland and the United Kingdom). In the remaining eight countries, a decision has yet to be made about future surveys.

### 5.3.3 Topics currently covered

Each country was asked about the topics they included in their behavioural surveys among MSM. The topics were grouped under a number of headings. These included: knowledge and attitudes; sexual relationships and sexual partners; sexual activity and lifestyle; exposure to risk of infection; HIV and other STI; drugs and substance use. Sixteen of the 18 countries provided information on the range of topics they covered. The topics most commonly covered among MSM are presented in Table 5.3 below and in Table 6.1 in chapter 6. Most of these topics were covered regularly as part of a country's behavioural surveillance programme. The exceptions were 'Risk reduction strategies' and 'How and where men met their sexual partners'. About half the countries covered these regularly, while the other half did so irregularly.

**Table 5.3 Topics most frequently covered in behavioural surveillance among MSM**

Topic area Topics	Number of countries reporting use (total 17)
<b>Knowledge and attitudes</b>	
Knowledge about HIV/AIDS infection and/or treatments	14
Knowledge of Post Exposure Prophylaxis (PEP)	10
Awareness of prevention activities	14
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	15
<b>Sexual activity and lifestyle</b>	
Sexual activity, such as number of partners, frequency of sexual contacts	16
Sexual orientation	16
Sexual practices	15
How and where partners are met	12
<b>Exposure to risk of infection</b>	
Condom use at last intercourse	14
Condom use with different types of partners	16
Condom use in different types of sexual practice (e.g. vaginal, anal, oral sex)	12
Risk reduction strategies (such as negotiated safety, serosorting, positioning)	11
<b>HIV and other STI</b>	
HIV testing	15
Current or past STI other than HIV and hepatitis	14
Result of last HIV test (self-reported)	15
Result of last HIV test (measured)	7
<b>Drugs and substance use</b>	
Types of drugs consumed	12
Use of psychoactive substances (including alcohol) and intercourse	10
Injecting drug use	7
<b>Socio-demographic characteristics</b>	
Education	15
Employment	12
Nationality and/or ethnic origin	10

### 5.3.4 Current behavioural surveillance indicators

Ten of the 18 countries provided information on their current behavioural surveillance indicators (Belgium, Denmark, France, Lithuania, the Netherlands, Slovenia, Spain, Sweden, Switzerland and the United Kingdom).

Four main indicators are in current use. These are:

- unprotected anal intercourse;
- condom use;
- number of partners; and
- HIV testing.

However, there is considerable diversity between countries regarding specific indicators, as it can be seen below (see also Table 9.3 in Appendix 2).

### ***Unprotected anal intercourse***

For Unprotected Anal Intercourse (UAI), the specific indicators included:

- UAI with any partner
- UAI with a casual partner
- UAI with a main partner
- UAI with a partner of unknown or opposite status
- UAI with a partner of unknown status
- UAI with a casual partner of unknown or discordant HIV status
- UAI with a main partner of unknown or discordant status
- Number of UAI partners
- Frequency of UAI

The time periods included three months, six months or 12 months, although most countries used 12 months. In addition some countries asked about:

- UAI at last encounter
- UAI at last encounter with a man of unknown HIV status

### ***Condom use***

For condom use, the specific indicators were:

- Used condom during last Anal Intercourse (AI)
- Used condom during most recent AI with casual partner
- Used condom during last AI with casual partner of unknown or discordant HIV status
- Always used condom in last 12 months
- Always used condom with casual partner in last 12 months
- Always used condoms with main partner in last 12 months

### ***Number of partners***

For number of partners, the specific indicators were:

- Number of anal sex partners
- Number of steady and casual partners
- Number of partners for anal or oral sex
- Number of men reporting more than 10 partners

The time period was always 12 months.

### ***HIV testing***

For HIV testing, the specific indicators were:

- Ever tested for HIV
- Tested for HIV in the last 12 months
- Tested for HIV in the last 12 months and knows the results
- Percentage with undiagnosed HIV
- Percentage who tested HIV positive
- Percentage of HIV positive MSM who are on treatment
- Percentage of HIV positive men with a detectable viral load

## **5.3.5 Discussion**

Of the 27 countries that returned a questionnaire, 14 said there was a system of behavioural surveillance among MSM in their country. Another four countries did not consider that they had such a system but, nonetheless, had conducted behavioural surveys among MSM. Nine countries did not have a system of behavioural surveillance among MSM nor had they conducted behavioural surveys in this population. A further four countries did not provide information about behavioural surveillance among MSM.



There is considerable diversity between countries in when a behavioural surveillance began, the interval between surveys and the range of indicators used. For example, Western European countries generally introduced behavioural surveillance among MSM before Eastern Europe. France was the first country to introduce behavioural surveillance among MSM in Western Europe (in 1985), while Latvia was the first Eastern European country to do so (in 1997). However, three Western European countries (Finland, Norway and Sweden) only conducted behavioural surveys among MSM for the first time in 2006 or 2007.

Although a wide range of behavioural surveillance indicators are currently used, these can be grouped under four main headings: unprotected anal intercourse, condom use, number of partners and HIV testing. A consensus appears to have emerged spontaneously, rather than by design, as to which the most important indicators for behavioural surveillance among MSM are. This is perhaps not surprising, since all countries are monitoring high-risk sexual behaviours in relation to HIV and STI transmission in this population. However, there is also enormous variation between countries in the specific indicators used, which makes direct comparison between countries problematic.

On the other hand, there are also common characteristics across Europe. Since there is no sampling frame for MSM, all countries have conducted cross-sectional surveys in convenience samples of men. An increasing number of countries now recruit men through the internet. Fourteen of the 18 countries conducting behavioural surveillance or surveys among MSM have used the internet for recruitment and data collection in the last five years. This reflects the well-established trend for more and more MSM to meet sexual partners through the internet via dating sites.

An advantage of using convenience samples is that it is possible to recruit large numbers of MSM who may be at risk for HIV and STI. This is especially so for internet samples. On the other hand, the disadvantage is that convenience samples are not representative of the overall MSM population. In general, convenience samples tend to overestimate the true level of HIV or STI risk in the MSM population. However, if sampling bias remains constant from one cross-sectional survey to the next, then it is possible to monitor time trends in risk behaviour using convenience samples with some reliability.

In the countries that have recruited MSM both in community venues (e.g. bars, clubs) and through the internet, the internet samples are usually larger than community samples. This highlights the ease with which large samples of MSM can be recruited through the internet for behavioural surveillance.

Several important gaps have emerged from this mapping exercise. The most striking is that nine European countries have not introduced behavioural surveillance among MSM (and another four did not provide any information) even though MSM remain the group at greatest risk of acquiring HIV in most European countries. Some of these countries have a small population and therefore a small MSM population, so may not be able to justify conducting behavioural surveillance among MSM (namely Cyprus, Iceland, Liechtenstein, Luxembourg and Malta). On the other hand, it seems likely that the other countries (Austria, Czech Republic, Hungary, Italy, Portugal and Slovakia) will have large enough MSM populations to justify behavioural surveillance among this group. Furthermore, three European countries (Finland, Greece and Poland) have only conducted one behavioural survey among MSM to date. It is important to recognise that in some European countries MSM may be harder to reach than in others because of cultural or religious barriers.

In conclusion, this mapping of behavioural surveillance among MSM in EU/EFTA countries has revealed both diversity and similarity between countries. In a number of countries behavioural surveillance among MSM has developed along similar lines without formal coordination. On the other hand, the diversity of behavioural indicators limits the extent to which direct comparisons can be made between countries. Not surprisingly, the ECDC workshop in 2008 reached the same conclusion and suggested that Member States should move towards harmonisation.

### ***Suggested set of indicators***

One way forward would be for all countries to incorporate a core set of indicators for behavioural surveillance among MSM. These indicators would include:

- Unprotected anal intercourse (UAI) with a partner of unknown or discordant HIV status in the last 12 months\* (overall and separately for casual and main partners)
- UAI with a casual partner of the same HIV status in the last 12 months
- Diagnosed with an STI in the last 12 months\*
- Tested for HIV in last 12 months\*
- Percentage who are HIV positive\*
- Number of sexual partners in last six or 12 months (male and female)\*
- Used condom at last anal intercourse (ideally, for casual and main partners separately)\*
- Where men met their sexual partners in last 12 months (saunas, bars, clubs, internet, etc.)\*

The core indicators with an asterisk (\*) were also included in the report from the ECDC workshop in 2008.

'UAI with a casual partner of the same HIV status' was not suggested as a core indicator in the ECDC workshop. The justification for including this indicator here is that an increasing number of HIV-positive (HIV+) men report 'serosorting' with casual partners i.e. only having UAI with casual partners who are also HIV positive. In principle, this does not present a risk of HIV transmission to someone who is uninfected, but it does present a risk for STI transmission among HIV+ MSM. Serosorting has undoubtedly contributed to the recent increase in STI among HIV+ MSM in Western Europe and therefore needs to be monitored. In addition, some HIV-negative men report serosorting with casual partners as a risk-reduction strategy. Since it is extremely difficult for two men in a casual encounter to establish with confidence that they are both HIV-negative, serosorting with casual partners among HIV-negative men presents a risk for HIV transmission.

The ECDC workshop only suggested including as a core indicator 'UAI with a partner of unknown or discordant HIV status'. The report did not differentiate between main and casual partners of unknown or discordant HIV status. This differentiation is important since, in some European countries, HIV transmission among MSM is more likely to occur within a regular relationship while in other countries it is more likely to occur in a casual encounter. Collecting data on UAI with main as well as casual partners will allow the description of the context in which HIV transmission occurs among MSM in Europe.

Further information on this population is to be found in Table 8.3, Appendix 1.

## 5.4 Injecting drug users (IDU)

- Those who inject drugs are vulnerable to a wide range of viral and bacterial infections — not only HIV — through poor injection hygiene.
- EMCDDA has already conducted significant work on the monitoring of infections and related behaviour among IDU at the European Union level.
- Seventeen countries reported that they had behavioural surveillance among IDU.
- The systems reported by these countries varied from large annual national surveys of IDU to smaller scale local studies.
- The data collected is focused on drug use, the sharing of injecting equipment, and HIV and hepatitis C testing.

### 5.4.1 Introduction

IDU are vulnerable to a wide range of viral and bacterial infections — not only HIV[47-49] — through poor injection hygiene. These infections, which include hepatitis C and B, result in considerable levels of morbidity and mortality. Sero- and behavioural surveillance systems focused on IDU thus often look at a range of infections and related behaviours rather than focus on HIV and STI. The high burden due to infections among IDU has resulted in the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) developing its Drug-related Infectious Disease (DRID) key indicators[50]. As a consequence, many EU countries have developed systems for monitoring these infections among IDU.

Undertaking infectious disease and related behavioural surveillance among IDU poses a number of significant practical difficulties. In particular, due to the illicit nature of drug injecting and the high levels of marginalisation and associated stigma, accessing IDU populations can be difficult, and there is of course no population based sampling frame. Surveys of IDU thus typically use accessibility sampling approaches either to access individuals in the community or through the services provided to them.

Following the development of its draft protocol for surveys on the DRID Key Indicator, in 2006, EMCDDA has launched a pilot collection of behavioural data through the National Focal Points using its standard reporting table for DRID<sup>29</sup>(standard table 9), with this data now being collected through the EMCDDA online system Fonte[51].

#### *Summary of the systems reported*

Twenty-eight countries returned the questionnaire on behavioural surveillance among IDU, and 17 of these countries reported having a behavioural surveillance system (Belgium, Czech Republic, Estonia, Finland, France, Greece, Iceland, Ireland, Latvia, Luxembourg, Lithuania, the Netherlands, Poland, Slovenia, Spain, Switzerland and the United Kingdom). Not all of the countries provided detailed information on their surveillance system. It should be noted that one country stated it had a system, but gave no information on the data collection system (Iceland), and another indicated having a system but gave no further information at all (Czech Republic).

<sup>29</sup> Links to EMCDDA relevant pages: <http://www.emcdda.europa.eu/themes/key-indicators/drid> and [www.emcdda.europa.eu/attachements.cfm/att\\_67055\\_EN EMCDDA-DRID-overview.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_67055_EN EMCDDA-DRID-overview.pdf)

### **Coverage**

In total, 28 current or past IDU surveillance surveys (involving repeated, or to be repeated, surveys) reported were conducted in 12 countries (Belgium, Estonia, Finland, France, Greece, Lithuania, the Netherlands, Poland, Slovenia, Spain, Switzerland and the United Kingdom), and a 13th country (Latvia) had a more informal arrangement with a series of surveys, but these had varied methodologically from year to year. Of these behavioural surveillance surveys, 22 were ongoing and covered 12 countries (Belgium, Estonia, Finland, France, Greece, Lithuania, the Netherlands, Poland, Slovenia, Spain, Switzerland and the United Kingdom). Seven surveys were described to have national coverage, with six of these ongoing (France, Greece, Slovenia, Spain, Switzerland and the United Kingdom).

Five countries reported using their national Treatment Demand Indicator (TDI) system for behavioural surveillance related to injecting drug use (France, Ireland, Luxembourg, Slovenia and Spain), and in two of these countries this was the only system being used (Ireland, Luxembourg). Though all the EU countries have a national TDI system of some kind, these collect different data and operate in different ways; however, they principally collected data from clinical assessments by service staff. These systems aim to monitor the characteristics of those presenting at drug treatment centres for the first time. In addition, they can collect data on IDU re-presenting to services, and sometimes they also collect data on those in ongoing treatment.

### **Surveillance strategy**

A range of different approaches are used for data collection. Whilst some countries just use surveys and others just TDI, some use a combination of both of these approaches (France, Slovenia and Spain). As the TDI systems collect data from clinical assessments of the subset of IDU presenting for medical treatment of their drug use, complementing these with surveys in other settings can give wider coverage of the IDU population.

The behavioural surveillance surveys used a range of recruitment methods. Eleven of the behavioural surveillance surveys that are, or had been, in operation used service-based sampling, another three used venue-based sampling, and there were also five that were described as cross-sectional surveys. These surveys all used a range of health and social services accessed by IDU as their recruitment setting. Typically, these were low-thresholds services (such as Needle Exchanges and outreach) and substitute prescribing programmes, however, one survey did use a community setting (Lithuania). Two used respondent driven sampling (Estonia, Lithuania), and one used a network sampling approach (Belgium). There were also two cohort studies (the Netherlands, Lithuania), one of which was ongoing (the Netherlands).

Eighteen behavioural surveillance surveys used face-to-face interviewing and eight, paper questionnaires. Samples sizes ranged from 100 per year to over 3 000. Nine countries had two or more surveys (Belgium, Estonia, France, Lithuania, the Netherlands, Poland, Spain, Switzerland and the United Kingdom), with the surveys typically covering different geographical areas and/or settings within the countries. The vast majority of the surveys recruited IDU, however, in three countries, a number of surveys recruited problem drug users (France, the Netherlands and Spain).

There are also 21 one-off studies reported from seven countries (France, Ireland, Latvia, Lithuania, Luxembourg, Sweden and the United Kingdom). Like the ongoing behavioural surveillance surveys, these had used a wide range of methods and varied in sample size. They also included surveys of prisoners as well as drug users and IDU. In Latvia, a series of such studies have occurred on several locations. Though they have used a number of methods over time, they have resulted in an informal surveillance structure.

Further details of the surveillance surveys and the one-off studies described above can be found in Table 8.4, Appendix 1.

### 5.4.3 Topics currently covered

The topics covered in behavioural surveillance of the IDU population are summarised in Table 5.4 and Table 6.1 in chapter 6. The most commonly collected information related to data on drug use and the sharing of injecting equipment, with 16 countries reporting that they collected these data through their behavioural surveillance systems. There were 14 countries that reported collecting information related to HIV and hepatitis B and C among IDU, and information related to healthcare usage by IDU was also reported as being collected by 14 countries. Information on IDU knowledge and attitudes was collected by only eight countries.

**Table 5.4 Topics most frequently covered in behavioural surveillance of the IDU population**

Topic area Topics	Number of countries reporting use (total 17)
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	11
<b>Sexual activity and lifestyle</b>	
Recourse to prostitution (as sex worker)	11
<b>Exposure to risk of infection</b>	
Condom use at last intercourse	11
Condom use with different types of partners	12
<b>HIV and other STI</b>	
HIV testing	14
Result of HIV test (self-reported)	11
Result of HIV test (measured)	12
Hepatitis B status (self-reported)	10
Hepatitis B status (measured)	11
Hepatitis B vaccine	13
Hepatitis C test	13
Hepatitis C status	14
<b>Drugs and substance use</b>	
Types of drugs consumed	16
Injecting drug use	16
Non-injecting drug use	16
Sharing of needles and syringes	16
Sharing of other injection material	16
<b>Health and access to care</b>	
Drug substitution treatment (methadone, etc.)	14
<b>Socio-demographic characteristics</b>	
Education	12
Employment	12
Imprisonment	12
Housing conditions	12
Sources of income (work, drug dealing, pension, welfare, prostitution)	11

### 5.4.4 Current behavioural surveillance indicators

Eight countries reported that they had one or more agreed key indicators which were derived from their behavioural surveillance systems (Belgium, Finland, France, Luxembourg, Poland, Slovenia, Switzerland and the United Kingdom). These are summarised in Table 9.4 in Appendix 2. It should be noted that these countries will be collecting a range of other data items, and that other countries will also be collecting these or similar data, but will not have established key indicators or do not use them. The behavioural indicators reported as being used by more than one country, with the country specific recall period used (if known), are:

#### *Sharing needles/syringes*

Belgium: not known

Slovenia: last month and last time

Switzerland: borrowing and passing on, last month and last six months

United Kingdom: last month and last six months

### ***Sharing other equipment***

Belgium: not known

Slovenia: last month and last time

### ***Sharing any equipment***

Finland: last month

France: borrowing only last 30 days

Luxembourg: borrowing only last 30 days

Poland: last month, last year, ever

United Kingdom: last month and last six months

### ***Uptake of voluntary confidential HIV test***

Belgium: last year

Luxembourg: last five months and ever

Poland: last year and ever

Switzerland: lifetime

United Kingdom: lifetime

### ***Uptake of voluntary confidential HCV test***

Belgium: not known

Luxembourg: last five months and ever

Poland: last year and ever

Switzerland: lifetime

United Kingdom: lifetime

### ***Age first injected***

Belgium, Finland

### ***Condom use***

Finland: last six months (regular or casual partners)

Luxembourg: last time (by gender)

Slovenia: last time

Switzerland: last time, last six months with regular and causal partners

There were thus three key indicators common to five countries: voluntary confidential testing for HIV; voluntary confidential testing for hepatitis C; and sharing of any injecting equipment in past month. There were, however, variations in the recall periods for the testing indicators, with 'ever tested' being used by four countries.

## **5.4.5 Discussion**

Overall, almost half of the countries had an IDU behavioural surveillance system, with many of these countries having more than one system. These systems took a range of forms, using a variety of recruitment approaches and settings, and varied greatly in size. These variations probably reflect a wide range in the quality, robustness and sustainability of the systems, although these cannot be objectively assessed through a mapping exercise of this kind.

A wide range of topics are covered in these systems, however only a small number of countries have identified key indicators. These key indicators are focused on voluntary confidential testing for HIV and hepatitis C, and sharing of any injecting equipment.

### ***Suggested set of indicators***

The EMCDDA has recently established a system for collecting behavioural surveillance data as part of its ongoing monitoring of the DRID key indicator. There is a range of data items that are collected and there are four main behavioural items — with these allowing some flexibility in recall periods so as to be useful in different countries (as patterns of injecting drug use do vary considerably between countries). Data on these are being collected in EMCDDA's 'Standard Table 9'. The main EMCDDA's behavioural indicators are[51]:

1. Sharing needles/syringes – This should include both lending and borrowing, as well as otherwise using, a needle/syringe already used by someone else, even if cleaned. The exact definition/recall period as used in the study is to be provided with data.
2. Sharing needles/syringes or other injecting equipment – This should include both lending and borrowing, as well as otherwise using, any injecting materials already used by someone else, even if cleaned: e.g.

- needle/syringe, water, cotton/filter, cooker, spoon, acid/lemon. The exact definition/recall period as used in the study is to be provided with data.
3. Recent HIV testing uptake – Has the user been tested for HIV infection in the last 12 months (before this survey or screening)? The exact definition/recall period as used in the study is to be provided with data.
  4. Recent hepatitis C virus (HCV) testing uptake – Has the user been tested for HCV infection in the last 12 months (before this survey or screening)? The exact definition/recall period as used in the study is to be provided with data.

These indicators fit well with the main indicators most commonly reported in this mapping exercise. Most of the countries reporting having a 'sharing' key indicator had a recall period for this of the last month (or 28/30 days), suggesting this might be a good preferred recall period for the sharing indicators. However, these indicators do not include sexual behaviour data, and data on number of sexual partners and condom use would be useful additions (EMCCDA currently has optional questions on these[51]).

There are also a number of indicators that have been proposed by UNGASS for use in surveillance among IDU. Most of the indicators are generic however one of these is specific to IDU, 'Injecting Drug Users: Safe Injecting Practices'[34], and refers to the proportion of those who had injected during the last month and reported using a sterile needle the last time they injected (UNGASS Indicator 20). No countries reported using this indicator.

Possible indicators were discussed at the Behavioural Surveillance Expert Meeting (Montreux, February 2009). The behavioural items collected by the EMCDDA were felt to be particularly useful and were considered to provide an excellent basis for identifying and selecting a core set of indicators for IDU in EU. Following this meeting, the following indicators are suggested.

Indicators on which EMCDDA is collecting behavioural data through Fonte are marked with (\*). Recall periods for indicators marked with (†) need to be agreed, although the mapping exercise indicates that the last four weeks/month is commonly used for these, and would probably be an appropriate period where injecting is regular event (e.g. from several times a week to daily), but may be too short where injecting is less frequent.

### ***Suggested transverse indicators for use with IDU***

The following indicators should be common with other population groups.

#### **Main indicators:**

- Condom use at last intercourse\*
- HIV testing and test result indicators\*

#### **Also where appropriate:**

- Number of sexual partners in the last 12 months
- Involvement in sex work (as client)

### ***Suggested IDU specific indicators***

(though some of these may be relevant to other populations)

#### **Main indicators:**

- Needles and syringe sharing\*†
- Injecting frequency\*†
- Number of new needles/syringes obtained\*†
- Recently received a substitute drug\*†

#### **Additional indicators:**

- HCV testing (same format as for HIV testing transversal indicator)\*
- Years since first injected\*
- Having been paid for sex\*

#### **Other possible options include:**

- Number of sharing partners\*†
- Ever injected in prison

In settings where drug users, or groups with a high prevalence of drug use, are being surveyed, questions about ever and current injecting could be useful additions to these studies, since monitoring the extent of injecting among those using illicit drugs is also important.

Further information on this population is to be found in Table 8.4, Appendix 1.

## 5.5 Migrants and ethnic minorities

- As it becomes easier to travel, and particularly as circular labour migration increases, it is inevitable that people living with HIV will migrate. Many will also travel back and forth to home countries.
- People from high prevalence countries contribute disproportionately to heterosexually acquired cases of HIV/AIDS in several European countries. They usually discover their HIV after arrival, often during pregnancy.
- Country reports revealed that there is little systematic 'behavioural surveillance' related to HIV and STI for migrants and ethnic minorities. However, a number of relevant one-off and repeated studies have been carried out, particularly in countries with a long history of migration.
- There is a need for standardisation across studies, across countries, and across different migrant populations (migrants recently arriving and/or in transit, established ethnic minority communities).
- More research is needed to develop accurate indicators related to mobility and migration status.
- Models of good practice should be developed on the basis of an analysis of studies carried out among migrants and ethnic minorities.

### 5.5.1 Introduction

Worldwide, some 200 million people are thought to be international migrants. The number of people who live in a country other than that of their birth has more than doubled since a generation ago[52], and several other changes have occurred in migration patterns. First, approximately half of the world's labour migrants are now women, some of whom work abroad for a few years before they start their families, and others leave children in their home country, usually in the care of family members. Second, more and more of the world's migrants are skilled workers, such as information technology specialists and healthcare workers. Third, the fact that travel is now much easier and less expensive has modified migration patterns in several ways. Ease of travel also means that people working abroad can return home for regular visits. The possibility of such visits, and also the easy communication tools, mean that family relations can be maintained across long distances. 'Transnational families' have appeared, in which members of the same family live in two or more different countries or continents. It is a reflection of such movements throughout their life courses that migrants not uncommonly hold more than one nationality.

Other worldwide trends in population mobility are pertinent. One trend is that wars are taking place more within — and less between — countries, meaning that the world is seeing fewer refugees and more people who remain within their own country as they flee conflict. Another trend is that countries of origin, transit, destination and return are less clear than they were a generation ago: migration patterns are shifting, with some countries seeing all four types of migration. Today, for example, countries such as Spain may simultaneously send skilled workers abroad, serve as a destination country for significant numbers of migrant workers for the agriculture and construction industries, receive significant numbers of citizens who return to retire after years of working abroad, and see large numbers of people transiting the country as they follow well-established channels for clandestine migration northward.

As it is clear in the example just given, all of these tendencies affect Europe. Migration patterns in European countries are driven by history, particularly by the former colonial links that now affect bilateral agreements and exchanges (for example, explaining the number of Ghanaian or South African physicians and nurses in the United Kingdom, of Algerians in France, and of Congolese (from the Democratic Republic of the Congo) in Belgium). Previous patterns of migration are also extremely important determinants, as social networks strongly affect migration destinations: potential migrants most easily go to places where family and friends have previously migrated and will be available to help them. In addition, Southern European countries, which had for years been sending migrants, are seeing returns and becoming countries of destination and of transit for migrants from further away. Several Eastern European countries are simultaneously sending workers further west and serving as destinations for migrants or would-be migrants from less developed countries. Irregular migration has become an important issue in Europe as of the 1990s, with considerable (and sometimes highly oversimplifying) media attention given to smuggling and trafficking in people — in particular to trafficking for sex work —, as well as to unaccompanied child migrants.

At the same time, the 1990s brought a rise of conservatism in several European countries, in which worries about protecting the welfare state and a climate of insecurity and xenophobia created an uncomfortable atmosphere for migrants in many countries. There have been calls for, and some attempts at using, repressive measures for controlling clandestine migration in particular, such as the creation of detention centres, as well as more humane measures, such as campaigns to provide realistic information to would-be migrants prior to departure. The effect that the economic downturn of 2008 will have on migration worldwide and to European countries is unknown.

Factoring HIV in to the above, as prevalence rises — in some countries to a quarter or even more of the adult population — it is inevitable that increasing numbers of people with HIV will be migrating. This is exactly what has been happening in European countries over the past 10 years. People from countries with generalised epidemics accounted for about 40% of the heterosexually acquired HIV infections reported in most countries in the EU in 2007[4]. In the United Kingdom, a review published in 2004 estimated that almost three quarters of the HIV infections acquired heterosexually were acquired in Africa and that 79% of HIV+ children infected *in utero* or postnatally were of African ethnicity[53]. Proportions of people from the Caribbean newly diagnosed with HIV are also rising in the United Kingdom[54]. France has also seen an increase in AIDS cases among people from Sub-Saharan Africa, especially women[55]. Migrants in France were less likely than French patients to seek medical care on their own initiative and more likely to have had their HIV test instigated by health professionals[56]. In Switzerland, the relative proportion of AIDS patients from Sub-Saharan Africa (and also from South-East Asia) has been increasing, with migrant patients very often diagnosed during pregnancy or shortly after having given birth[57]. Trends are similar in countries for which migration is a new phenomenon such as Italy[58], Spain[59], or Greece[60], where migrants are disproportionately represented among new cases of HIV/AIDS, especially among those infected heterosexually.

It is worth while spelling out the main issues, since these directly affect the behavioural surveillance that can be, and is, carried out among migrant populations in Europe:

- Migrant populations in European countries are comprised of vastly different subgroups, some of which are well established, while others are highly mobile. Some may stay in the destination country for only a short time. Although all the surveillance studies listed below leave the question implicit, it would be helpful to distinguish three subgroups of migrants living in European countries:
  - Established migrant communities (members of which may have been present for two or more generations)
  - Newly arriving migrants (who usually arrive for family reunification, or seeking asylum, and in numbers that fluctuate greatly)
  - Undocumented, irregular or clandestine migrants
- Several studies have shown that migrants are often diagnosed later in the course of HIV disease. Concern about the possibility of maternal-child transmission has meant that HIV testing is increasingly proactively offered to women from high prevalence countries. This means that new migrants very often discover their HIV status during antenatal screening.
- The question of where infection takes place is a politically loaded one that it would be naïve to see as simply technical. Although most countries have clearly rejected the policy option of mandatory HIV testing for newly arriving migrants<sup>30</sup> and no European country currently deports migrants with HIV on the basis of their infection status, such deportation is still — rightly or wrongly — feared in many migrant communities.
- Such fears are fed by the xenophobia and racism mentioned above.
- HIV infection for migrants may also occur in countries of destination, or during return visits to home countries, especially when HIV prevalence in the latter is high[61,62].
- Access to prevention, testing and care is often limited for a country's non-nationals. Prevention efforts have been hampered by lack of recognition of their importance, by lack of political will and by fear of stigma.
- Access to care is largely determined by legal status in the country. Migrants with irregular legal status generally have the right to receive only very limited healthcare and no social services.
- Migrants with HIV are usually separated from the family and other social support that would be available to them at home and that is available to others living with HIV in the destination country.
- Extreme AIDS stigma prevails in many migrant communities, especially, though not exclusively, in communities of Africans living abroad. Fear of stigma adds to the isolation of HIV-infected migrants. Women, especially, often disclose to no-one outside the healthcare system[61-64].
- Some subgroups of migrants, such as MSM or sex workers, may experience multiple levels of stigma in destination countries, including stigma by others from their country living in diaspora.

### 5.5.2 Systems and methods reported

Only three countries responded that they had a system of behavioural surveillance addressing migrant populations (the Netherlands, Switzerland and the United Kingdom). Information was ambiguous in the case of Belgium ('yes' in response to the closed question, tempered with 'not really' in comment). The Netherlands indicated that the system has been in place since 2002, Switzerland since 2008. The UK gave no date, but published relevant studies indicate starting as far back as 1990, and Belgium lists relevant studies as of 1997.

The relevant studies (listed in Table 8.5, Appendix 1) take two forms: studies that focus on the general population

<sup>30</sup> See [www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2008/20080718\\_travel\\_restrictions.asp](http://www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2008/20080718_travel_restrictions.asp)



in a country and extract information about migrant respondents, and studies that specifically focus on migrant populations.

Some countries with a long history of migration have specifically attempted to define migrant subpopulations in repeated national health surveys with representative samples of the general population. Those listed in Table 8.5 are surveys of 1 200 people in Belgium, of 15 000 in Switzerland, or among 11 000 in the UK. The latter includes an 'ethnic boost' that specifically sought out 950 'black and ethnic minority' residents through targeted sampling from relevant neighbourhoods in the UK. Similarly, though in a one-off study, minority adolescents were included in a study of 'sex under the age of 25' in the Netherlands (n= 4 800). The methods used in these studies are described in the 'general population' and 'young people' chapters of this report. Concerning migration status, the Belgian study asks where the respondent was born and their current nationality. The Dutch and Swiss studies ask about country of origin and how long the respondent has lived in the country. Each of these studies has been repeated, or will be in the future, thus helping compare migrant with non-migrant populations and, ideally, also to assess trends. Thus, for example, the UK national survey on sexual attitudes and lifestyles finds that (contrary to what has been observed in other countries as well as in previous UK studies) black ethnic groups in the UK are now reporting higher attendance at STI clinics and uptake of HIV testing<sup>31</sup>.

As for studies that specifically focus on migrant populations:

- The Netherlands reported that repeated surveys were carried out among migrants or ethnic minorities in major cities between 2002 and 2005 (1 000 respondents each in Amsterdam, Rotterdam and The Hague, with questionnaires administered face-to-face to people frequenting public spaces, and HIV testing offered). Another more qualitative study on HIV-related stigma, carried out in 2007 in the Netherlands among 100 Africans, Surinamese and Antilleans, is to be repeated in 2009.
- Switzerland, in 2008, expressed the intention to establish sentinel surveillance among migrant women, starting with a questionnaire administered to 700 patients attending an outpatient obstetrics/gynaecology clinic in Lausanne, among whom half are non-nationals. The effort has been planned to be repeated in other Swiss cities with large migrant populations. In Switzerland a study was carried out in 2004 using telephone interviews and with the objective to monitor the health status among a sample of 3 000 people representative of different migrant groups (long-established, more recently established, and asylum seekers). The study is to be repeated at a date not yet defined. The 2004 study included some questions about sexuality, but the refusal rate was high in many populations; therefore, the data could not be analysed in depth (see comments below about community preparation).
- France reported one repeated or cross-sectional survey among migrants: a KAPB study carried out in 2005 among 1 900 people from Sub-Saharan Africa living in the Paris region. Respondents were recruited in public spaces such as on the streets, in the metro and at bus stations, markets, post offices and supermarkets.
- In the United Kingdom, two large-scale repeated, cross-sectional surveys have been carried out among people who define themselves as 'Black Africans living in England'. These are the 'BASS line survey' (African Health and Sex Survey) and 'MAYISHA' (Swahili for 'lifestyle or life choices'). The former administered questionnaires on paper or through the internet to 4 200 people in 2007 and to 2 900 people in 2008, and the latter used paper questionnaires with 750 people in 1999 and with 1 400 in 2004. Anonymous unlinked HIV testing was also carried out during the second wave of the MAYISHA survey, with uptake of 75%[65]. A very important element in both of these studies is that they were extensively prepared in collaboration with the relevant community organisations, the names of which appear prominently on the covers of the study reports. In the case of the BASS survey, questionnaires were distributed through community organisations and online. In the MAYISHA study, questionnaires were administered by field workers from the same ethnic group as the interviewee in previously mapped commercial venues such as bars and nightclubs, hairdressers, shops, community centres, universities and colleges, churches, and during community events, football matches and social gatherings.

Additionally a number of one-off studies in undefined groups of migrants, or in specific groups (see Table 8.5) were listed. These include:

- Knowledge, Attitude, Beliefs and Practices (KAPB) studies among 359 migrants in Germany (2005).
- A KAPB study among 980 Portuguese, Spanish and Turks living in Switzerland (1995).
- A study focusing on Islam and sexuality carried out by means of a questionnaire administered through the internet and returned by 700 young Moroccans and Turks in the Netherlands (2006).
- A study in the United Kingdom examining the sexual attitudes and lifestyles of 2 000 Eastern Europeans

<sup>31</sup> Similarly, and also in the UK, surveillance of HIV rates in blood specimens left over after syphilis testing, used to track undiagnosed HIV infections, shows that service uptake is increasing among ethnic minority residents and that fewer people are leaving the clinic undiagnosed.

- living in London, carried out with questionnaires that were also distributed through the internet, as well as through community groups, in clinics and with respondent-driven sampling (RDS) (ongoing).
- An additional English study (2006) looked at sexual health, knowledge, attitudes, and behaviour among black and minority ethnic youth in London. In this study, after extensive preliminary consultations and explanations with school authorities, teachers and students (see [66] for an extensive discussion of the preparation involved), 3 000 young people in schools with at least two thirds ethnic minority students filled out questionnaires administered in their classroom by field workers from the same communities.
  - Studies carried out in the Netherlands[63] and the United Kingdom[67] have examined the experiences of migrants living with HIV. The 'Facing HIV in the Netherlands' study used in-depth interviews to explore the life histories and daily lives of 15 migrants living with HIV. In Project Nasah, 435 Africans living with HIV in the United Kingdom responded to a 20-minute questionnaire administered by people from their own community who had been specifically trained for the study (see also section 5.7, 'Persons Living with HIV/AIDS (PLWHA)').

Other more qualitative efforts include studies of 124 Congolese youth and of 194 migrant mothers carried out respectively in 1997 and 1998 in Belgium, and a study from the Netherlands examining the sexual health of HIV+ heterosexuals from black and minority ethnic backgrounds carried out with 20 migrants and 10 care professionals (2006). A French study examines patients presenting late for AIDS care, finding that among the 267 people who were already in an advanced stage of disease when they were first diagnosed with HIV (CD4 cells at less than 350/mm<sup>3</sup>) 64% were born abroad, including 88% of the women. Somewhat similarly, the United Kingdom Anonymous Survey of African Born conducted in Genitourinary Medicine clinic attendees (GUMANON study) (see Table 8.5, Appendix 1), allows for seeing the proportion of migrants among people who consult such services, as well as the proportion who leave the service with HIV infections that were not diagnosed.

### 5.5.3 Topics currently covered

Questionnaires from only five countries gave information on the topics covered, making it difficult to define any tendencies (Belgium, France, the Netherlands, Switzerland and the United Kingdom) (Table 6.1 in chapter 6). Of note:

- The topics covered in migrant studies are generally the same as in the studies of general populations: knowledge about HIV/STI, number and types of partners, condom use (different types of partners, at last intercourse), HIV testing.
- Only France and Switzerland ask about concurrency, and only ask it irregularly. This is unfortunate in the light of the late testing noted among many migrant populations, and in the light of the possibility of sexual relations occurring during return visits home to high prevalence countries.
- Only the United Kingdom regularly asks about disclosure to sexual partners. Belgium asks it irregularly, the others countries apparently do not ask it (the question is important because of the stigma, secrecy and isolation experienced by many migrants).
- Exactly the same pattern is noted for questions about experience of stigmatisation and/or discrimination (United Kingdom regularly, Belgium irregularly, the others do not ask about it).
- Questions have been added about several other very pertinent topics:
  - Sexual violence (France, Switzerland, the Netherlands)
  - Travel to country of origin and sex with locals during travel (the Netherlands) or sexual contact on return to country of origin (France)
  - Partner refuses condom (France)
  - Attitudes of healthcare providers (the Netherlands)
  - Willingness to answer questions on sexuality to a doctor, in order to be counselled (Switzerland).

### 5.5.4 Current behavioural surveillance indicators

Questionnaires from five countries gave information regarding indicators: Belgium, France, the Netherlands, Switzerland and the United Kingdom. These are in general the same as for the general population: knowledge about HIV/AIDS; have had an HIV test; sexual activity, such as number of sex partners, concurrent partners, casual partners; and condom use. Numerators are generally the number of people reporting the indicator, denominators usually the population concerned (e.g. 'migrants', 'Africans aged 18–49', 'self-identified Africans over the age of 16', 'sexually active migrant women'). A detailed list summarising the main indicators used for surveillance in migrant populations is available in Table 9.5, Appendix 2.

Of note:

- Different ways of approaching the same question make it difficult to compare countries. There is a need for harmonisation and standardisation.

- Current indicators of migration status are usually simply 'country of birth' and/or 'nationality'. Here, too, lack of standardisation makes it difficult to compare countries. Very few studies attempt to cover migration status and trajectories more precisely.
- One country addresses a sensitive issue, as a closed question yes/no, regarding the reason for migration to the country because of health reasons.
- One country asks if respondents have ever accepted money or gifts for sex.
- One country attempts to measure stigma or discrimination in migrant communities.
- The access to health services has not been addressed in any survey, although HIV testing can be used as a proxy for this. Two less direct questions are: whether a respondent would be willing to talk with a doctor about sexuality (Switzerland), and whether respondents with HIV have been able to talk with a nurse about their sex lives (the Netherlands).

### 5.5.5 Discussion

Limited information was available from Eastern European countries where pertinent issues include migrants returning home, labour migration from developing countries and transit migration. A specific issue of concern is sex work in Western European countries, and return home afterwards or for visits.

As for Western European countries, overall there appears to be relatively little behavioural surveillance carried out among migrant and ethnic minority populations. There are a number of possible reasons for this. A first reason is that 'migrants', 'ethnic minorities', 'foreigners', 'non-nationals' are subject to stigmatisation: fear of the consequences of such stigmatisation, combined with the observation that such populations are hard to reach, may well have prevented studies from taking place in the first instance. A second reason is that migrant communities are dispersed: 'communities' are comprised of individuals from very different ethnic and socio-economic backgrounds. In the case of ethnic minorities, people may not have migrated at all because it was their ancestors who did so. The only thing such 'communities' may have in common is currently living in the same foreign country. It is thus not surprising that such 'communities' have been slow to mobilise around HIV. Third, in France[68], in particular (and perhaps to a lesser extent in other European countries), an ideology that everyone is equal, without distinction on the basis of race or origin, for a long time prevented epidemiologists and social scientists from taking race or ethnic origin into account as a variable. A final possible reason for not carrying out behavioural surveillance among migrants or ethnic minorities is that such populations are most often marginal in the countries in which they are living.

In most countries, relevant studies were initiated when a major problem became apparent — that migrants and ethnic minorities were disproportionately affected by HIV/AIDS. As mentioned above, these tended to be in countries with long-established ethnic minority populations (the United Kingdom, the Netherlands, Belgium and Switzerland, to a lesser extent), where people from the communities began to demand the evidence necessary for constructing solid programmes for HIV prevention and access to care. The United Kingdom is the best example of a country in which 'black and ethnic minority' groups organised themselves to carry out research and to lobby for their needs. Significant efforts have been taking place in several countries to promote prevention and access to testing and services among migrants and ethnic minorities — especially among pregnant women — and some of the studies listed here are beginning to show results (late access beginning to be reversed, at least for some migrant subgroups, in France and the United Kingdom, for example).

The responses to the questionnaire raise a number of points that merit further discussion. The first is an overall comment, followed by more detailed points.

#### **'Behavioural surveillance'**<sup>32</sup>

- Behavioural surveillance is not purely a technical matter, as it addresses sensitive issues.
- Stigma and trust are major issues that affect the establishment of behavioural surveillance. Some migrant and ethnic minority populations face issues not faced by other subpopulations in this report, some of whom may be objects of stigma, but who are citizens of the country in which the surveillance is being carried out. The relevant issues for migrants may include precarious legal status in the country in which they are living, fear of having to return to a home community where HIV care is not known to be available, and, for many ethnic minorities, racism and xenophobia. Poorly handled, the information created by behavioural surveillance research may feed stigma and racism, remove people from access to informal care that may have been available, and even lead to deportation to countries without HIV care.
- Well handled, on the other hand, such data is essential for demonstrating a need for services and raising community awareness. The information created by behavioural surveillance (as by HIV/STI-related social science research) can help decrease stigma, and improve access to Voluntary Counselling and Testing (VCT), care and treatment.

<sup>32</sup> In fact, the term 'behavioural surveillance' is probably to be avoided — it has a 'big brother' aspect that could sabotage the community preparation that is essential for such studies.

### Target group

A number of questions arise concerning potential target groups:

- Specifically which migrant and ethnic minority populations should be the object of behavioural surveillance?
  - Those present in the country in the largest numbers?
  - Those less likely to be reached by prevention, care and monitoring for the general population in the country?
  - Those most affected by HIV?
  - Those most vulnerable (and if so, by what criteria: by lack of access to prevention, to testing, to treatment?).
- What are the potential benefits, difficulties and consequences for each of the above ways of defining targets for behavioural surveillance?
- How can the most marginal and vulnerable migrant populations be reached (such as those with irregular status in the destination country), in ways that will not do harm, and also in ways that will be repeatable and sustainable?

### Research institution(s) and cross-national efforts

- What is the most appropriate institutional base from which to conduct behavioural surveillance among migrant or ethnic minority populations? Under what circumstances will the various potential actors (government agencies, academic institutions, community-based organisations, others) be most successful in gathering the necessary data?
- In which countries should such surveillance take place? What possibilities exist for cross-country studies, for example by looking at the same ethnic or nationality group living in different European countries?

### Methods and approaches

- The mapping questionnaires revealed some promising methodological approaches such as:
  - use of the internet<sup>33</sup>;
  - use of outreach in public spaces to recruit participants<sup>34</sup>; and
  - offering potential participants a choice between being interviewed by someone from the same community, culture and language, or by an outsider less likely to have acquaintances in common.
- The questionnaires also demonstrated the critical importance of working through community groups to prepare studies (e.g. in Switzerland in the 1990s, in the United Kingdom and the Netherlands since the beginning) and using field workers from ethnic minority communities:
  - When they are well prepared, studies may even have potential participants giving samples for HIV testing (the Netherlands, the United Kingdom).
  - This is in contrast with a later Swiss study of migrant health, where there was no mention of community preparation and the questionnaire filled out for this survey remarked that migrants apparently refused to answer questions about sexuality. Remarks such as this deserve to be followed up: the factors that help make studies acceptable to their target populations — or that may hinder them — should be examined with care[71].

### Topics of interest

Concerning the topic areas that need to be monitored in behavioural surveillance, the following subjects are important:

- Access to STI/HIV testing, treatment and care (monitoring access is a priority since many migrants have difficulties in this area) and since knowledge of HIV status and appropriate treatment reduce the risk of further transmission. Access to prevention may be difficult to assess, but access to testing can serve as a proxy that is easier to monitor.
- Knowledge about STI/HIV/AIDS: monitoring knowledge is important because it is influenced by the fact that migrant and ethnic minority populations may not have access to information that is generally available to others in the destination country (information may be linguistically and culturally inappropriate).
- Attitudes towards PLWHA: monitoring attitudes is important because of the significant stigma often noted in ethnic minority communities. In addition, it is also important to attempt to monitor internalised AIDS stigma among members of ethnic minority communities.

<sup>33</sup> For example, the Dutch 'Islam and sexuality' study notes that 97% of all young Turks between the ages of 15 and 24 use the internet, and 85% of their Moroccan peers do the same. In a study of HIV-positive persons attending a clinic in East London, among the 700 Black Africans respondents, 71% of the men and 64% of the women reported that they had access to the internet at home or at work [69].

<sup>34</sup> Among migrants approached in Amsterdam, the response rate at community houses and at clinics was as high as 90%. The response rate on the streets was about 50% [70].

- Sexual relationships: this includes types of partners, i.e. casual, regular or paid. See discussion below on indicators.
- Unprotected sexual relations: for migrant and ethnic minority groups this includes relations in both the host country and that of origin.
- Injecting drug use: this question is important everywhere, but particularly pertinent in Central and Eastern Europe.

### *Suggested set of indicators*

The proposed indicators to be used in behavioural surveillance for migrant and ethnic minority populations are quite similar to those proposed for other populations:

Core indicators (see Table 6.2, chapter 6):

- **Partners**  
Number of sexual partners in the last 12 months; concurrency
- **Use of condom**
  - a) Use of condom at last intercourse
  - b) with identification of the type of partner: stable/casual/paid
- **HIV test**
  - a) Ever and date of the last test
  - b) Result of the test (reported or measured)
- **Sex work**  
Having paid for sex in the last 12 months
- **Contextual indicators**  
Level of education  
Nationality/ethnic origin (however, see discussion below and in Appendix 5)  
Sexual orientation
- **Knowledge**  
UNGASS indicator: being able to correctly identify ways of preventing the sexual transmission of HIV and to reject major misconceptions about HIV transmission as well.
- **Attitudes towards PLWHA**

The above core indicators are suggested as the basic minimum. However, as much as the design of the surveillance or survey permits, some of the questions should contain more detail, specifically those addressing HIV knowledge (e.g. on treatments) and attitudes towards PLWHA (e.g. measures of stigma). Studies addressing migrants living with HIV should include disclosure to partners and others, as well as discrimination issues.

Some of the above core indicators may be very sensitive to address for particular ethnic minority groups. For instance, questions about paying for sex may be delicate, including situations in which sex may be exchanged not for money but for gifts. Somewhat similarly, and although some work has already been done in the field of migrant MSM<sup>35</sup>, it may be difficult to ask direct questions about sexual orientation in communities in which same-sex sexual behaviour is highly stigmatised. More qualitative research is required to address such issues in migrant and ethnic minority communities.

Two issues related to sexual behaviour are of particular pertinence in some migrant populations: unprotected sexual contacts in home countries and concurrent sexual partnerships. The former is important since people visiting their home countries may be more likely than other visitors to establish sexual relationships and they may serve as a bridge between populations with different HIV prevalence. Concurrent sexual partnerships are important since 'transnational families' may maintain branches in different locations, for instance when someone established in one country also maintains a regular partner at home. The most appropriate way to evaluate concurrency needs to be further investigated; more research is needed to define the precise question(s) independently of ethnic origin or nationality.

There is also a need for indicators related to mobility and to migration status. Indicators of migration status currently used are: country of birth or of origin, nationality and ethnic origin. 'Country of birth' (or the less specific 'country of origin') is frequently used, but 'nationality' is preferred in other studies. 'Ethnic origin' is considered important in some countries, but thought to be irrelevant — or even offensive — in others. Some of the advantages and disadvantages of each definition are discussed in Appendix 5. The variability in the definition of 'migrant' or 'ethnic minority' makes comparison between studies and countries extremely difficult, in epidemiological surveillance of HIV and tuberculosis[73], and also for behavioural surveillance. As for mobility, the most often used indicator is 'travel to another country' with questions on sexual contacts during travel and use of

<sup>35</sup> See for example Hickson F et al [72].

protection. The most appropriate way to evaluate and standardise the indicators related to mobility needs to be further investigated (i.e. time periods, nature of the relationships).

In sum of all of the above, behavioural surveillance for migrant and ethnic minority populations needs to be further developed in European countries particularly in light of the role that population mobility may play in HIV/STI transmission. Some of the behavioural research has already been carried out in some countries and can serve as a proxy and good example for regular monitoring.

ECDC can facilitate behavioural surveillance in migrant populations/ethnic minorities by establishing a European working group with the purpose of further developing the main questions area mentioned in the discussion and making suggestions as regards populations to be surveyed, as well as methods and indicators. Models of good practice should be developed on the basis of an analysis of studies carried out among migrants and ethnic minorities, taking into account positive and negative experiences.

Further information on this population is to be found in Table 8.5, Appendix 1.

## 5.6 Sex work (SW)

- Sex workers and their partners may be at increased risk of acquiring and transmitting HIV/STI, although this varies by place, sex industry sector and over time.
- There is little evidence that sex work is an important driver of HIV and STI epidemics in most parts of Europe, but sex workers are at-risk if preventive interventions are not in place.
- Few countries in Europe have systematic behavioural surveillance of sex workers or their clients.
- Behavioural surveillance of clients of sex workers is best approached as part of general population surveillance.
- Behavioural surveillance of sex workers has only been approached through convenience samples in services and sex work venues, leading to problems of generalisability and comparison.
- Indicators including condom use, HIV testing and access to preventive interventions are proposed.
- Collection of such indicators must be done in collaboration with sex workers and their advocates, and within the appropriate ethical framework.

### 5.6.1 Introduction

Sex workers and their partners may be at increased risk of HIV and STI, although this varies widely by place, sex industry sector and over time. There is little evidence that sex work is an important driver of HIV or STI epidemics in most parts of Europe, and reported condom use is high, particularly in female sex work[74,75].

Where HIV prevalence data exist, either from surveys or from sex workers attending for screening, they show a low prevalence among non-injecting drug user (Non-IDU) female sex workers (<1% in all countries, except Uzbekistan, where it was 5.2% among street sex workers in Tashkent, and Armenia, where it was 1.2% in sex workers attending testing centres in 2000); risks are higher for IDU sex workers, male and transgender sex workers[76]. Indeed, there are some reports of high rates of HIV and STI occurring in the context of other determinants such as poverty, drug use, sex between men and criminalisation[77-82].

Less is known about the risks of HIV and STI in clients of sex workers, most of whom are men. Again, commercial sex does not appear to be a major risk factor for acquisition of infection [74,75], but may play a role in some outbreaks[83,84]. There is some evidence of an increase in the proportion of men who pay for sex, with links to other potential risk factors such as travel and sex tourism[85-87].

There is almost no routine epidemiological surveillance of HIV and STI in relation to the sex industry in Europe, nor routine surveillance of the numbers, distribution and behaviour of sex workers and clients. Most of our information comes from one-off surveys among convenience samples of sex workers and clients and combines behavioural data with results of screening<sup>36</sup>. Interpreting these individual studies is particularly difficult since the relationship between the sample and the population is not known. This is a reflection of the hidden, stigmatised and generally criminalised nature of the industry. The possibility of more systematic surveillance is shown by a small number of multi-centre surveys of HIV/STI and risk behaviours that have been carried out in Europe[88]. However, as with national surveys, there remain problems of obtaining representative samples and of engaging sex workers and clients in the process. The high level of stigmatisation and criminalisation of many sex workers

<sup>36</sup> Some countries collate data through prevalence studies (including unlinked anonymous testing in parts of the Netherlands, Spain, Armenia, Belarus, Latvia, Russia and Ukraine) and surveys of particular sectors or services (Belgium, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Germany, Italy, England, Scotland, Bulgaria, Czech Republic, Poland, Armenia, Azerbaijan, Russia, Ukraine and Uzbekistan).

and some clients leads to an understandable reluctance on the part of many individuals, and many advocacy groups, to take part in surveys or other surveillance.

Better information on the numbers of people selling and buying sex, their behaviour, access to preventive health interventions and rates of HIV/STI could inform prevention efforts and may help in the detection of emerging problems. For this reason, UNAIDS recommends some epidemiological and behavioural surveillance among sex workers and clients, particularly in generalised epidemics but also to detect emerging problems in low level or concentrated epidemics[21]. Indicators have been developed, such as the percentage of men reporting sex with a sex worker in the last 12 months. Unfortunately, data resulting from surveys designed to collect such indicators remain hard to interpret[89,90].

One of the key challenges to collecting useful information and to providing effective preventive interventions is the political context in which sex work operates. There is increasing regulation of the sex industry, either through partial legalisation or through further criminalisation of sex workers and clients[91]. Sex work involving migrants is particularly heavily policed, and this makes establishing contact with sex workers difficult and creates ethical problems in carrying out 'surveillance' of people with few rights or representation. Any proposals for systematic surveillance of sex workers have to be considered in this context and should only be considered after full consultation with sex workers and their advocates and with appropriate protection and rights enshrined in the systems.

## 5.6.2 Systems and methods reported

### *Coverage*

Of the 25 countries that completed the questionnaire, six stated that there was a system of behavioural surveillance among the sex industry in their country: Belgium, Estonia, Lithuania, Luxembourg, Spain and the Netherlands (see Table 8.6, Appendix 1).

Two additional countries (Switzerland and the United Kingdom) indicated that there was no system of behavioural surveillance, but reported repeated surveys; in Switzerland and the United Kingdom, general population and MSM surveys include information on men paying for sex, and in the United Kingdom there have been repeated service-based behavioural surveys of sex workers. In this mapping analysis we have grouped these eight countries together, since they all refer to some repeated measure of behaviour in relevant populations.

The following countries reported no behavioural surveillance: Austria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Latvia, Liechtenstein, Malta, Poland, Slovakia, Slovenia and Sweden.

### *Sampling and recruitment*

Of the eight countries included here, the most commonly used sampling methods were service-based recruitment (STI clinics and health centres) and venue-based recruitment (clubs, windows, brothels, streets). Respondent driven sampling (Estonia) and a national probability sample (covering proportion of men who pay for sex, United Kingdom) were also reported. Populations were recruited at the local, regional and national level with sample sizes ranging from only 30 to 10 000.

### *Data collection*

Data were primarily collected via face-to-face interviews and paper questionnaires or from review of routine records in health service settings. General population samples that collected data on proportion of men reporting paying for sex included Computer-Assisted Self-Interview (CASI) or Computer-Assisted Telephone Surveys (CATI).

## 5.6.3 Topics currently covered

Only five countries regularly monitored the themes included in the specific question on topics as part of the behavioural surveillance system (Estonia, Lithuania, Luxembourg, Spain and the Netherlands) (Table 5.5 and Table 6.1 in chapter 6).

**Table 5.5 Topics most frequently mentioned by countries with behavioural surveillance among sex workers**

Topic area	Number of countries reporting use (total 9*)
<b>Topics</b>	
<b>Knowledge and attitudes</b>	
Knowledge about HIV/AIDS infection and/or treatments	6
Knowledge about STI infection and/or treatments	6
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	6

Topic area Topics	Number of countries reporting use (total 9*)
<b>Sexual activity and lifestyle</b>	
Sexual practices	6
Setting of prostitution	6
<b>Exposure to risk of infection</b>	
Condom use with different types of partners	8
Condom use in different types of sexual practice (e.g. vaginal, anal, oral sex)	8
<b>HIV and other STI</b>	
HIV testing	7
Result of HIV test (self reported)	7
Result of HIV test (measured)	8
<b>Drugs and substance use</b>	
Injecting drug use	7
Sharing of needles and syringes	6
<b>Health and access to care</b>	
Access to care and support	4
<b>Socio-demographic characteristics</b>	
Education	6
Nationality/ethnicity	7

\* Eight countries reported having a system and one reported having indicators without a system.

### 5.6.4 Current behavioural surveillance indicators

Four of the 25 countries who returned the questionnaires provided information regarding the current behavioural surveillance indicators collected (Belgium, Lithuania, Spain and Switzerland) (Table 9.6, Appendix 2).

The following main indicators were reported:

- Transactional sex (sex workers and clients)
- Condom use (sex workers and clients)
- HIV testing
- Access to health services

Among the main indicators, there was variability in the specific indicators reported by each country. Condom use was the most frequently utilised indicator and predominantly pertained to female sex workers (FSW), but it was additionally cited for male sex workers (MSW), transvestite and transgender sex workers (TSW), and the clients of sex workers. For condom use, the time period used ranged from the last act to 12 months.

For each main indicator, the specific indicators included:

#### **Transactional sex (client)**

- Ever paid for sex (males)
- Paid for sex in the last year (males, MSM)

#### **Transactional sex (SW)**

- Ever worked as a sex worker (IDU)
- Sex work in the past six months (IDU)
- Received money for sex in last year (MSM)

#### **Condom use (SW)**

- Used condom with most recent client
- Condom use with clients by type of sex (vaginal, anal, oral) (FSW)
- Always used condom with clients in last month (FSW, MSW, TSW)
- Always used condom with clients in last 12 months (oral, receptive AI) (MSW)
- Always used condoms with transactional sex in last six months (IDU and SW)
- Always used condom with clients in last six months (vaginal, anal, oral) (FSW)
- Always used condom in private life in last six months (vaginal, anal, oral) (FSW)
- Always used condom in private life in last month (MSW, TSW)
- Have more than five clients (on 10) ask for sexual intercourse without condom (FSW)



***Condom use (client)***

- Used condom at last paid intercourse, within the last year (male client)

***HIV testing and prevalence***

- Ever tested for HIV
- Tested for HIV in last 12 months and knows the result (FSW)
- Percentage of FSW HIV positive
- Percentage of MSW HIV positive

***Access to care***

- Have a regular gynaecologist (FSW)

Overall, most indicators were specific to female sex workers. Little data was collected from male clients and only two countries included indicators pertaining to male sex workers. There was no country overlap in specific indicators with each country using a slightly different, yet unique, specific indicator.

***Relevant UNGASS indicators***

UNAIDS/UNGASS does not have a single set of indicators to be applied in all settings, but suggests that they are related to the type of epidemic in the country. There are several indicators for 'most-at-risk' populations which may include sex workers and people who pay for sex. The relevant indicators (2009) are:

- The percentage of most-at-risk populations that have received an HIV test in the last 12 months and who know the result.
- The percentage of most-at-risk populations reached by HIV prevention programmes.
- The percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission.
- The percentage of female and male sex workers reporting the use of a condom with their most recent client.
- Percentage of most-at-risk populations who are HIV infected.

Previous indicators from UNAIDS also included the percentage of men reporting sex with a sex worker in the last 12 months and the percentage of these men reporting condom use at the last time they had sex with a sex worker.

**5.6.5 Discussion**

The mapping exercise has highlighted the limited scope of existing behavioural surveillance among sex workers in EU/EFTA countries. While some countries have performed local and regional studies and one-off surveys that include behavioural data, there is very limited ongoing or repeated surveillance at the national level. There are not enough data to enable a comparison between systems in Eastern and Western Europe; however, there appears to be a greater focus on female sex workers in Eastern Europe with an overarching aim of quantifying HIV prevalence.

The lack of existing systems reflects both the current state of HIV and STI epidemics in Europe, in which sex work plays a limited role, and the difficulties of carrying out surveillance in marginalised and often criminalised groups. Surveys that do exist are based on sampling, for example in sex work venues or through services, which may exclude a significant proportion of this group of the population. In addition, the majority of the surveillance conducted is among female sex workers. The clients of sex workers and male sex workers are populations that remain inadequately identified and sampled. Currently, novel techniques such as online surveys are not much used.

The wide range of data collected also shows that useful indicators in relation to sex work are not agreed upon, making it difficult to draw comparisons and conclusions.

Guidance on surveillance in relation to HIV is generally divided into suggestions for low level or concentrated epidemics and those for generalised epidemics. In Europe we are looking at the former, and UNAIDS suggests the need to identify subpopulations at current or potential risk, such as sex workers, estimating the size of the populations, measuring HIV prevalence and risk behaviours in these populations, and exploring the links between these subpopulations and the general population. The aim is to identify problems at an early stage in order to put preventive interventions in place. This requires monitoring of risk behaviours in vulnerable groups, measuring HIV and STI in these groups, looking for overlapping risk networks.

### **Suggested set of indicators**

In addition to the main transversal indicators suggested for the general population, the following sex industry specific indicators should be discussed for standardisation and harmonisation:

- Proportion of men who have paid for sex in the past 12 months
  - proportion of these who used a condom last time they paid for sex
  - proportion of these who have had an HIV test
- Proportion of sex workers who used a condom last time they were paid for sex
- Proportion of sex workers who have had an HIV test in the last 12 months
- Proportion of sex workers who have access to preventive services

Collection of such indicators must be done in collaboration with sex workers and their advocates, and within the appropriate ethical framework. Further information on this population is to be found in Table 8.6, Appendix 1.

## **5.7 People living with HIV/AIDS (PLWHA)**

- Very few countries have set up behavioural surveillance among PLWHA.
- A variety of methods have been used, mainly cross-sectional surveys carried out only once and planned to be repeated.
- To date, surveillance covers only limited dimensions of sexual behaviour. Indicators are limited to condom use with casual and steady partners and some information on drug use. There is no consensus on indicators to be monitored.
- Behavioural surveillance should cover the changing issues regarding HIV transmission.
- Existing studies could be used to monitor behavioural indicators among PLWHA, especially cohorts and repeated surveys in population groups with high HIV prevalence such as MSM, IDU and migrants.
- Discussions should be organised with PLWHA organisations to set up behavioural surveillance.

### **5.7.1 Introduction**

Among the 27 countries that returned the questionnaires, nine answered that they had some behavioural surveillance among PLWHA. Some studies focussed on quality of life and health needs with questions about social conditions and sexual behaviour, like the NordPol survey (conducted in Denmark, Iceland, Norway and Sweden) and the Eurosupport, carried out in 13 European countries.

Epidemiological surveillance provides some relevant information which has to be considered: transmission categories of newly diagnosed cases, clinical stage and CD4 count at diagnosis and, in some countries, demographic and social characteristics. During the Expert Meeting (Montreux, February 2009), additional information from Denmark and from the Nordic countries (NordPol) was provided by the experts.

### **5.7.2 Systems and methods reported**

Nine countries (Belgium, Estonia, France, Germany, Lithuania, Norway, Spain, Switzerland and the United Kingdom) report the existence of a behavioural surveillance system among PLWHA (Table 8.7, Appendix 1).

#### **Belgium**

In 2006, a cohort was set up in Belgium covering the whole HIV population followed in medical settings, including old and new cases. Information is collected at diagnosis on sexual orientation, CD4 count and nationality. During follow-up, only treatment and viral load are collected. The current cohort follow-up does not collect behavioural information. This study is carried out by the Institute of Public Health.

#### **Estonia**

In 2005, a study on quality of life and discrimination was carried out for the first time by the National Institute for Health Development. Another study was carried out in 2008. This study collects information on sexual orientation, stage of infection, treatment and biological markers at the time of data collection. The study used the WHO Quality of Life (WHOQOL-HIV) method, which documents mainly the social dimensions of well-being. The dimensions of quality of life are split in six domains (physical, psychological, level of independence, social relationships, environment, spirituality) and 11 facets (symptoms, social inclusion, forgiveness/blame, concerns about the future, death, pain and discomfort, energy and fatigue, sleep and rest, financial resources, health and social care, social support). These data are tabulated by sex, region, income, route of infection, clinical stage, and CD4 count. Data are also collected on drug use and injecting behaviour[92].

## France

In 2003, the VESPA study ('VIH Enquête sur les Personnes Atteintes') was carried out for the first time to document a range of social and behavioural issues in a national representative sample of PLWHA recruited in outpatient hospital clinics. The questionnaire, administered by an interviewer, covers living conditions, conditions of medical care, parenthood, social network and any discrimination experienced. Sexual behaviour was documented with data on the lifetime number of partners, steady partners and sexual activity in the last 12 months (regarding steady partners: penetrative and oral sex, frequency of condom use, HIV status of the partner and disclosure of the HIV status by the index; regarding casual partners: number of partners, frequency of condom use for oral and penetrative sex, disclosure of the respondent's HIV status). Drug use, injecting drugs and substitution therapy was also documented. A short medical questionnaire was completed from patient charts. Several papers on sexual behaviour have been published. The study is planned to be renewed in 2010 to monitor social situation and sexual behaviour[93-107].

Among the different cohorts of HIV-positive (HIV+) patients, some do not collect any behavioural data: Aquitaine Cohort, French Hospital Data Base, SEROCO-HEMOCO (Cohort of HIV Infected Patients with a Known Date of Infection, Hemoco: Patients Infected by Blood Products). Three more recent cohorts document behaviour at each follow-up: COPANA (Patients Naive of Antiretrovirals at Inclusion), of newly diagnosed cases from 2005–2008; APROCO-COPILOTE (Cohort of Patients followed-up since Initiation of Protease Inhibitors), of patients included at their first Highly Active Antiretroviral Therapy (HAART) in 1997; and PRIMO (Patients Diagnosed During Primary Infection), an open cohort of cases diagnosed at primary infection since 1997. Information on sexual behaviour is documented using different questions, as described below:

- COPANA over past 12 months: numbers of partners, steady partner, unsafe penetrative sex with a known HIV+ partner;
- COPILOTE over past 12 months: condom use for penetrative and oral sex with steady and occasional partners, number of sexual intercourses, HIV status of partners with whom no condom was used and drug injection in the last four weeks.
- PRIMO cohort: detailed information is documented on the gender and type of partner, partner's HIV status and country of birth, and use of condom. The data on longitudinal sexual behaviour in the first three years of follow-up have been published[108].

The Cohort of Patients Infected by Sharing of Drug Use Equipment (MANIF) cohort recruited HIV+ patients infected through IDU. Patients (n=500) recruited in various French regions were followed-up over five years (1995–2000) for HIV progression, treatment outcome, hepatitis infection and treatment, and sexual and injecting behaviours. Predictors of injection behaviour (cessation of injection, sharing of injecting equipment) and unsafe sex were studied as well as the interplay between being on treatment, treatment outcome and unsafe behaviour[109,110].

All these studies are carried out by research teams under the coordination and with funding of the National Agency for Research on AIDS and Hepatitis (Agence Nationale de Recherches sur le Sida et les Hépatites Virales, ANRS).

## Germany

A surveillance system was implemented in Germany in 2004, based on the Patient Cohort of Competence Network for HIV/AIDS (CompNet) ([www.kompetenznetz-hiv.de](http://www.kompetenznetz-hiv.de)). This cohort includes patients, old and new cases, both children and adults, followed-up in treatment sites. Information is collected twice a year on demographic and social data and medical information and outcomes. Some behavioural data are collected at inclusion (type of partners, sexual orientation) but behaviours are not monitored in follow-up. However, additional studies could be carried out. There is no publication on behavioural data collected at diagnosis.

## Lithuania

Although the questionnaire indicated the existence of behavioural surveillance among PLWHA, there is currently no information documented about knowledge, attitudes and behaviour among the HIV+ population but only in the general population. A cross-sectional study focussing on psychological dimensions was carried out in 2004 among prisoners with HIV<sup>37</sup>. To date there is no organised behavioural surveillance among PLWHA.

<sup>37</sup> Stoniene L. Types of Lithuanian prisoners living with HIV. XVI International AIDS Conference 2006. Abstract CDC1288 (Toronto, Canada).

Stonieni L et al. Quality of life of the HIV-infected prisoners. The 3rd IAS Conference on HIV Pathogenesis and Treatment 2005. Abstract TuPe11.9C06 (Rio de Janeiro, Brazil).

### Norway

The Fafo Institute for Labour and Social Research carried out in 2001 and 2008 a cross-sectional study on living conditions and quality of life among PLWHA in Norway<sup>38</sup>. This study used a large variety of channels (the Norwegian organisation of PLWHA, medical sites, networks) to reach the largest possible sample and actually reached an estimated 20% of the total HIV+ population in Norway. The questionnaire covers a range of social and psycho-social information but no information on individual risk behaviour.

### Spain

Since 1995, a one-day prevalence survey is performed annually in Spain by the secretariat of the national framework plan on AIDS. Some behavioural data are collected since 2000. Patients attending medical care in public hospitals are surveyed for sexual orientation, condom use at last intercourse, injecting drug use, being on methadone, medical data including CD4 count and viral load, and social characteristics<sup>39</sup>. A total of 13 to 17 provinces (*autonomias*), 80 hospitals and 700 individual patients participate annually. Time trends are published annually.

### Switzerland

The main provider of regular information on PLWHA behaviour is the Swiss cohort. About 40% of the Swiss cases are included in the cohort (6 500–7 000 patients), with new diagnosed cases being included continuously. Over 15 000 cases have been included since 1988; 25% are lost to follow-up. Patients under care are recruited at both HIV outpatient hospital clinics and in private practices. Since 2000, behavioural information is collected every six months: stable partner, penetrative sex with this partner, frequency of condom use with this partner and his/her HIV status; regarding casual partners: the same information is documented apart from HIV status. Disclosure of the index case's status to his/her stable partner is not documented. The trend in sexual behaviour and condom use has been published for the period 2000 to 2002[111]. Other dimensions, such as attitudes, discrimination and social information, are not documented.

Two other repeated cross-sectional surveys that could be used to monitor trends in behaviour are the survey on MSM and the survey carried out in low-threshold services for injecting drug users (*Structures à Bas Seuil — SBS*). Significant numbers of HIV+ MSM are surveyed, recruited from the press (HIV+: 9–12%/1 000) and the internet (HIV+: 6–7%/1 900). This study uses a self-administered questionnaire. Sexual behaviour is fully documented, with some information on medical aspects, including viral load. The partner's HIV status is asked. The last report on behaviour among MSM presents HIV behaviour among the subgroup of positive MSM but not the trends in such behaviour[112]. Regarding drug users, only those continuing injection are included in the SBS survey. Clients of low-threshold settings have been surveyed from 1993 to 2006 using a kind of random sampling (clients attending the service during five successive days in May–June each year). The questionnaire is documented both by interview and by self-completion. Eight hundred clients are surveyed, with 10–11% HIV+. The questionnaire covers social information, use of drugs; injecting drug use in the last six months, including the number of injections in the last week; and detailed information on equipment sharing in the last six months. Information on sexual behaviour covers: sex with a steady partner, sex with casual partners, sex work and frequency of condom use with these respective partnerships, measured over the last six month period. Data are not used to monitor trends in behaviour among HIV+ IDU[113].

### United Kingdom

In the United Kingdom, behavioural surveillance is based on a set of studies focusing on distinctive aspects (e.g. annual studies, repeated cross-sectional surveys): recently acquired HIV infection is monitored from the Serologic Testing Algorithm for Recent HIV Seroconversions (STARHS), sexual orientation from the epidemiological surveillance data; information on biological markers and treatment as part of national surveillance (HIV notifications, Survey Prevalent HIV Infections Diagnosed). Social characteristics were included in the 'What do you need' surveys in 2002 and 2007. Indicators on sexual behaviour and condom use are monitored among HIV+ in the MSM surveys and the survey among black African migrants (MAYISHA). In both studies, HIV status is assessed using saliva samples.

### Latvia

Latvia did not indicate to have behavioural surveillance among PLWHA but quoted three small-scale studies in recent years focussing on well-being and/or sexual health.

<sup>38</sup> [www.fafo.no/pub/rapp/402/index.htm](http://www.fafo.no/pub/rapp/402/index.htm)

<sup>39</sup> [www.iscii.es/hdocs/centros/epidemiologia/epi\\_sida.jsp](http://www.iscii.es/hdocs/centros/epidemiologia/epi_sida.jsp)

In 2006–2007, the Eurosupport study on sexual risk included 13 countries<sup>40</sup>. However, sample sizes do not correspond to the national HIV+ population size. This study was sponsored by the European Union.

### **Other studies**

In 2005, the Danish national organisation of PLWHA carried out a survey on living conditions and quality of life using a large range of channels, including treatment sites, to reach the maximum number of HIV+ patients. It is unclear if this study will be repeated[114]. In Iceland, Denmark, Norway and Sweden, the NordPol survey 'HIV quality of life survey' was carried out in 2006–2007, using a variety of community channels to reach people living with HIV<sup>41</sup>.

### **5.7.3 Topics currently covered**

Few countries report a kind of behavioural surveillance among PLWHA. Epidemiological surveillance includes information on gender, ethnicity, age at diagnosis, clinical stage and biological data at diagnosis (including trends in the proportion of cases with advanced infection). Data on transmission categories can be seen as a first dimension of behaviour. However, most countries did not report these data as part of behavioural surveillance (Table 6.1 in chapter 6).

Regarding PLWHA, only Spain can be considered as having a surveillance system, since the one-day prevalence survey collects data on sexual and injecting behaviour and publishes trends for the whole population. As a large proportion of the Swiss HIV+ population are followed-up in the Swiss cohort since 1988, with continuous inclusion of new cases, data on sexual behaviour collected since 2000 produce a kind of monitoring, as least with regard to sexual risk. However, only data for 2000–2002 have been published. Treatment and clinical information are documented for research purposes and not used in surveillance. In France, the first national cross-sectional survey was carried out in 2003 and the next survey is planned for 2010, thus VESPA cannot yet be considered as a surveillance system.

Norway and Estonia have performed repeated (twice) cross-sectional surveys focussing on quality of life and social needs. However, only data from the first survey have so far been published.

The quality of life surveys include mostly questions on disclosure of HIV status, discrimination experience and sexual and preventive behaviour. These studies are mostly published as national 'grey' literature.

Large cohorts have been set up in several countries, mainly in order to monitor progression of HIV infection, first without treatment, then under HAART, and then to document a range of biological, therapeutic and clinical issues. Three large networks coordinate this effort in Europe: Concerted Action on SeroConversion to AIDS and Death in Europe (CASCADE), Collaboration of Observational HIV Epidemiological Research Europe (COHERE) and EuroSIDA<sup>42</sup>. EuroSIDA includes centres from new EU Member States. Eighteen countries participate in at least one network<sup>43</sup>. However, social dimensions, psychosocial aspects and behaviour are not considered in any of these networks. Few cohorts collect information on behaviour on a regular basis.

Only a few countries with ongoing cohort studies mention them as part of a surveillance system among PLWHA. All collect detailed data on treatment and clinical and biological outcomes. Belgium and Germany indicate large cohorts, but neither collects behavioural data at entry nor during follow-up. In France, three cohorts collect detailed information on sexual behaviour and drug injection at follow-up, and two document a range of social variables. However, the samples under follow-up in these cohorts do not represent the whole population living with HIV.

Repeated cross-sectional surveys among MSM and IDU are not used as surveillance systems for PLWHA, although the sample sizes would permit large enough subsamples of HIV+ MSM or IDU. Detailed information is collected on sexual behaviour and drug use, and could provide enough information to monitor trends.

---

<sup>40</sup> Nöstlinger C, Platteau T, Nideröst S, Colebinders R and the Eurosupport V Study Group. Eurosupport V. Understanding sexual risk and protection behaviour among people living with HIV. ITM seminar.

<sup>41</sup> HIV-Quality of Life Survey, NordPol, 2007.

<sup>42</sup> The EuroSIDA study is a prospective observational cohort study of more than 16 505 patients followed in 103 hospitals in 32 European countries plus Israel and Argentina. The main objective of the study is to assess the impact of antiretroviral drugs on the outcome of the general population of HIV-infected patients living in Europe and Argentina.

<sup>43</sup> Belgium, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, The Netherlands, Norway, Poland, Romania, Spain, Switzerland and the United Kingdom.

### 5.7.4 Current behavioural surveillance indicators

Only two countries (Spain and Switzerland) report using data to document behavioural indicators. These indicators on sexual behaviour differ between the studies: protected sex at last intercourse in Spain, and frequency of condom use for penetrative sex with stable and casual partners in the last six months in the Swiss cohort (Table 9.7, Appendix 2).

#### *Switzerland*

Six-monthly data from the Swiss cohort are used to document four indicators. Regarding drug use, two indicators are provided: 'injecting drug use', 'non-injecting use of illegal drugs'. However, it appears that this information on behaviour is mainly used as a predictor of treatment outcomes. Two indicators of condom use ('always condom use': 1) with the steady partner, 2) with casual partners) are computed among individuals who have had penetrative sex with each type of partner in the last six months[111]. The data for the 2001 to 2003 period have been published and concluded that sexual behaviour (e.g. condom use) has remained stable.

#### *Spain*

Spain annually monitors three indicators among HIV+ individuals in hospitals as in- or outpatients: condom use at last intercourse among persons who have had penetrative sex in the last 12 months; injecting drug use and being on methadone for patients labelled as HIV infected through IDU. These data have been published annually between 2002 and 2007.

In both countries the HIV status of the steady partner is not documented.

### 5.7.5 Constructing a surveillance system among PLWHA

As there is no behavioural surveillance among PLWHA, there is no consensus on indicators to monitor the situation. In constructing behavioural surveillance among PLWHA, the following may be considered:

- The epidemiological situation regarding HIV/AIDS: HIV epidemics in Europe are concentrated in risk groups (MSM, IDU and Sub-Saharan and Caribbean migrant communities), with different levels of incidence and prevalence across countries within these respective populations. HIV infection in the general heterosexual population is low.
- In each country the HIV+ population varies according to the history of epidemics, the history of HIV policy and the size and behaviour of populations at-risk.
- The proportion of the HIV-infected population under effective antiretroviral treatment (and reduction of further HIV transmission) is an important key for the control of the epidemic.
- The proportion of HIV-infected people that is not aware of their infection is unknown and varies across countries and among subpopulations. Changes in testing policies affect this proportion and the time between infection and diagnosis.
- The respective contributions of undiagnosed cases, cases with primary infection, untreated cases, cases with treatment failure and cases with controlled viral replication in new HIV seroconversions are not known.

Epidemiological surveillance provides information on demographic characteristics, including migrant status; transmission categories; testing for recent infection; clinical and immunological stage at diagnosis; and for AIDS cases, duration of treatment before diagnosis. These data are of crucial importance since they may be triangulated with data from behavioural surveillance. Limited information is available regarding sexual and injecting behaviour among PLWHA as compared with information on knowledge, beliefs, attitudes and behaviours that is collected in the general population and some subpopulations. MSM and IDU are monitored through repeated cross-sectional surveys. Detailed behavioural information is available from these studies and could be used to monitor trends among the HIV+ subpopulations of MSM and IDU. There is no reason to define specific behavioural indicators for the HIV+ subpopulation. Some information specific to HIV+ respondents might be added in MSM and IDU surveys regarding HIV treatment, treatment outcome, stigma and discrimination related to HIV infection. Migrants originating from Sub-Saharan Africa and the Caribbean are the third population with high prevalence rates. However, in surveys among migrant populations, the proportion of HIV cases may be too small to allow for detailed analysis.

#### *Possible study designs for PLWHA*

PLWHA are surveyed in clinical settings in three different types of study:

1. The one-day prevalence study design involves an exhaustive sampling of HIV-care services and includes all patients attending such services that day, who answer a short survey on various topics. This type is only implemented in Spain. It provides regular data on large national samples. However, the information cannot be very detailed due to the use of a brief questionnaire (administered by doctors or nurses). The possibility of adding some behavioural questions to the questionnaire should be discussed.

2. There are many cohort studies in Europe, mainly focussing on physiopathology, treatment outcomes, and virological, immunological and clinical dimensions of HIV infection. Only a few cohorts collect information on behaviour, and some on discrimination. The information is heterogeneous across cohorts and not detailed. Moreover, in most cases, participants in cohort studies do not represent the whole population with HIV/AIDS, except in some countries such as Switzerland, Belgium and Germany. The last two cohorts do not collect behavioural information. Introduction of behavioural modules into the cohorts could be suggested to the coordinators of European cohorts (EuroSIDA, COHERE, CASCADE) for future implementation.
3. Four countries report cross-sectional surveys with different target groups and sampling methods. The French VESPA study is the only example of a large national sample of PLWHA under medical follow-up in treatment settings. This study has been performed only once and is planned to be renewed in 2010. Detailed information is collected on the range of social and behavioural issues. In the United Kingdom, a study among a large sample of PLWHA is carried out in the London area, documenting a large range of behavioural and social issues. Repetition is currently being considered. Studies performed in Norway, Estonia and in the EuroSupport study focus on quality of life, which was not considered in the scope of the behavioural mapping. Since national representative surveys are difficult and costly, local studies could provide relevant information on behaviour. As the composition of HIV + population varies across countries and behaviours vary across subpopulations, the information should be provided by subpopulations (MSM, IDU, heterosexual men and women, migrant heterosexual men and women).

### 5.7.6 Discussion

To date, PLWHA have not been considered as a population to be monitored regarding issues such as knowledge regarding HIV infection and treatment, sexual behaviour, social consequences of HIV disease, stigma and exposure to discrimination. Focus has first been put on the natural history of HIV infection, then delayed diagnosis, treatment outcomes and improvement of quality of life and mortality. However, cohorts, cross-sectional studies, and studies on convenient samples have brought to light a large range of data on these topics, mainly published in academic journals.

This situation needs to be evaluated in the changing context of HIV as regards both epidemiology and treatment. PLWHA are viewed rather as individuals than as a population. The high HIV prevalence among MSM lead to a significant proportion of HIV+ men in surveillance studies. Theoretically, such samples allow for the monitoring of knowledge and behaviour. However, in most countries, these data are not used for this purpose. Barriers to such use of behavioural data have to be questioned involving organisations of PLWHA.

The implicit assumption has long been that a significant proportion of HIV infected individuals do not know their HIV status and that everyone should use a condom in any sexual encounter, at least with a new sexual partner. As testing policies are improving to reduce late diagnosis and to improve early diagnosis, the proportion of diagnosed individuals among infected people will increase. Their sexual and preventive behaviour will be the key to understanding the dynamics of HIV infection.

#### *Suggested set of indicators*

The set of proposed indicators include those specific to PLWHA (marked with \*) and others common to subgroups such as MSM, IDU and migrants (marked with \*\*) to allow comparison. The indicators in bold are proposed as core (priority) indicators.

#### *Knowledge*

After the introduction of Post-Exposure Prophylaxis (PEP) to prevent transmission, information on the effect of antiretroviral treatment on HIV transmission from infected individuals (Swiss statement, Pre-Exposure Prophylaxis (PrEP)) might have blurred knowledge of HAART among PLWHA. Knowledge on the effect of antiretroviral drugs on transmission from an HIV+ person to an HIV- person, and on the use of antiretrovirals in PEP or PrEP should be monitored. More research is needed to develop and harmonise the indicators on knowledge.

#### *Stigma and discrimination*

Stigma and discrimination are commonly experienced by PLWHA; they might prevent people from seeking testing and care or from disclosing their HIV positive status and/or using condoms. However, there is no consensus on indicators regarding stigma and discrimination. Three different dimensions have been identified: internalised stigma, disclosure within different segments of the social network (sexual partners, spouse, parents, friends, workmates etc); experience of discrimination in healthcare settings, at work, or in administrative procedures. Developing a common set of variables to account for experience of discrimination and disclosure is seen as a priority.

## Sexual orientation\*\*

### Sexual behaviour in the last 12 months

Indicators on sexual behaviour including condom use are priority indicators

- **Sexual activity\*\***: PLWHA are shown to be less sexually active than same age general population
- Whether has steady partner, gender and HIV status of steady partner\*\*
- **Number and gender of casual partners\*\***
- **Unprotected penetrative sex with a negative or unknown status partner (steady/casual, M/F)\***
- **Unprotected penetrative sex with a positive status partner (steady/casual, M/F)\***
- **Condom use at last intercourse\*\***

### New diagnoses of STI\*

#### Drug use, injection practices, substitution treatments

In some countries, IDU is the main transmission category while in other countries IDU-related infections have decreased dramatically. However, the incidence of HIV infection remains higher among drug users than among the general population. In the HIV+ population, a large proportion of those who became infected through the sharing of equipment no longer use drugs or are in substitution treatment.

- **Injecting drug use\*\***
- **Being on substitution treatment\*\***
- Sharing needles/equipment\*\*
- Use of recreational drugs during sex might be considered as a secondary indicator

Information on drug behaviour and access to substitution treatment are key issues in reducing transmission among IDU, especially in countries with high levels of prevalence and incidence in IDU.

#### Medical information

In future, treatment and viral load might be considered as determinants of HIV transmission and might be used as such in prevention messages targeting PLWHA. This information is available from medical records, however, the information should be obtained from the individual in studies outside medical settings, especially in surveys among MSM, IDU and migrants. Among PLWHA, these indicators are priority indicators.

- **Being on HAART\***
- **Last viral load\***
- Last CD4 count\*

#### Other

Among PLWHA, decreased condom use in HIV+ individuals is documented in those who wish or plan to have a child.

- Desire for a child among women of reproductive age\*

Further information on this population is to be found in Table 8.7, Appendix 1.

## 5.8 Sexually transmitted infection clinic attenders

- People attending STI clinics have a high-risk of having been exposed to HIV infection.
- Behavioural and laboratory data are collected and linked in STI clinics as part of the routine consultation process.
- Behavioural surveillance systems in STI clinics have been implemented in only a few European countries.
- Comparison of behavioural data from STI clinic attenders across countries is difficult because of differences in the populations surveyed.

### 5.8.1 Overview

People attending STI clinics<sup>44</sup> are, by definition, a self-identified group of people with a high-risk of having been

<sup>44</sup> STI clinics are also known as sexually transmitted disease clinics, venereal disease clinics, dermato-venereology clinics, sexual health clinics, departments of genitourinary medicine, dispensaries, and special clinics. In this report the term sexually transmitted infections clinics (STI clinics) is used.



exposed to HIV and STI. Data from unlinked anonymous surveys of HIV prevalence in the United Kingdom showed that about 2.5% of heterosexual women and men and 41% of MSM attending STI clinics in London in 2007 were infected with HIV[115]. A quarter of heterosexual infections and 10% of those in MSM had not previously been diagnosed.

Collecting information about sexual behaviour to assess exposure to risk and interpret symptoms is an integral part of the consultation process. There is obviously great variation between countries and clinics in the questions asked, consistency of recording, and methods for recording this information. The data are, however, linked to STI diagnoses that will frequently be confirmed by laboratory tests. Such data could, if compiled in a standardised way (sentinel/periodically/consistently), provide a source of behavioural surveillance.

## 5.8.2 Systems and methods reported

### *Coverage*

Of the 27 countries that returned a questionnaire, respondents in nine countries indicated that, in their view, there was a system of behavioural surveillance among STI clinic attenders in their country: Belgium, Finland, France, Germany, Italy, Lithuania, the Netherlands, Spain and the United Kingdom (Table 8.8, Appendix 1). Greece did not indicate that there was a behavioural surveillance in place but a survey had been conducted in 2007 to prepare the UNGASS report and a similar survey is planned for 2009. Iceland reported that there was no system of behavioural surveillance in STI clinic attenders but provided a list of behavioural data collected. In Switzerland, behavioural surveillance data were collected from STI clinic attenders from 1989 until 2007; this was discontinued because of the small numbers of cases and lack of correlation with reported national trends in STI[116]. The data discussed in this chapter relate to the nine countries reporting any ongoing behavioural surveillance system.

Italy, starting in 1990, was the first country to conduct behavioural surveillance in STI clinic attenders, followed by Finland in 1995. Data collection in the United Kingdom began in 1999, in Belgium in 2000, in France in 2001, in Germany in 2002, in Lithuania in 2003, and in the Netherlands in 2004. In Spain, HIV prevalence has been monitored in STI clinics since 1991. Since 2003, additional behavioural data have been collected from people with newly diagnosed HIV infection, and from 2005 from patients diagnosed with gonorrhoea and syphilis.

In all nine countries reporting ongoing behavioural surveillance data collection in this population, data collection is planned to continue.

The coverage of data collection differs according to the population surveyed (see below) and between countries. Data of any kind are collected from all STI clinics in the United Kingdom ( $n > 220$ ). Data are collected from sentinel STI clinics in: France (number of clinics not reported), Italy (number of clinics not reported), the Netherlands ( $n=2$ ) and Spain ( $n=14$ ). Data are collected from a variety of sentinel physicians in different specialities in Belgium (because there are no dedicated STI clinics), from both STI clinics and general or student health clinics in Finland, and in Germany from 58 STI clinics, 14 other outpatient departments and 160 private practitioners. In Lithuania, the data are collected from one national AIDS centre.

### *Data collection methods*

All nine countries that reported an ongoing system of behavioural surveillance in STI clinic attenders have collected data in a continuous manner and data are reported annually, or for a set time period. Data were reported to be collected by paper questionnaires in four countries (Belgium, Finland, France, Germany) and by face-to-face interview in four (Italy, Lithuania, the Netherlands and Spain).

Three countries reported additional surveys: in Spain, unlinked anonymous surveillance for HIV infection was conducted in seven STI clinics from 1998 to 2002; in Germany, a study among 169 MSM was conducted in 2002–2003[117]; in the United Kingdom, a survey linking behavioural and clinical data from all patients was conducted in two STI clinics over 18 months[118].

### *Populations surveyed*

Behavioural data can be collected from different groups of patients attending STI clinics.

#### **All patients attending STI clinics**

In Finland, behavioural data have been collected from all patients attending any clinic in a sentinel network of seven STI clinics and five general and student health clinics since 1995 (estimated 200 000 patients over an unreported time period).

#### **Patients with a diagnosed STI**

In several countries, behavioural data are collected from patients with selected STI. This includes patients attending sites participating in sentinel networks of clinics in: Belgium since 2000 and France since 2001 (number of patients and infections not specified in either country), and Germany since 2002 (patients with HIV, gonorrhoea, Chlamydia, syphilis or trichomoniasis, estimated 22 500). In Lithuania, data have been collected from patients from one national AIDS centre since 2003 (estimated 1 000, infections not specified). In Spain, behavioural data

have been collected from patients diagnosed with gonorrhoea or syphilis since 2005 (estimated 1 000 per year) in 14 sentinel STI clinics. In the United Kingdom, data have been collected from all patients diagnosed with syphilis since 1999 (estimated 3 000 patients per year) or lymphogranuloma venerereum since 2003 (estimated 150 patients per year) at any STI clinic, and from all patients with gonococcal isolates taken in a three-month period each year from 26 STI clinics since 2000.

### **Patients being tested for STI**

In the Netherlands, anonymous testing for HIV infection in STI clinic attenders, with collection of behavioural data, has been carried out in Amsterdam since 1991 and since 1994 in Rotterdam (estimated 3 000 per year). In Spain, data about sexual orientation and sex work have been collected from patients being tested for HIV since 1991; additional behavioural indicators have been collected since 2003 (estimated 20 000 per year). In the United Kingdom, unlinked anonymous surveillance of HIV prevalence collects limited behavioural data from all patients having blood taken for syphilis serology in participating STI clinics (numbers not reported).

In Italy, it was not clear if the estimated 5 000 people surveyed each year since 1990 included all STI clinic attenders or only those with diagnosed STI.

### **Topics covered in behavioural surveillance data**

Table 5.6 and Table 6.1 in chapter 6 summarise the main topic areas covered by behavioural surveillance systems in STI clinic attenders. All nine countries collect data about HIV and STI, together with at least some indicators of sexual activity and lifestyle, and drug and substance use.

### **Knowledge, attitudes and awareness of HIV and prevention activities**

These topics are not usually asked to STI clinic attenders. No country collects data about attitudes towards PLWHA.

### **Sexual relationships and partnerships**

Six countries collect data about types of partners or relationships, such as regular and casual partners (Belgium, Finland, France, Germany, Lithuania and Spain). Data about concurrent sexual relationships are collected in only two countries (Germany and Spain).

### **Sexual activity and lifestyle**

All nine countries collect data about sexual activity, such as numbers of sexual partners. Sexual orientation was asked in all nine countries. Questions about sex work (as client, sex worker, or both) are asked in most countries; in Finland questions relate only to clients of sex workers. Questions about types of sexual practice are asked in three countries (France, Spain and the United Kingdom). Only two countries (France and the United Kingdom) ask questions about where sexual partners have met.

### **Exposure to risk**

Condom use is asked in all countries except for Belgium and Spain. The type of question differs between countries: four ask about condom use at last intercourse (Finland, France, Lithuania and the Netherlands); three ask about condom use with different types of partners (France, Germany and Italy). In France and in the United Kingdom, questions about condom use in different types of sexual practices are asked. Disclosure of HIV status is only included in France.

### **HIV and other STI**

HIV and STI testing is done regularly in all nine countries. These include measured results of HIV tests and tests for syphilis, gonorrhoea and Chlamydia. Tests for hepatitis are less consistently recorded: hepatitis B (Belgium, France, Netherlands and Spain) and hepatitis C (Belgium, France and Spain). Hepatitis B vaccine uptake has been recorded regularly in Belgium and Spain.

### **Drug and substance use**

Questions about drug or substance use, most frequently injecting drug use, are asked in all countries except France and Lithuania. Types of drug used are asked only in Germany and Lithuania.

### **Access to care**

Few countries (France and United Kingdom) ask STI clinic attenders about access to HIV care and antiretroviral therapy. In Germany and in the Netherlands, the reason for attendance at an STI clinic (with symptoms, as a sexual partner, etc.) is recorded.

**Table 5.6 Topics most frequently mentioned by countries with behavioural surveillance among STI clinic attenders**

Topic area Topics	Number of countries reporting use (total 9)
<b>Sexual relationships and sexual partners</b>	
Types of partners/relationships, such as regular partner, casual partners	6
Concurrency	4
<b>Sexual activity and lifestyle</b>	
Sexual activity, such as number of partners, frequency of sexual contacts	9
Sexual orientation	8
Recourse to prostitution (as client)	8
Recourse to prostitution (as sex worker)	7
<b>Exposure to risk of infection</b>	
Condom use at last intercourse	4
<b>HIV and other STI</b>	
HIV testing	9
STI testing	9
<b>Drugs and substance use</b>	
Injecting drug use	6

### *Indicators used*

There appear to be few countries in which indicators are specified and monitored over time, despite the wide range of data collected from people attending STI clinics in the countries with behavioural surveillance in this setting. Monitoring of any specific indicators was mentioned by respondents in five countries (France, Germany, Netherlands, Spain and the United Kingdom). Most of these indicators were not, strictly speaking, behavioural indicators.

Sexual orientation was monitored in all five countries, with trends of STI cases among MSM being the indicator most frequently mentioned. This was the only indicator monitored in the United Kingdom. In Spain, the only indicators mentioned were HIV prevalence rates in different patient groups, including first-time clinic attenders; people diagnosed with syphilis or gonorrhoea; and male and female sex workers.

France, Germany and the Netherlands indicated that behaviours were monitored regularly. In France and Germany, trends in STI according to behaviours such as numbers of sexual partners, condom use and sexual practices are collected. Condom use was monitored as a behavioural indicator in France, Germany and the Netherlands. Sexual contact abroad was monitored in Germany and the Netherlands. In addition, having a concurrent partner was monitored in Germany, and the number of sexual partners was monitored in France.

### *Relevant UNGASS indicators*

UNAIDS considers the following populations to be 'most at-risk': female sex workers; clients of female sex workers; injecting drug users; and MSM. These groups are all dealt with separately in this report. All these groups also account for a significant proportion of attenders at STI clinics.

The following UNGASS indicators could be incorporated into the information collected from STI clinic attenders:

- Percentage of STI clinic attenders who had an HIV test in the last 12 months and who knew their result (national programme indicator).
- Number of female sex workers/men who have sex with men/injecting drug users screened for STI (process indicator).
- Percentage of STI clinic attenders who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (knowledge indicator).
- Percentage of women and men aged 15–49 years (attending STI clinics) who have had sex with more than one partner in the last 12 months (behaviour indicator).
- Percentage of women and men aged 15–49 years (attending STI clinics) who had sex with more than one partner in the last 12 months reporting use of a condom at last sexual intercourse (behaviour indicator).
- Percentage of men (attending STI clinics) reporting use of a condom last time they had anal sex with a male partner (behaviour indicator).
- Percentage of female and male sex workers (attending STI clinics) reporting the use of a condom with their most recent client (behaviour indicator).
- Percentage of STI clinic attenders who are HIV infected (impact indicator).

### 5.8.3 Discussion

Behavioural surveillance systems are in place in STI clinics in a few Member States. In those countries with such a system, data are usually collected from sentinel clinics or physician networks and only from patients with a diagnosed STI. Data collection from all STI clinic attenders was reported only in Finland and in the Netherlands. In all countries, the established behavioural surveillance systems are planned to continue. In Greece, a behavioural survey in STI clinic attenders in 2007 is planned to be repeated in 2009.

The main strength of behavioural surveillance conducted in STI clinics is that data are, in theory, readily available. In addition, data collection is usually continuous but repeated cross-sectional surveys could also be undertaken. Using either method, trends in behaviours can be monitored if sampling has been truly systematic[119]. The UNAIDS-defined populations 'most at-risk', female sex workers, clients of female sex workers, injecting drug users, and MSM are already sentinel populations among whom behavioural surveillance is suggested and have been dealt with in-depth elsewhere in this report. Another key advantage is that the behavioural data can be linked directly to confirmed diagnoses of STI; surveys in other populations often have to rely on self-report of infection status, which can be biased.

In practice, behavioural surveillance among attenders at STI clinics is uncommon. Trends in numbers of infections diagnosed are reported routinely as surveillance reports. In some cases comparisons of these STI surveillance data have been made across Europe[6,7] or between several clinics in the same country[8]. The collection and reporting of sexual behaviour data linked to these studies are reported less often and usually as one-off studies[3,6,7]. In our survey, we might have missed some systems; for example, Romania did not respond to the questionnaire but a second generation HIV surveillance system in STI clinics seems to have been attempted in two regions[10]. In other countries, such as Switzerland, behavioural surveillance was undertaken but has been discontinued[116].

There are several possible reasons why behavioural surveillance and second generation surveillance are not more widespread in this group. First, data collection on a continuous basis from all STI clinic attenders requires a certain level of infrastructure, technology and standardisation of information recorded[11]. These requirements might not be achievable in many countries. Second, the indicators required for behavioural surveillance might not be those required in a sexual history, tailored to a patient's presenting complaint. However, many clinics use standardised patient history forms[12] and it is much easier to extract relevant data from such records. Third, concerns that patient anonymity or confidentiality might not be well protected, particularly when individual level data are required, might also be relevant in some countries.

Interpretation of data collected from STI clinic attenders can be complicated. This might also be a reason why behavioural surveillance in this setting has not been established in some countries. STI clinic attenders are not necessarily a stable population. First, populations are likely to be representative only of those group members that seek services and if data are only collected from people with STI then there is no group with whom to compare behaviours[119]. Four of eight behavioural surveillance systems in STI clinics track data from patients with diagnosed infections only. Second, in some countries, STI clinics are situated only in major cities or have limited opening hours and most STI are diagnosed in other healthcare settings. People attending such clinics are often assumed to be those with the most risky behaviours, but this might not be the case. Third, even when standardised data are collected from all attenders, changes in the characteristics of the population over time in response to social change, number and availability of clinics and clinic staff, types of service offered, etc. make it difficult to interpret changes.

There was considerable diversity between countries in the extent and nature of the main indicators used for behavioural surveillance in STI clinics. There was, however, less information about which of these indicators are used to monitor behavioural trends in a particular country. In four countries, there were no specific key indicators that were used for monitoring trends in behaviour. Among the remaining four countries, condom use was the only indicator mentioned by respondents in all countries, and the question asked was not the same across countries.

In conclusion, behavioural surveillance is uncommon in STI clinic attenders in the EU/EFTA countries. In those countries collecting such data, there is a wide range of methods and information available, but there are few key indicators to monitor behavioural trends.

A core set of indicators of sexual behaviour could be developed, mostly using the above mentioned UNAIDS indicators. These should be consistent with those used for the general population so that comparisons can be made.

Further information on this population is to be found in Table 8.8, Appendix 1.

## 6 Conclusions and suggestions on behavioural surveillance systems and indicators

This chapter is divided into two parts: the first relates to conclusions and suggestions regarding behavioural surveillance systems, the second to conclusions and suggestions regarding the choice of indicators.

### 6.1 On behavioural surveillance systems: from data collection on behaviour to behavioural surveillance systems

There are many countries with data collection on behaviour related to HIV and STI, several with behavioural surveillance systems in specific populations, a few with comprehensive behavioural surveillance systems, but considerably less with long-term experience of this form of surveillance.

Europe is rich in expertise and experience in behavioural studies related to HIV and STI. In many countries, there has been a progressive accumulation of surveys or other types of data collection constituting, de facto, the necessary elements to build a behavioural surveillance system. However, even when the material is available, the concerted organisation of this into a formal, comprehensive and sustainable system has only taken place in a small number of countries. It will be a future challenge to organise data collection with the aim of reinforcing behavioural surveillance.

#### *Adequacy and completeness of behavioural surveillance*

The majority of European countries have concentrated epidemics; some have low level epidemics. The recommendations of UNAIDS/WHO for behavioural surveillance in these situations are the following:

- In countries with low-level epidemics: after a previous identification of populations with risk behaviour, cross-sectional surveys (or other continuous or repeated data collection) should be conducted in these populations and organised within a behavioural surveillance system. The main populations to be considered – but not necessarily included, this depending of the assessment of the local situation – are: Men who have Sex with Men (MSM), Injecting Drug Users (IDU), migrant populations, STI patients, sex workers and their clients.
- In countries with concentrated epidemics: the same procedure should be used and other populations, these being the general population and youth, should be added to check for any possible generalisation of the epidemic and the existence of bridging populations, such as sex workers clients, sexual partners of IDU, etc.

It is not easy to evaluate the adequacy of behavioural surveillance in European countries: in many cases the identification of populations with risk behaviour and the selection of populations to be included in a behavioural surveillance system have not been done or are incomplete. However, although it is not necessary to include each population in the system, several gaps can be identified:

- As regards identification and surveillance of at-risk populations: many countries do not have data on MSM or IDU, very few countries have collected data on sex workers and migrants, and practically none has behavioural surveillance installed in these two populations, which are difficult to reach and/or to identify.
- In populations identified as potentially at-risk of acquiring or transmitting infections and accessible through the health system, such as STI patients and PLWHA, there are few behavioural surveillance systems in place.

#### *Suggestions regarding behavioural surveillance systems*

The development of a general framework for behavioural surveillance in EU/EFTA countries could facilitate common processes to establish and maintain HIV/STI behavioural surveillance in Member States. This framework would need to take into account current existing recommendations from UNAIDS/WHO regarding behavioural and second generation systems. Furthermore, behavioural surveillance could also be implemented as part of renewed or updated surveillance systems[23,27].

In countries that do not have surveillance systems, and no or little data collection on behaviour, an assessment of surveillance needs could be carried out so that populations as part of a surveillance system could be identified and a surveillance system could be designed. Special attention must be paid to the selection of the populations that

actually need to be surveyed and to the maintenance of the system over time, considering issues such as choice of methods, cost, etc.[26].

In countries that already have elements of a surveillance system, but where these are not organised as such, a streamlining process could be suggested to further integrate the surveys or other type of data collections and to harmonise the indicators within the country. This would imply that choices be made on the minimum set of surveys to be conducted and on data to be collected on a regular basis, giving priority to the questions of sustainability and cost effectiveness. The most appropriate data collection methods for each of the populations need to be determined:

- In the general population and in young people, it may be more cost effective to change from HIV/STI specific surveys to sexuality and drug consumption modules in general health surveys.
- In more hard-to-reach or sample populations, such as MSM, sex workers or migrant and ethnic minorities, specific surveys should be maintained.
- For IDU, PLWHA and STI patients, service-based data collections may be suggested as the most appropriate and cost-effective options.

Formalisation of a behavioural surveillance system at country level should be encouraged and addressed in the general framework as regards the EU level. This implies defining the organisation and functioning of the system, the roles and responsibilities of the diverse institutions in the system and the links to be established with the biological surveillance system. Tasks such as advocacy for continuous surveillance and organisation of dissemination of data to increase their use are part of this system. This is important to the maintenance and sustainability of the system over time.

In the two populations for which little data collection on behaviour takes place — migrant and ethnic minorities and sex workers — there is a need for further work.

- Regarding migrants and ethnic minorities, no consensus exists on several questions: which populations should be monitored, in which situation, for what reasons and with which methods? There is a huge diversity in migrant populations; their composition differs from country to country; the reasons for establishing behavioural surveillance may also differ across countries (e.g. particularly high HIV prevalence, extreme vulnerability or mobility, problems of access to prevention, care and treatment services, etc.). These populations may also be subject to stigma. In this complex situation, the establishment of a European expert group on the surveillance in migrants and ethnic minorities is suggested to reflect in depth on these questions and propose guidance for Member States.
- Regarding sex workers, such a process may also take place, with the objective of conducting a common pilot study in several countries, based on the experience of previous studies and projects conducted in some European countries (e.g. the Netherlands and the United Kingdom, the border project) and on the recommendations of UNAIDS/WHO regarding pre-surveillance assessments [26].

Service-based surveillance seems to be, in general, underused in behavioural surveillance. It could be suggested to encourage the clinical services concerned (and the internal cohort networks) to integrate key indicators into their research and routine data collection.

## 6.2 On indicators: from diversity to harmonisation

Table 6.1 shows the various topics and sub-topics regularly or irregularly monitored in behavioural surveillance by European countries. In terms of the topics generally monitored, the level of agreement on the priority topics (in bold) is quite high across the populations. This can guide the choice of indicators common to countries and to populations surveyed. The majority of countries mentioning topics have indicators for the following themes: knowledge about HIV/STI infection or treatment, types of partners and relationships, sexual orientation, sexual activity, condom use (last intercourse and/or with different types of partners), HIV testing and types of drug(s) consumed. This is a good basis on which to build the discussion on harmonisation of indicators.

For each of the populations considered, the countries that provided information on their priority indicators are less numerous than those having mentioned collecting information on the corresponding topics. This is probably due to the fact that only countries operating within a surveillance paradigm have made specific choices on indicators to be collected regularly and are in a situation to define them clearly.

Internationally agreed indicators have to be taken into account. International indicators are in use in European countries, mainly the UNGASS indicators[119], those proposed by the EMCDDA for the IDU population<sup>45</sup> and those proposed in the HBS study<sup>46</sup> for young people. In countries with long experience of behavioural surveillance, the

<sup>45</sup> [www.emcdda.europa.eu/attachements.cfm/att\\_67055\\_EN EMCDDA-DRID-overview.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_67055_EN EMCDDA-DRID-overview.pdf).

<sup>46</sup> [www.hbsc.org](http://www.hbsc.org).

'weight of history' may have resulted in the maintenance of the use of different indicators, subsequently retained for comparison of trends over time. In certain populations, especially in the general population, MSM and IDU, where European experience is particularly rich, the main indicators in use may be more detailed than those proposed at international level. Nevertheless, through careful composition of questionnaire items by using techniques such as split ballot samples it should be possible to maintain the original specificity while ensuring that the agreed indicators can easily be 'translated' into the UNGASS ones. Building on indicators that already have been agreed upon should guide the development of any behavioural system.

### *Harmonisation of indicators*

As great diversity still exists regarding indicators, the process of harmonisation of indicators, specific to each population, needs to be continued at European level.

- Regarding populations where there is already considerable experience of behavioural surveillance (general population, youth) or populations where behavioural surveillance has yet to be further developed (such as sex workers), a harmonisation process similar to the one conducted for MSM and IDU could be initiated over time, with the organisation of consensus-building workshops for experts at European level.
- In populations where behavioural surveillance is, or could be, conducted using service- or cohort-based sampling (mainly STI clinic patients and PLWHA), preliminary discussions need to be conducted with all stakeholders (including services, persons and organisations concerned) regarding the establishment of behavioural surveillance in such settings and the conditions under which this could take place. Technical discussions may subsequently be conducted on a set of harmonised main indicators.
- Very little behavioural surveillance has been conducted in migrants and ethnic minorities. For these groups, harmonisation of indicators can therefore not yet be established. Further research is needed with respect as to indicators related to mobility, migration status and main definitions. A debate on wider issues regarding behavioural surveillance in these populations is needed. As proposed above, establishing a European expert group to take this work forward is suggested as a first step.

Harmonising indicators, so as to have transverse indicators (used in all populations) and indicators common to various countries, would improve comparability over time between populations and in and across countries. However, special attention needs to be given to the precise definition of the populations surveyed or subject to data collection that may vary across countries or according to data collection methods (for example, which criteria are used to define MSM).

The following guidelines need to be applied in further discussion on indicators at a European level:

- Where possible, indicators should be harmonised with those used by other international monitoring systems.
- Priority should be given to indicators that are common to all populations; these may be completed by more indicators specific to each population, if necessary.
- The agreed indicators should also be used when one-off surveys on sexuality or HIV/STI Knowledge, Attitude, Beliefs and Practices (KABP) are conducted.

Table 6.2 shows the main indicators common to most of the groups that are proposed. This proposal is a result of:

- analysis of the topics most frequently mentioned by countries;
- proposals made by the experts in each of the specific populations; and
- discussions during the Behavioural Surveillance Expert Meeting, 2009.

The precise definition of the indicators is sometimes not given, because there is still a lot of diversity as regards the age groups concerned, the period of reference or precise wording of the indicator. When there is already some kind of consensus, a more precise indication is given.

Two groups of indicators are included in the table:

- Core indicators (in grey) that are common to all populations and that may be used, wherever possible, by all countries in all populations surveyed (the choice of populations to be surveyed in a defined country depending on its specific situation).
- Secondary or population specific indicators: some are proposed for use in several populations; others are very specific and may be used in only one or just a few populations. These indicators are also proposed for use in all countries. However, for some topics, more research is needed before a satisfactory indicator (as regards content, wording or validation status) can be made available.

Six core indicators are proposed that are common to all populations. For most of them, in order to measure current behaviour, the proposed time period of reference is the last 12 months<sup>47</sup>.

<sup>47</sup> This can also be obtained (for example, for HIV testing) by asking a question about lifetime behaviour and the date of the last event.

1. **Number of sexual partners in the last 12 months**  
This indicator allows for construction of UNGASS Indicator 16: percentage of adults aged 15–49 who had sex with more than one sexual partner in the past 12 months.
2. **Use of a condom at last intercourse with the identification — in a consecutive question — of the type of partner with whom this last intercourse took place: stable partner, casual partner or paid partner<sup>48</sup>**  
The first part of the indicator allows for construction of UNGASS Indicator 17 (respectively, 18 for sex workers, 19 for MSM<sup>49</sup>, and 20 for IDU): percentage of adults aged 15–49 who had sex had with more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse. Most European countries that ask a question on condom use, also try to differentiate according to type of partner. The way of presenting this indicator would allow for compliance with UNGASS requirements without losing valuable information.
3. **HIV test**  
It is proposed that this indicator be constructed with three questions: the first on lifetime experience of the test (having ever been tested), followed by a question on the date (year) of last test and a question on the result of the test (or the biological result if a biological sample is associated). The last question may only be included in circumstances where the answer can remain anonymous. This allows for construction of UNGASS Indicator 7 (respectively, 8 in most-at-risk populations): percentage of women and men aged 15–49 who received an HIV test in the last 12 months and who know their results.
4. **Sex work: having paid for sex in the last 12 months and use of condom at last paid sex (in the last 12 months)**  
As little information is collected about sex workers in Europe, it is proposed to have at least one indicator on the sexual behaviour of clients of sex workers, that is, persons reporting having paid for sex and that this information be collected, in each population.
5. **Contextual indicators**  
As listed below, three main indicators are proposed that can provide relevant information with regard to vulnerability. Two are widely used socio-demographic variables.
  - Level of education: this allows for exploration of social inequalities regarding HIV/STI. It is proposed that the International Standard Classification of Education (ISCED) be used.
  - Nationality/ethnic origin: these indicators have relevance for social integration and mobility and are frequently used. In the Behavioural Surveillance Expert Meeting, they were seen as important, but the view was expressed that no commonly agreed satisfactory indicator is currently available and more research is needed.
  - Sexual orientation: it is proposed that a modified Kinsey indicator, with five items, be used, as is currently the case in several countries in Europe<sup>50</sup>).
6. **Composite indicator of HIV knowledge**  
(UNGASS Indicator 13): the experts convened for the Behavioural Surveillance Expert Meeting acknowledged the usefulness of having an indicator of knowledge, but also felt that the content and wording of the questions included in this composite indicator would need to vary according to the context. State of knowledge varies over different countries, populations and over time, and the precise questions asked would need to reflect this in order to be able to monitor change. On this point, more research is therefore needed and the existing UNGASS indicator cannot be proposed with the same level of agreement (indicator not in grey in the table). The existing corresponding UNGASS Indicator is number 13 (respectively, 14 for most-at-risk populations): percentage of young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.  
As this indicator only measures HIV-related knowledge, a similar indicator capturing STI-related knowledge should also be developed.

<sup>48</sup> This indicator is measured among people having had at least one sexual partner in the last 12 months.

<sup>49</sup> With a change in the question: percentage of men reporting the use of a condom the last time they had anal sex with a male partner.

<sup>50</sup> Having had sex: only with males (or a male), never with a female; more often with males, and at least once with a female; about equally often with males and with females; more often with females, and at least once with a male; only with females (or a female), never with a male[120].



**Table 6.1 Summary of topics: number of countries monitoring the topic regularly or irregularly in behavioural surveillance (the most frequently mentioned are highlighted)**

	Topics	General population n=18	Young people n=16	MSM n=17	IDU n=17	Migrants and ethnic minorities n=5	Sex workers n=9	STI clinics attenders n=12	PLWHA n=12
<b>1</b>	<b>Knowledge and attitudes</b>								
1.1	Attitudes towards PLWHA	10	8	7	0	4	3	1	<b>5</b>
1.2	Knowledge about HIV/Aids infection and/or treatments	<b>16</b>	<b>13</b>	<b>14</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>4</b>	3
1.3	Knowledge about STI infection and/or treatments	11	12	6	6	4	<b>6</b>	3	3
1.4	Knowledge of PEP	n.a.	n.a.	10	n.a.	n.a.	n.a.	n.a.	1
1.5	Awareness of prevention activities	<b>13</b>	<b>14</b>	<b>14</b>	<b>8</b>	4	5	<b>6</b>	3
<b>2</b>	<b>Sexual relationships and sexual partners</b>								
2.1	Types of partners/relationships, such as regular partner, casual partners	<b>16</b>	<b>15</b>	<b>15</b>	<b>11</b>	<b>4</b>	<b>6</b>	<b>9</b>	<b>8</b>
2.2	Concurrency	12	6	10	0	2	1	5	2
<b>3</b>	<b>Sexual activity and lifestyle</b>								
3.1	Sexual orientation	<b>15</b>	10	<b>16</b>	5	<b>3</b>	3	<b>12</b>	<b>12</b>
3.2	Sexual activity, such as number of partners, frequency of sexual contacts	<b>18</b>	<b>15</b>	<b>16</b>	<b>12</b>	<b>4</b>	5	<b>12</b>	<b>6</b>
3.3	Contraception	<b>15</b>	<b>14</b>	n.a.	n.a.	<b>3</b>	n.a.	6	n.a.
3.4	Recourse to prostitution (as client)	12	7	11	4	0	n.a.	11	4
3.5	Recourse to prostitution (as sex worker)	7	1	11	<b>11</b>	1	n.a.	9	3
3.6	How and where partners are met	6	3	12	1	0	4	4	2
3.7	Sexual practices	14	n.a.	15	2	2	<b>6</b>	4	5
3.8	Setting of prostitution (as sex worker)	n.a.	n.a.	n.a.	n.a.	n.a.	<b>6</b>	n.a.	n.a.
<b>4</b>	<b>Exposure to risk of infection</b>								
4.1	Condom use at first intercourse	n.a.	<b>11</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4.2	Condom use at last intercourse	<b>18</b>	<b>16</b>	<b>14</b>	<b>11</b>	2	5	<b>7</b>	4
4.3	Condom use with different types of partners	<b>17</b>	10	<b>16</b>	<b>12</b>	<b>4</b>	<b>8</b>	<b>6</b>	<b>5</b>
4.4	Condom use in different types of sexual practice (e.g. vaginal, anal, oral sex)	10	5	12	6	0	<b>8</b>	5	4
4.5	Risk reduction strategies (such as negotiated safety, serosorting, positioning)	n.a.	n.a.	11	n.a.	n.a.	n.a.	3	2
4.6	Semen in mouth	n.a.	n.a.	7	n.a.	n.a.	n.a.	n.a.	n.a.
4.7	Disclosure of HIV status to sexual partners	4	1	10	2	2	3	4	<b>5</b>
<b>5</b>	<b>HIV and other STI</b>								
5.1	Recency of infection at first positive test	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>9</b>
5.2	Stage of infection	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>9</b>
5.3	CD4 count and/or viral load	n.a.	n.a.	4	n.a.	n.a.	n.a.	n.a.	<b>9</b>
5.4	HIV testing	<b>15</b>	<b>10</b>	<b>15</b>	<b>14</b>	<b>5</b>	<b>7</b>	<b>12</b>	<b>9</b>
5.5	Result of HIV test (self-reported)	6	5	<b>15</b>	11	<b>3</b>	<b>7</b>	10	n.a.
5.6	Result of HIV test (measured)	4	1	7	12	2	<b>8</b>	10	n.a.
5.7	Current or past STI other than HIV and hepatitis	<b>13</b>	<b>6</b>	14	8	<b>3</b>	6	n.a.	6
5.8	Hepatitis B vaccine	5	2	8	13	1	4	5	2

	Topics	General population n=18	Young people n=16	MSM n=17	IDU n=17	Migrants and ethnic minorities n=5	Sex workers n=9	STI clinics attenders n=12	PLWHA n=12
5.9	Hepatitis B status (self-reported)	5	n.a.	6	10	2	4	5	2
5.10	Hepatitis B status (measured)	2	n.a.	3	11	0	5	7	5
5.11	Hepatitis C test	n.a.	n.a.	n.a.	13	n.a.	n.a.	5	n.a.
5.12	Hepatitis C status	n.a.	n.a.	n.a.	14	n.a.	n.a.	6	n.a.
5.13	HPV vaccine	n.a.	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5.14	Syphilis	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12	n.a.
5.15	Gonorrhoea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12	n.a.
5.16	Chlamydia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12	n.a.
5.17	HSV	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10	n.a.
5.18	Trichomonas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9	n.a.
<b>6</b>	<b>Drugs and substance use</b>								
6.1	Types of drugs consumed	11	11	12	16	1	5	5	8
6.2	Injecting drug use	10	9	7	16	1	7	9	9
6.3	Non-injecting drug use	n.a.	n.a.	n.a.	16	2	n.a.	n.a.	n.a.
6.4	Sharing of needles and syringes	n.a.	n.a.	n.a.	16	n.a.	6	n.a.	n.a.
6.5	Sharing of other injection material	n.a.	n.a.	n.a.	16	n.a.	4	n.a.	n.a.
6.6	Use of psychoactive substances (including alcohol) and intercourse	11	11	10	6	1	4	5	5
<b>7</b>	<b>Health and access to care</b>								
7.1	Antiretroviral treatment	3	1	5	7	2	1	3	11
7.2	Drug substitution treatment (methadone, etc.)	n.a.	n.a.	n.a.	14	n.a.	n.a.	n.a.	n.a.
7.3	Access to care and support	8	n.a.	4	9	4	4	3	6
7.4	Access to sex education	n.a.	11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>8</b>	<b>Socio-demographic characteristics</b>								
8.1	Education	18	n.a.	15	12	5	6	8	10
8.2	Employment	18	n.a.	12	12	4	5	5	10
8.3	Nationality and/or ethnic origin	15	11	10	9	5	7	12	11
8.4	Housing conditions	12	10	5	12	3	5	1	9
8.5	Income	n.a.	n.a.	9	n.a.	n.a.	n.a.	n.a.	n.a.
8.6	Membership of Gay or AIDS NGOs	n.a.	n.a.	7	n.a.	n.a.	n.a.	n.a.	n.a.
8.7	Sources of income (work, drug dealing, pension, welfare, prostitution, etc.)	n.a.	n.a.	n.a.	11	n.a.	4	n.a.	n.a.
8.8	Imprisonment	n.a.	n.a.	n.a.	12	n.a.	4	n.a.	n.a.
8.9	Experience of stigmatisation and/or discrimination	n.a.	n.a.	7	0	2	3	1	5
<b>9</b>	<b>Other topics followed</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>

**Notes**

*n.a.*: topic was not included in this population's questionnaire

Cells indicate number of countries reporting either 'Regular' or 'Irregular' monitoring of the topic in surveillance of that population

Countries not monitoring 'Regularly' or 'Irregularly' are either not monitoring the topic, did not respond to the question, or did not participate in the survey

**Table 6.2 Minimum list of indicators (in grey: core indicators common to all populations)**

Core indicators, common to all populations	GP	Youth	MSM	IDU	PWLHA	Sex work	STI clients	Migrants
<b>1. Partners</b>								
Number of sexual partners in the last 12 months <sup>51</sup>	x	x	x	(x)	x	x	x	x
<b>2. Use of condom</b>								
a) Use of condom at last intercourse <sup>52</sup> (in the last 12 months)	x	x	x	x	x	x	x	x
b) With identification of the type of partner: stable/casual/paid	x	x	x	x	x	x	x	x
<b>3. HIV test</b>								
a) Ever and date of the last test or whether tested in the last 12 months <sup>53</sup>	x	x	x	x	x	x	x	x
b) Result of the test (reported or measured)	(x)	(x)	x	x		x	x	(x)
<b>4. Sex work</b>								
a) Having paid for sex in the last 12 months	x	(a)	x	(x)	x	x	x	x
b) Use of condom at last paid intercourse (in the last 12 months)	x	(a)	x	x	x	x	x	x
<b>5. Contextual indicators</b>								
Level of education (ISCED classification)	x	x	x	x	x	x	x	x
Nationality/ethnic origin*	x	x	x	(x)	x	x	x	x
Sexual orientation (Kinsey modified classification)	x	a	x	(x)	x	x	x	x
<b>6. Knowledge**</b>								
UNGASS indicator: being able to both correctly identify ways of preventing the sexual transmission of HIV and to reject major misconceptions about HIV transmission	x	x	x	x	(x)	x	x	x
<b>Secondary and/or population specific indicators</b>								
Age at first intercourse and/or being sexually active <sup>54</sup>	x	x	x		x	x	x	x
Condom use/contraceptive method at first and last intercourse		x						
Recent STI*	x	a	x		x	x	x	x
Condom use with different types of partners	(x)	(x)	x	(x)	x	x	x	x
Having been paid for sex in the last 12 months			x	x	x	x	x	x
Concurrency*	x	a	x				x	x
Condom use for different types of sexual practices			x			x	x	
Comprehensive indicator of exposure to risk (last 12 months)			x					
Sharing equipment (last month)				x				
Number of times injected (last month) and number of sharing partners				x				
Number of clean needles obtained (last month)				x				
Substitution therapy (last month)				x				
Years since first injected				x				
Ever injected in prison				x				
Hepatitis C test								
a) Ever and date of the last test			x	x	x	x	x	x
b) Result of the test (reported or measured)								
Types of drugs consumed***	x	x	x	x	x	x	x	x
Variables related to HIV treatment (being in treatment, CD4 count, viral load)			x	x	x			

(see legend on next page)

<sup>51</sup> Allows for construction of UNGASS Indicator16.

<sup>52</sup> Allows for construction of UNGASS Indicators 17/18/19/20.

<sup>53</sup> Allows for construction of UNGASS Indicators 7/8.

<sup>54</sup> Allows for construction of UNGASS Indicator 15.

**Legend:**

*a* Asked only for sexually active youth.

*(x)* Depends on the context.

*(a)* Asked only for sexually active youth; depends on the context.

*\** Seen as important; however, as no commonly agreed satisfactory indicator is currently available, more research is needed.

*\*\** Since the relevance of different questions vary according to context, it is difficult to ensure comparability over time and between countries for this indicator. More research is needed.

*\*\*\** Seen as important in certain groups; however, its wording is unsatisfactory, sometimes not adapted to the situation, and should be improved.

## 7 References

- 1 Hamers FF, Devaux I, Alix J, Nardone A. HIV/AIDS in Europe: trends and EU-wide priorities. *Euro Surveill* 2006;11(11). Available at: URL: [www.eurosurveillance.org/ew/2006/061123.asp](http://www.eurosurveillance.org/ew/2006/061123.asp).
- 2 Hamers FF, Downs AM. The changing face of the HIV epidemic in Western Europe: what are the implications for public health policies? *Lancet* 2004;364(9428):83-94..
- 3 EuroHIV. HIV/AIDS surveillance in Europe: end-year report 2006. Saint-Maurice: Institut de veille sanitaire (InVS); 2007. (No. 75).
- 4 European Centre for Disease Prevention and Control/WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2007. Stockholm: European Centre for Disease Prevention and Control; 2008.
- 5 Hamers FF, Devaux I, Alix J, Nardone A. HIV/AIDS in Europe: trends and EU-wide priorities. *Euro Surveill* 2006;11(11). Available at: URL: [www.eurosurveillance.org/ew/2006/061123.asp](http://www.eurosurveillance.org/ew/2006/061123.asp).
- 6 Wiessing L, van de Laar MJ, Donoghoe MC, Guarita B, Klempová D, Griffiths P. HIV among injecting drug users in Europe: increasing trends in the East. *Euro Surveill* 2008;13(50). Available at: URL: [www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19067](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19067).
- 7 Fenton K, Lowndes CM, The European Surveillance of Sexually Transmitted Infections (ESSTI) Network. Recent trends in the epidemiology of sexually transmitted infections in the European Union. *Sex Transm Infect* 2004;80:255-63.
- 8 Low N, Zwahlen M. Infections sexuellement transmissibles: évolution en Suisse de 1997 à 2003 [Sexually transmitted infections: trends in Switzerland from 1997 to 2003]. *Bulletin OFSP* 2005;46(5):844-9.
- 9 EuroHIV. HIV/AIDS surveillance in Europe: end-year report 2005. Saint-Maurice: Institut de veille sanitaire (InVS); 2006. (No. 73).
- 10 Righarts AA, Simms I, Wallace L, Solomou M, Fenton KA. Syphilis surveillance and epidemiology in the United Kingdom. *Euro Surveill* 2004;12(9):21-5.
- 11 Marcus U, Bremer V, Hamouda O, Kramer MH, Freiwald M, Jessen H, et al. Understanding recent increases in the incidence of sexually transmitted infections in men having sex with men: changes in risk behavior from risk avoidance to risk reduction. *Sex Transm Dis* 2006;33(1):11-7.
- 12 Sasse A, Defraye A, Ducoffre G. Recent syphilis trends in Belgium and enhancement of STI surveillance systems. *Euro Surveill* 2004;12(9):6-8.
- 13 Ward H, Martin I, Macdonald N, Alexander S, Simms I, Fenton K, et al. Lymphogranuloma venereum in the United Kingdom. *Clin Infect Dis* 2007;44(1):26-32.
- 14 Bremer V, Meyer T, Marcus U, Hamouda O. Lymphogranuloma venereum emerging in men who have sex with men in Germany. *Euro Surveill* 2006;11(9):152-4.
- 15 Herida M, de Barbeyrac B, Sednaoui P, Scieux C, Lemarchand N, Kreplak G, et al. Rectal lymphogranuloma venereum surveillance in France 2004-2005. *Euro Surveill* 2006;11(9):155-6.
- 16 van de Laar TJ, Van der Bij AK, Prins M, Bruisten SM, Brinkman K, Ruys TA, et al. Increase in HCV incidence among men who have sex with men in Amsterdam most likely caused by sexual transmission. *J Infect Dis* 2007;196(2):230-8.
- 17 Hughes G, Simms I, Leong G. Data from UK genitourinary medicine clinics, 2006: a mixed picture. *Sex Transm Infect* 2007;83(6):433-5.
- 18 van der Bij AK, Stolte IG, Coutinho RA, Dukers NHTM. Increase of sexually transmitted infections, but not HIV, among young homosexual men in Amsterdam: are STIs still reliable markers for HIV transmission? *Sex Transm Infect* 2005;81(1):34-7.
- 19 Pebody RG, Andrews N, Brown D, Gopal R, De Melker H, Francois G, et al. The seroepidemiology of herpes simplex virus type 1 and 2 in Europe. *Sex Transm Infect* 2004;80(3):185-91.
- 20 European Centre for Disease Prevention and Control (ECDC). HIV prevention in Europe: action, needs and challenges [Meeting report, Stockholm 2–3 October 2006]. Stockholm: ECDC; 2006.
- 21 UNAIDS/WHO – Working Group on Global HIV/AIDS and STI Surveillance. Guidelines for second generation HIV surveillance. Geneva: UNAIDS/WHO; 2000.
- 22 Garnett G, Garcia-Calleja J, Rehle T, Gregson S. Behavioural data as an adjunct to HIV surveillance data. *Sex Transm Infect* 2006;82:57-62.
- 23 UNAIDS/WHO – Working Group on Global HIV/AIDS and STI Surveillance. Guidelines for second generation HIV surveillance. Geneva: UNAIDS/WHO; 2000.

- 24 Dubois-Arber F, Jeannin A, Meystre-Agustoni G, Spencer B, Moreau-Gruet F, Balthasar H, et al. Evaluation of the HIV/AIDS prevention strategy in Switzerland: abridged version of the seventh synthesis report 1999–2003. Lausanne: Institut universitaire de médecine sociale et préventive; 2003. Available at URL: [www.iumsp.ch](http://www.iumsp.ch).
- 25 Brown T. Behavioral surveillance: current perspectives, and its role in catalyzing action. *J Acquir Immune Defic Syndr* 2003;32:S12-S17.
- 26 UNAIDS/WHO – Working Group on Global HIV/AIDS and STD Surveillance. The pre-surveillance assessment: guidelines for planning serosurveillance of HIV, prevalence of sexually transmitted infections and the behavioural components of second generation surveillance of HIV. Geneva: Co-published by World Health Organization, UNAIDS and Family Health International; 2005.
- 27 UNAIDS/WHO – Working Group on Global HIV/AIDS and STI Surveillance. Initiating second generation HIV surveillance systems: practical guidelines. Geneva: UNAIDS/WHO; 2002.
- 28 McGarrigle CA, Fenton KA, Gill ON, Hughes G, Morgan D, Evans B. Behavioural surveillance: the value of national coordination. *Sex Transm Infect* 2002;78:398-405.
- 29 SIVES 2005: integrated AIDS/HIV/STI surveillance system of Catalonia, CEESCAT annual report. Barcelona: Generalitat de Catalunya, Departament de Salut; 2006. (Technical document N° 18).
- 30 Bozon M, Doré V, Laporte A, Lert F, Meyer L, Théry I, et al. Evaluer la prévention de l'infection par le VIH en France: synthèse des données quantitatives, 1994-1999. Agence nationale de recherches sur le sida et les hépatites virales (ANRS); 1999. (Sciences sociales et sida).
- 31 Paccaud F, Dubois-Arber F. EC concerted action on assessment of HIV/AIDS prevention strategies. In: Baert AE, Razquin MC, Tyrrell D, Koch MA, Montagnier L (editors). *AIDS Research at the EC level*. Amsterdam: IOS Press; 1995. p. 62-72.
- 32 Hubert M. Studying and comparing sexual behaviour and HIV/AIDS in Europe. In: Hubert M, Bajos N, Sandford TGM (editors). *Sexual behaviour and HIV/AIDS in Europe*. London: UCL Press; 1998. p. 3-34. (Social Aspects of AIDS).
- 33 Sexual behaviour and risks of HIV infection in Europe: an integrated relationship-based survey protocol for the general population, final report. Brussels: Facultés universitaires Saint-Louis, Centre d'études sociologiques; 1998.
- 34 Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on construction of core indicators: 2010 reporting. Geneva: UNAIDS; 2009. (UNAIDS/09.10E/JC1676E). Available at URL: [http://data.unaids.org/pub/Manual/2009/2009\\_UNGASScoreindicators2009\\_en.pdf](http://data.unaids.org/pub/Manual/2009/2009_UNGASScoreindicators2009_en.pdf).
- 35 Ministry of Health NAP. HIV/AIDS surveillance in Cyprus, data from 1986 until the end of June 2007. Nicosia: Ministry of Health; 2007.
- 36 Trummal A, Lõhmus L. HIV/AIDS prevention in Estonia in 2004 and 2005. Tallinn: National Institute for Health Development; 2006.
- 37 Breard G, Brunet JB, Chaban-Delmas M, Ingold R, Karsenty S, Moatti JP, et al. Evaluer la prévention du sida en France: un inventaire des données disponibles. Paris: Agence nationale de recherche sur le sida, Agence française de lutte contre le sida; 1992.
- 38 Institut de veille sanitaire. Lutte contre le VIH/sida et les infections sexuellement transmissibles en France: 10 ans de surveillance, 1996–2005. Saint-Maurice: L'Institut; 2007.
- 39 Public Health Agency. Uldis Likops MT (editor). The prevalence and consequences of dependency inducing substances in Latvia. 15th ed. Riga: Public Health Agency; 2007.
- 40 Op de Coul EL, van de Laar MJ. Surveillance van seksueel gedrag in Nederland. *Tijdschrift voor Gezondheidswetenschappen* 2007;85(3):138-43.
- 41 Klavs I, Bergant N, Kustec T, Kastelic Z. HIV infection in Slovenia; annual report 2007 [In Slovene]. Ljubljana: Institute of Public Health of the Republic of Slovenia; 2008.
- 42 Klavs I. Drug-related infectious diseases. In: Lovrecic M (editor). Report on the drug situation 2003 of the Republic of Slovenia. Ljubljana: Institute of Public Health of the Republic of Slovenia; 2004. p. 29-31.
- 43 Plan multisectorial frente a la infección por VIH y el sida: España 2008-2012. Madrid: Ministerio de Sanidad y Consumo; 2008.
- 44 Dubois-Arber F, Jeannin A, Meystre-Agustoni G. Un système de surveillance de deuxième génération pour améliorer la surveillance du VIH/sida en Suisse. *Bulletin OFSP* 2006;15:277-81.
- 45 Groves RM, Couper MP, Lepkowski JM, Singer E, Tourangeau R. Survey methodology. Hoboken, NJ: Wiley; 2004. (Wiley Series in Survey Methodology).
- 46 Heckathorn DD. Respondent-driven sampling: a new approach to the study of hidden populations. *Soc Probl* 1997;49(1):11-34.

- 47 Wiessing L, Ncube F, Hedrich D, Griffiths P, Hope V, Gill N, et al. Surveillance of infectious diseases in IDUs across the EU: information from the expert network. *Euro Surveill* 2004;8(4):-pii=2368. Available at: URL: [www.eurosurveillance.org/ViewArticle.aspx?ArticleId=2368](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=2368).
- 48 Health Protection Agency, Health Protection Scotland, National Public Health Service for Wales, Communicable Disease Surveillance Centre Northern Ireland, Centre for Research on Drugs and Health Behaviour, Unlinked Anonymous Surveys Steering Group. Shooting up: infections among injecting drug users in the United Kingdom 2007. London: Health Protection Agency; 2008.
- 49 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Drug-related infectious diseases. Lisbon: EMCDDA; 2009. Available at URL: [www.emcdda.europa.eu/themes/key-indicators/drid](http://www.emcdda.europa.eu/themes/key-indicators/drid).
- 50 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). An overview of the drug-related infectious diseases (DRID) key indicator. Lisbon: EMCDDA; 2009. Available at URL: [www.emcdda.europa.eu/publications/methods/drid-overview](http://www.emcdda.europa.eu/publications/methods/drid-overview).
- 51 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Drug-related infectious diseases: current EMCDDA questionnaire for DRID reporting (Fonte template 9). Lisbon: EMCDDA; 2009. Available at URL: [www.emcdda.europa.eu/attachements.cfm/att\\_67108\\_EN EMCDDA-DRID-ST9.zip](http://www.emcdda.europa.eu/attachements.cfm/att_67108_EN EMCDDA-DRID-ST9.zip).
- 52 International Organization for Migration. World Migration 2008: managing labour mobility in the evolving global economy. Geneva: IOM; 2008.
- 53 Green G, Smith R. The psychosocial and health care needs of HIV-positive people in the United Kingdom following HAART: a review. *HIV Med* 2004;5:1-46.
- 54 Dougan S, Payne LJC, Brown AE, Fenton KA, Logan L, Evans BG, et al. Black Caribbean adults with HIV in England, Wales, and Northern Ireland: an emerging epidemic? *Sex Transm Infect* 2004;80(1):18-23.
- 55 Lot F, Larsen C, Valin N, Gouëzel P, Blanchon T, Laporte A. Parcours sociomédical des personnes originaires d'Afrique subsaharienne atteintes par le VIH, prises en charge dans les hôpitaux d'Ile-de-France, 2002. *Bull Epidemiol Hebdo* 2004;(5):17-20.
- 56 Chee CC, Mortier E, Dupont C, Bloch M, Simonpoli AM, Rouveix E. Medical and social differences between French and migrant patients consulting for the first time for HIV infection. *AIDS Care* 2005;17(4):516-20.
- 57 Staehelin C, Rickenbach M, Low N, Egger M, Ledergerber B, Hirschel B, et al. Migrants from Sub-Saharan Africa in the Swiss HIV Cohort Study: access to antiretroviral therapy, disease progression and survival. *AIDS* 2003;17(15):2237-44.
- 58 Saracino A, El-Hamad I, Prato R, Cibelli DC, Tartaglia A, Palumbo E, et al. Access to HAART in HIV-infected immigrants: a retrospective multicenter Italian study. *AIDS Patient Care STDS* 2005;19(9):599-606.
- 59 Castilla J, Sobrino P, del AJ, EPI-VIH Study Group. HIV infection among people of foreign origin voluntarily tested in Spain: a comparison with national subjects. *Sex Transm Infect* 2002;78(4):250-4.
- 60 Nikolopoulos G, Arvanitis M, Masgala A, Paraskeva D. Migration and HIV epidemic in Greece. *Eur J Public Health* 2005;15(3):296-9.
- 61 Fenton KA, Chinouya M, Davidson O, Copas A. HIV transmission risk among Sub-Saharan Africans in London travelling to their countries of origin. *AIDS* 2001;15(11):1442-5.
- 62 Kramer MA, van den Hoek A, Coutinho RA, Prins M. Sexual risk behaviour among Surinamese and Antillean migrants travelling to their countries of origin. *Sex Transm Infect* 2005;81(6):508-10.
- 63 Shiripinda I, Van Eerdewijk A. Facing HIV in the Netherlands: lived experiences of migrants living with HIV. Utrecht: Pharos; 2008.
- 64 Anderson J, Doyal L. Women from Africa living with HIV in London: a descriptive study. *AIDS Care* 2004;16(1):95-105.
- 65 Sadler K, et al. Mayisha II main study report: assessing the feasibility and acceptability of community based prevalence surveys of HIV among black Africans in England. London: Health Protection Agency; 2005. Available at URL: [www.ahpn.org/downloads/publications/Mayisha\\_II.pdf](http://www.ahpn.org/downloads/publications/Mayisha_II.pdf).
- 66 Testa AC, Coleman LM. Accessing research participants in schools: a case study of a UK adolescent sexual health survey. *Health Educ Res* 2006;21(4):518-26.
- 67 Weatherburn P, Ssanyu-Sseruma W, Hickson F, McLean S, Reid D. Project Nasah: an investigation into the HIV treatment information and other needs of African people with HIV resident in England. London: Sigma Research, Faculty of Humanities and Social Sciences, University of Portsmouth; 2003. Available at URL: [www.sigmaresearch.org.uk/downloads/report03a.pdf](http://www.sigmaresearch.org.uk/downloads/report03a.pdf).
- 68 Lydié N, Beltzer N, Fenies K, Halfen S, Lert F, Levu S. Etudes Santé. Les populations africaines d'Ile de France face au VIH/sida: connaissances, attitudes, croyances et comportements. Saint-Denis: Institut national de prévention et d'éducation pour la santé (INPES); 2007.
- 69 Elford J, Ibrahim F, Bukutu C, Anderson J. Sexual behaviour of people living with HIV in London: implications for HIV transmission. *AIDS* 2007;21:S63-S70.

- 70 Gras MJ, Weide JF, Langendam MW, Coutinho RA, Van Den HA. HIV prevalence, sexual risk behaviour and sexual mixing patterns among migrants in Amsterdam, The Netherlands. *AIDS* 1999;13(14):1953-62.
- 71 Rommel A, Weilandt C, Eckert J. Gesundheitsmonitoring der schweizerischen Migrationsbevölkerung: Endbericht. Bonn: Wissenschaftliches Institut der Ärzte Deutschlands (WIAD) gem. e.V.; 2006.
- 72 Hickson F, Reid D, Weatherburn P, Stephens M, Nutland W, Boakye P. HIV, sexual risk, and ethnicity among men in England who have sex with men. *Sex Transm Infect* 2004;80(6):443-50.
- 73 del Amo J, Broring G, Hamers FF, Infuso A, Fenton K. Monitoring HIV/AIDS in Europe's migrant communities and ethnic minorities. *AIDS* 2004;18(14):1867-73.
- 74 European Working Group on HIV Infection in Female Prostitutes. HIV infection in European female sex workers: epidemiological link with use of petroleum-based lubricants. *AIDS* 1993;7(3):401-8.
- 75 Day S, Ward H. Approaching health through the prism of stigma: research in seven European countries. In: Day S, Ward H (editors). *Sex Work, Mobility and Health in Europe*. London: Kegan Paul; 2004. p. 139-160.
- 76 EuroHIV. HIV/AIDS surveillance in Europe: mid-year report 2006. Saint-Maurice: Institut de veille sanitaire (InVS); 2006. (No. 74).
- 77 Uuskula A, Fischer K, Raudne R, Kilgi H, Krylov R, Salminen M, et al. A study on HIV and hepatitis C virus among commercial sex workers in Tallinn. *Sex Transm Infect* 2008;84(3):189-91.
- 78 McDonnell RJ, McDonnell PM, O'Neill M, Mulcahy F. Health risk profile of prostitutes in Dublin. *Int J STD AIDS* 1998;9(8):485-8.
- 79 Dubois-Arber F, Balthasar H, Huissoud T, Zobel F, Arnaud S, Samitca S, et al. Trends in drug consumption and risk of transmission of HIV and hepatitis C virus among injecting drug users in Switzerland, 1993-2006. *Euro Surveill* 2008;13(21):1-6. Available at: URL: [www.eurosurveillance.org/ViewArticle.aspx?ArticleId=18881](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=18881)
- 80 Sethi G, Holden BM, Gaffney J, Greene L, Ghani AC, Ward H. HIV, sexually transmitted infections and risk behaviours in male sex workers in London over a 10 year period. *Sex Transm Infect* 2006;82(5):359-63.
- 81 Ward H, Day S, Green A, Cooper K, Weber J. Declining prevalence of STI in the London sex industry, 1985 to 2002. *Sex Transm Infect* 2004;80(5):374-6.
- 82 Saleri N, Graifembergi S, El Hamad I, Minelli A, Magri S, Matteelli A. Prevalence and incidence of syphilis among South American transgender sex workers in Northern Italy. *Sex Transm Dis* 2006;33(5):334-5.
- 83 Lomax N, Wheeler H, Anaraki S, Anderson H, Goh B. Management of a syphilis outbreak in street sex workers in East London. *Sex Transm Infect* 2006;82(6):437-8.
- 84 Arumainayagam J, Pallan MJ, Buckley E, Pugh RN, White DG, Morrall IA, et al. Syphilis outbreak in Walsall, UK: lessons for control and prevention. *Int J STD AIDS* 2007;18(1):55-7.
- 85 Ward H, Mercer CH, Wellings K, Fenton K, Erens B, Copas A, et al. Who pays for sex? An analysis of the increasing prevalence of female commercial sex contacts among men in Britain. *Sex Transm Infect* 2005;81(6):467-71.
- 86 Groom TM, Nandwani R. Characteristics of men who pay for sex: a UK sexual health clinic survey. *Sex Transm Infect* 2006;82(5):364-7.
- 87 Jeannin A, Rousson V, Meystre-Agustoni G, Dubois-Arber F. Patterns of sex work contact among men in the general population of Switzerland, 1987-2000. *Sex Transm Infect* 2008;84(7):556-9.
- 88 Ward H, Mak R. EUROPAP: promoting the health and well being of sex workers in Europe. *Euro Surveill* 2002;6(41).
- 89 Vandepitte J, Lyerla R, Dallabetta G, Crabbe F, Alary M, Buve A. Estimates of the number of female sex workers in different regions of the world. *Sex Transm Dis* 2006;82(Suppl 3):iii18-iii25.
- 90 Carael M, Slaymaker E, Lyerla R, Sarkar S. Clients of sex workers in different regions of the world: hard to count. *Sex Transm Infect* 2006;82 Suppl 3:iii26-iii33.
- 91 Visser J, Randers-Perhson A, Day S, Ward H. Policies towards the sex industry in Europe: new models of control. In: Day S, Ward H, editors. *Sex work, mobility and health in Europe*. London: Kegan Paul; 2004. p. 241-260.
- 92 Ruutel K, Uuskula A, Minossenko A, Loit HM. Quality of life of people living with HIV and AIDS in Estonia. *Cent Eur J Public Health* 2008;16(3):111-5.
- 93 Lert F, Sitta R, Hamon M, Dray-Spira R, Bouhnik AD, Spire B. [Couple life, gender and HIV disease]. *Med Sci (Paris)* 2008;24 Spec No 2:33-40.
- 94 Lert F, Sitta R, Dray-Spira R, Bouhnik AD. [HIV-positive women: sexual life and prevention]. *Med Sci (Paris)* 2008;24 Spec No 2:90-102.
- 95 Heard I, Sitta R, Lert F. [Reproductive choices in women living with HIV/AIDS in the era of highly active antiretroviral therapies (HAART)]. *Med Sci (Paris)* 2008;24 Spec No 2:48-52.



- 96 Bouhnik AD, Preau M, Schiltz MA, Obadia Y, Spire B. Sexual difficulties in people living with HIV in France: results from a large representative sample of outpatients attending French hospitals (ANRS-EN12-VESPA). *AIDS Behav* 2008;12(4):670-6.
- 97 Delpierre C, Dray-Spira R, Cuzin L, Marchou B, Massip P, Lang T, et al. Correlates of late HIV diagnosis: implications for testing policy. *Int J STD AIDS* 2007;18(5):312-7.
- 98 Peretti-Watel P, Spire B, Obadia Y, Moatti JP. Discrimination against HIV-infected people and the spread of HIV: some evidence from France. *PLoS ONE* 2007;2(5):e411.
- 99 Bouillon K, Lert F, Sitta R, Schmaus A, Spire B, Dray-Spira R. Factors correlated with disclosure of HIV infection in the French Antilles and French Guiana: results from the ANRS-EN13-VESPA-DFA Study. *AIDS* 2007;21 Suppl 1:S89-S94.
- 100 Heard I, Sitta R, Lert F, the VESPA Study Group. Reproductive choice in men and women living with HIV: evidence from a large representative sample of outpatients attending French hospitals (ANRS-EN12-VESPA Study). *AIDS* 2007;21(Suppl 1):S77-S82.
- 101 Rey D, Bouhnik AD, Peretti-Watel P, Obadia Y, Spire B, the VESPA Study Group. Awareness of non-occupational HIV postexposure prophylaxis among French people living with HIV: the need for better targeting. *AIDS* 2007;21(Suppl 1):S71-S76.
- 102 Bouhnik AD, Preau M, Lert F, Peretti-Watel P, Schiltz MA, Obadia Y, et al. Unsafe sex in regular partnerships among heterosexual persons living with HIV: evidence from a large representative sample of individuals attending outpatients services in France (ANRS-EN12-VESPA Study). *AIDS* 2007;21(Suppl 1):S57-S62.
- 103 Bouhnik A-D, Préau M, Schiltz M-A, Lert F, Obadia Y, Spire B, et al. Unprotected sex in regular partnerships among homosexual men living with HIV: a comparison between sero-nonconcordant and seroconcordant couples (ANRS-EN12-VESPA Study). *AIDS* 2007;21(Suppl 1):S43-S48.
- 104 Bouhnik AD, Preau M, Schiltz MA, Peretti-Watel P, Obadia Y, Lert F, et al. Unsafe sex with casual partners and quality of life among HIV-infected gay men: evidence from a large representative sample of outpatients attending French hospitals (ANRS-EN12-VESPA). *J Acquir Immune Defic Syndr* 2006;42(5):597-603.
- 105 Peretti-Watel P, Spire B, Pierret J, Lert F, Obadia Y. Management of HIV-related stigma and adherence to HAART: evidence from a large representative sample of outpatients attending French hospitals (ANRS-EN12-VESPA 2003). *AIDS Care* 2006;18(3):254-61.
- 106 Peretti-Watel P, Spire B, Schiltz MA, Bouhnik AD, Heard I, Lert F, et al. Vulnerability, unsafe sex and non-adherence to HAART: evidence from a large sample of French HIV/AIDS outpatients. *Soc Sci Med* 2006;62(10):2420-33.
- 107 Spire B, Bouhnik AD, Obadia Y, Lert F. Concealment of HIV and unsafe sex with steady partner is extremely infrequent. *AIDS* 2005;19(13):1431-3.
- 108 Desquilbet L, Deveau C, Goujard C, Hubert JB, Derouineau J, Meyer L. Increase in at-risk sexual behaviour among HIV-1-infected patients followed in the French PRIMO cohort. *AIDS* 2002;16(17):2329-33.
- 109 Carrieri MP, Rey D, Serraino D, Tremolieres F, Mechali D, Moatti JP, et al. Oral contraception and unprotected sex with occasional partners of women HIV-infected through injection drug use. *AIDS Care* 2006;18(7):795-800.
- 110 Gollub EL, Rey D, Obadia Y, Moatti JP. Gender differences in risk behaviors among HIV+ persons with an IDU history: the link between partner characteristics and women's higher drug-sex risks. *Sex Transm Dis* 1998;25(9):483-8.
- 111 Glass TR, Young J, Vernazza PL, Rickenbach M, Weber R, Cavassini M, et al. Is unsafe sexual behaviour increasing among HIV-infected individuals? *AIDS* 2004;18(12):1707-14.
- 112 Balthasar H, Jeannin A, Dubois-Arber F. Les comportements face au VIH/sida des hommes qui ont des rapports sexuels avec des hommes: résultats de Gaysurvey 2007. Lausanne: Institut universitaire de médecine sociale et préventive; 2008. (Raisons de santé, 140).
- 113 Balthasar H, Huissoud T, Zobel F, Arnaud S, Samitca S, Jeannin A, et al. Evolution de la consommation et des pratiques à risques de transmission du VIH et du VHC chez les consommateurs de drogue par injection en Suisse, 1993-2006. *Bulletin OFSP* 2007;45:804-9.
- 114 Carstensen M, Dahl A, HIV Danmark. HIV and living conditions: a survey of living conditions and quality of life of people living with HIV in Denmark. Copenhagen: HIV-Danmark; 2008. Available at URL: [levekaar.dk/fileadmin/template/html/levekaarsfiler/pdf/Living\\_Conditions\\_Survey.pdf](http://levekaar.dk/fileadmin/template/html/levekaarsfiler/pdf/Living_Conditions_Survey.pdf).
- 115 Health Protection Agency. Unlinked anonymous survey of genitourinary medicine clinic attendees (UA GUM Survey): GUM Anon supplementary data set. London: Health Protection Agency; 2009. Available at URLs: [www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb\\_C/1202115496235](http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1202115496235); [www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1226046271991](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1226046271991).
- 116 Zwahlen M, Spoerri A, Gebhardt M, Mausezahl M, Boubaker K, Low N. Surveillance systems for sexually transmitted diseases in Switzerland. *Sex Transm Dis* 2007;34(2):76-80.

- 117 Marcus U, Bremer V, Hamouda O, Kramer MH, Freiwald M, Jessen H, et al. Understanding recent increases in the incidence of sexually transmitted infections in men having sex with men: changes in risk behavior from risk avoidance to risk reduction. *Sex Transm Dis* 2006;33(1):11-7.
- 118 Catchpole M, Connor N, Brady A, Kinghorn G, Mercey D, Band B, et al. Behavioural and demographic characteristics of attenders at two genitourinary medicine clinics in England. *Genitourin Med* 1997;73(6):457-61.
- 119 UNAIDS. A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations. Geneva: UNAIDS; 2007. (JC1338E). Available at URL: [data.unaids.org/pub/Manual/2007/20070420\\_me\\_of\\_prevention\\_in\\_most\\_at\\_risk\\_populations\\_en.pdf](http://data.unaids.org/pub/Manual/2007/20070420_me_of_prevention_in_most_at_risk_populations_en.pdf).
- 120 Wellings K, Field J, Johnson A, Wadsworth J. Sexual behaviour in Britain: the national survey of sexual attitudes and lifestyles. Harmondsworth: Penguin Books Ltd; 1994.
- 121 Beltzer N, Gremy I. Les liens entre la connaissance du VIH, la perception du risque de contamination et l'adoption des comportements de prévention chez les femmes en France: résultats à partir des enquêtes KABP. *Med Sci (Paris)* 2008;24(Suppl 2):62-71.
- 122 Beltzer N, Bozon M. La vie sexuelle après une rupture conjugale: les femmes et la contrainte de l'âge. *Population-F* 2006;61(4):533-52.
- 123 Beltzer N, Lagarde M, Wu-Zhou X, Gremy I. Le VIH/sida en France: évolution des connaissances, attitudes, croyances et comportements. *La Revue ADSP* 2006;53/54:98-104.
- 124 Gremy I, Beltzer N. HIV risk and condom use in the adult heterosexual population in France between 1992 and 2001: return to the starting point? *AIDS* 2004;18(5):805-9.
- 125 Grémy I, Cheveau J, Vongmany N, Beltzer. Les connaissances, attitudes, croyances et comportements face au VIH/sida: évolution 1992-2001. *La Revue ADSP* 2002;40:53-6.
- 126 Beltzer N, Gremy I, Bozon M. La gestion du risque VIH/sida après une rupture conjugale. Paris: Observatoire Régional d'Ile-de-France; 2002.
- 127 Beck F, Guilbert P, Gautier A. Baromètre santé 2005: attitudes et comportements de santé. Saint-Denis: Institut national de prévention et d'éducation pour la santé; 2007.
- 128 Töppich J, Christiansen G, Müller W. Konzept und Strategie der Qualitätssicherung in der Aidsprävention für die Allgemeinbevölkerung. In: Brockmeyer NH, Brodt R, Hoffmann K, Reimann G, Stücker M, Altmeyer P (editors). *HIV-Infekt: Epidemiologie, Prävention, Pathogenese, Diagnostik, Therapie, Psycho-Soziologie*. Heidelberg: Springer Verlag; 2000. p. 188-194.
- 129 Christiansen G, Töppich J. Measuring protective sexual behavior by KAB surveys. In: Friedrich D, Heckmann W (editors). *AIDS in Europe the behavioural aspect: determinant of behaviour change (Vol 4)*. 1995. p. 153-162.
- 130 Christiansen G, Töppich J. AIDS: Wissen, Einstellungen und Verhalten 1987 bis 1999. *Bundesgesundheitsblatt* 2000;43:669-76.
- 131 Layte R, McGee H, Quail A, Rundle K, Cousins G, Donnelly C, et al. The Irish study of sexual health and relationships: main report. Dublin: Crisis Pregnancy Agency and Department of Health and Children; 2006.
- 132 Layte R, McGee H, Quail A, Rundle K, Cousins G, Donnelly C, Mulcahy F, Conroy R. The Irish study of sexual health and relationships: summary report. Dublin: Crisis Pregnancy Agency and Department of Health and Children; 2006.
- 133 Rundle K, Layte R, McGee H. The Irish study of sexual health and relationships, sub-report 1: learning about sex and first sexual experiences. Dublin: Crisis Pregnancy Agency and Department of Health and Children; 2008.
- 134 McGee H, Rundle K, Donnelly C, Layte R. The Irish study of sexual health and relationships, sub-report 2: sexual health challenges and related service provision. Dublin: Crisis Pregnancy Agency and Department of Health and Children; 2008.
- 135 Cousins G, Layte R, McGee H. The Irish study of sexual health and relationships, sub-report 3: sexual knowledge, attitudes and behaviours, a further analysis. Dublin: Crisis Pregnancy Agency and Department of Health and Children; 2008.
- 136 Rundle K, Leigh C, McGee H, Layte R. Irish contraception and crisis pregnancy (ICCP) study: a survey of the general population. Dublin: Crisis Pregnancy Agency; 2004. (Crisis Pregnancy Agency Report No. 7).
- 137 Morgan K, McGee H, Watson D, Perry I, Barry M, Shelley E, et al. SLAN 2007: survey of lifestyle, attitudes and nutrition in Ireland: main report. Dublin: Department of Health and Children; 2008.
- 138 European Commission. AIDS prevention: fieldwork September to December 2005. Brussels: Directorate General Press and Communication; 2006. (Special Eurobarometer 240/Wave 64.1 and 64.3, TNS Opinion & Social).
- 139 National report (2002 data) to the EMCDDA by the Reitox national focal point Poland: new development, trends and in-depth information on selected issues. Warsaw: National Bureau for Drug Prevention; 2003.
- 140 National report (2006 data) to the EMCDDA by the Reitox national focal point Poland: new development, trends and in-depth information on selected issues. Warsaw: National Bureau for Drug Prevention; 2007.

- 141 Krajowe Centrum ds AIDS. Analiza danych uzyskanych z punktów konsultacyjno-diagnostycznych wykonujących testy w kierunku HIV połączone z poradnictwem okolołestowym w latach 2001-2004. Warszawa: The Centrum; 2005.
- 142 Klavs I, Hamers FF. Male circumcision in Slovenia: results from a national probability sample survey. *Sex Transm Infect* 2008;84(1):49-50.
- 143 Klavs I, Rodrigues LC, Weiss HA, Hayes R. Factors associated with early sexual debut in Slovenia: results of a general population survey. *Sex Transm Infect* 2006;82(6):478-83.
- 144 Grgic-Vitek M, Svab I, Klavs I. Prevalence of and risk factors for self-reported sexually transmitted infections in Slovenia in 2000. *Croat Med J* 2006;47(5):722-9.
- 145 Klavs I, Rodrigues LC, Wellings K, Weiss HA, Hayes R. Increased condom use at sexual debut in the general population of Slovenia and association with subsequent condom use. *AIDS* 2005;19(11):1215-23.
- 146 Klavs I, Rodrigues LC, Wellings K, Weiss HA, Hayes R. Sexual behaviour and HIV/sexually transmitted infection risk behaviours in the general population of Slovenia, a low HIV prevalence country in Central Europe. *Sex Transm Infect* 2009;85(2):132-8.
- 147 Instituto Nacional de Estadística y Ministerio de Sanidad y Consumo. Encuesta de salud y hábitos sexuales, 2003. Madrid: Instituto Nacional de Estadística; 2006.
- 148 Dubois-Arber F, Jeannin A, Meystre-Agustoni G, Spencer B, Moreau-Gruet F, Balthasar H, et al. Evaluation de la stratégie de prévention du VIH/sida en Suisse: septième rapport de synthèse 1999-2003. Lausanne: Institut universitaire de médecine sociale et préventive; 2003. (Raisons de santé, 90a). Available at URL: [www.iumsp.ch](http://www.iumsp.ch).
- 149 Dubois-Arber F, Jeannin A, Spencer B. Long term global evaluation of a national AIDS prevention strategy: the case of Switzerland. *AIDS* 1999;13(18):2571-82.
- 150 Swiss health survey 2007: first findings. Neuchâtel: Federal Statistical Office (FSO); 2008. Available at URL: [www.bfs.admin.ch/bfs/portal/fr/index.html](http://www.bfs.admin.ch/bfs/portal/fr/index.html).
- 151 Wadsworth J, Wellings K, Johnson AM, Field J. Sexual behaviour. *BMJ* 1993;306(6877):582-3.
- 152 Wadsworth J, Field J, Johnson AM, Bradshaw S, Wellings K. Methodology of the National Survey of Sexual Attitudes and Lifestyles. *J R Stat Soc Ser A Stat Soc* 1993;156(3):407-21.
- 153 Johnson AM, Wadsworth J, Wellings K, Bradshaw S, Field J. Sexual lifestyles and HIV risk. *Nature* 1992;360(6403):410-2.
- 154 Wadsworth J, Hickman M, Johnson AM, Wellings K, Field J. Geographic variation in sexual behaviour in Britain: implications for sexually transmitted disease epidemiology and sexual health promotion. *AIDS* 1996;10(2):193-9.
- 155 Johnson AM, Copas AJ, Erens B, Mandalia S, Fenton K, Korovessis C, et al. Effect of computer-assisted self-interviews on reporting of sexual HIV risk behaviours in a general population sample: a methodological experiment. *AIDS* 2001;15(1):111-5.
- 156 Adam P, Hauet E, Aron C. Recrudescence des prises de risque et des MST parmi les gays: résultats préliminaires de l'Enquête Presse Gay 2000. Saint-Maurice: Institut de Veille Sanitaire (InVS); 2001.
- 157 Copas AJ, Wellings K, Erens B, Mercer CH, McManus S, Fenton KA, et al. The accuracy of reported sensitive sexual behaviour in Britain: exploring the extent of change 1990-2000. *Sex Transm Infect* 2002;78(1):26-30.
- 158 Lader D. Contraception and sexual health 2006/07: a report on research using the National Statistics Omnibus Survey produced on behalf of the Information Centre for Health and Social Care. Newport: Office for National Statistics; 2007.
- 159 The National AIDS Trust. Public attitudes towards HIV 2005: research study conducted for the National AIDS Trust. London: National AIDS Trust; 2006.
- 160 Public attitudes towards HIV 2007: research study conducted for the National AIDS Trust. London: National AIDS Trust; 2008.
- 161 Bridgwood A, Lilly R, Thomas M, Bacon J, Sykes W, Morris S. Living in Britain: results from the 1998 General Household Survey. Office for National Statistics. London: The Stationery Office; 2000.
- 162 de Graaf H, Meijer S, Poelman J, van Wesenbeeck I. Seks onder je 25e: seksuele gezondheid van jongeren in Nederland anno 2005. Amsterdam: SoaAids Nederland/ Rutgers Nisso Groep; 2005.
- 163 Suarez Cardona M. Encuesta de salud y hábitos sexuales 2003: informe general. Madrid: Instituto Nacional de Estadística, Ministerio de Sanidad y Consumo; 2006.
- 164 Belza MJ, Koerting A, Suárez M, Álvarez R, López M, Melero I, et al. Jóvenes, relaciones sexuales y riesgo de infección por VIH/sida en España 2003. Fundación para la Investigación y la Prevención del Sida en España (FIPSE); 2006.
- 165 Herlitz C, Ramstedt K. Assessment of sexual behavior, sexual attitudes, and sexual risk in Sweden (1989-2003). *Arch Sex Behav* 2005;34(2):219-29.
- 166 Forsberg M. Adolescent sexuality in Sweden: a research review 2000. Stockholm: The National Institute of Public Health Report; 2000.

- 167 Narring F, Michaud PA, Wydler H, Davatz F, Villaret M. Sexualité des adolescents et sida: processus et négociations autour des relations sexuelles et du choix de la contraception. Lausanne: Institut universitaire de médecine sociale et préventive; 1997. (Raisons de santé, 4).
- 168 Narring F, Wydler H, Michaud PA. First sexual intercourse and contraception: a cross-sectional survey on the sexuality of 16–20-year-olds in Switzerland. *Schweiz Med Wochenschr* 2000;130(40):1389-98.
- 169 Wellings K, Nanchahal K, Macdowall W, McManus S, Erens R, et al. Sexual behaviour in Britain: early heterosexual experience. *Lancet* 2001;358:1843-50.
- 170 Robertson BJ. Sexual behaviour and risk of exposure to HIV among 18–25-year-olds in Scotland: assessing change 1988-1993. *AIDS* 1995;9(3):285-92.
- 171 Coleman LM, Testa A. Sexual health knowledge, attitudes and behaviours: variations among a religiously diverse sample of young people in London, UK. *Ethn Health* 2008;13(1):55-72.
- 172 Coleman L, Testa A. Experience of sexual intercourse and reported risk behaviour among an ethnically diverse sample of young people. *Sex Health* 2006;3(3):169-77.
- 173 Bochow M, Jauffret M, Michel A, Schiltz M-A. Les évolutions des comportements sexuels et les modes de vie à travers les enquêtes réalisées dans la presse gaie en France (1985–2000). In: Broqua C, Lert F, Souteyrand Y (editors). *Homosexualités au temps du sida: tension sociales et identitaires*. Paris: Agence nationale de recherche sur le sida; 2003. p. 35-54. (Sciences sociales et sida XIII–XVII).
- 174 Velter A, Bouyssou-Michel A, de Busscher P.-O., Jauffret-Roustide M, Semaille C. Enquête presse gay 2004: rapport. Saint-Maurice: Institut de veille sanitaire (InVS); Agence nationale de recherche sur le sida et les hépatites virales (ANRS); 2007.
- 175 Velter A, Bouyssou-Michel A, Arnaud S, Semaille C. Rencontre des partenaires masculins par internet et comportements sexuels à risque: enquête ANRS-Presse gay 2004. *Bull Epidemiol Hebdo* 2005;46-47:236-7.
- 176 Velter A, Bouyssou-Michel A. Relations stables et comportements sexuels à risque: enquête ANRS-Presse gay 2004. Paris: Agence Nationale de Recherches sur le Sida et les hépatites virales (ANRS); 2007.
- 177 Leobon A, Frigault LR. Frequent and systematic unprotected anal intercourse among men using the internet to meet other men for sexual purposes in France: results from the 'Gay Net Barometer 2006' Survey. *AIDS Care* 2008;20(4):478-84.
- 178 Balthasar H, Jeannin A, Dubois-Arber F. [Surveillance of HIV/AIDS-related behaviors among men who have sex with men: Switzerland, 1992-2004]. *Int J Pub Health* 2007;52(1):27-38.
- 179 Balthasar H, Jeannin A, Dubois-Arber F. First anal intercourse among men who have sex with men in Switzerland. *Arch Sex Behav* 2008; in press.
- 180 Moreau-Gruet F, Dubois-Arber F, Jeannin A. Long-term HIV/AIDS-related prevention behaviours among men having sex with men: Switzerland 1992-2000. *AIDS Care* 2006;18(1):35-43.
- 181 Moreau-Gruet F, Jeannin A, Dubois-Arber F, Spencer B. Management of the risk of HIV infection in male homosexual couples. *AIDS* 2001;15(8):1025-35.
- 182 Wang J, Häusermann M, Vounatsou P, Aggleton P, Weiss MG. Health status, behavior, and care utilization in the Geneva Gay Men's Health Survey. *Prev Med* 2007;44(1):70-5.
- 183 Hickson FC, Reid DS, Davies PM, Weatherburn P, Beardsell S, Keogh PG. No aggregate change in homosexual HIV risk behaviour among gay men attending the Gay Pride festivals, United Kingdom, 1993-1995. *AIDS* 1996;10(7):771-4.
- 184 Williamson LM, Dodds JP, Mercey DE, Hart GJ, Johnson AM. Sexual risk behaviour and knowledge of HIV status among community samples of gay men in the UK. *AIDS* 2008;22(9):1063-70.
- 185 Dodds JP, Johnson AM, Parry JV, Mercey DE. A tale of three cities: persisting high HIV prevalence, risk behaviour and undiagnosed infection in community samples of men who have sex with men.. *Sex Transm Infect* 2007;83(5):392-6. [erratum appears in *Sex Transm Infect*. 2007 Oct;83(6):500].
- 186 Dodds JP, Mercey DE, Parry JV, Johnson AM. Increasing risk behaviour and high levels of undiagnosed HIV infection in a community sample of homosexual men. *Sex Transm Infect* 2004;80(3):236-40.
- 187 Elford J, Bolding G, Sherr L, Hart G. No evidence of an increase in serosorting with casual partners among HIV-negative gay men in London, 1998-2005. *AIDS* 2007;21(2):243-5.
- 188 Elford J, Bolding G, Sherr L, Hart G. High-risk sexual behaviour among London gay men: no longer increasing. *AIDS* 2005;19(18):2171-4.
- 189 Elford J, Bolding G, Davis M, Sherr L, Hart G. Trends in sexual behaviour among London homosexual men 1998-2003: implications for HIV prevention and sexual health promotion. *Sex Transm Infect* 2004;80(6):451-4.
- 190 Elford J, Bolding G, Sherr L. High-risk sexual behaviour increases among London gay men between 1998 and 2001: what is the role of HIV optimism? *AIDS* 2002;16(11):1537-44.

- 191 Williamson LM, Hart GJ. HIV prevalence and undiagnosed infection among a community sample of gay men in Scotland. *J Acquir Immune Defic Syndr* 2007;45(2):224-30.
- 192 Hart GJ, Flowers P, Der GJ, Frankis JS. Homosexual men's HIV related sexual risk behaviour in Scotland. *Sex Transm Infect* 1999;75(4):242-6.
- 193 Hart GJ, Williamson LM, Flowers P, Frankis JS, Der GJ. Gay men's HIV testing behaviour in Scotland. *AIDS Care* 2002;14(5):665-74.
- 194 Hart GJ, Williamson LM. Increase in HIV sexual risk behaviour in homosexual men in Scotland, 1996-2002: prevention failure? *Sex Transm Infect* 2005;81(5):367-72.
- 195 Barette M, Piette D, & al. Recherche-action: SIDA et jeunes Congolais en communauté française de Belgique. *Recherche-Action Prévention SIDA* 1997;(numéro spécial):1-31.
- 196 Shiripinda I, Tempert B. Care2Talk about Sex?! Research on the sexual health of HIV positive heterosexuals from black and minority ethnic backgrounds in the Netherlands. Amsterdam: STI AIDS Netherlands (Soa Aids Nederland); 2006.
- 197 Azough R, Poelman J, Meijer S. Young people, sex and Islam: an investigation into Dutch young people of Moroccan and Turkish descent. Amsterdam: Soa Aids Nederland; 2008. Available at URL: [www.aidsactioneurope.org/uploads/tx\\_windpublications/874-0.pdf](http://www.aidsactioneurope.org/uploads/tx_windpublications/874-0.pdf).
- 198 Office fédéral de la santé publique (OFSP). Qu'est-ce qu'on sait de l'état de santé des populations migrantes? Les principaux résultats du monitoring de l'état de santé de la population migrante en Suisse. Berne: Office fédéral de la santé publique (OFSP); 2007. Available at URL: [www.bag.admin.ch/shop/00038/00242/index.html?lang=fr](http://www.bag.admin.ch/shop/00038/00242/index.html?lang=fr).
- 199 Haour-Knipe M, Fleury F, Dubois-Arber F. HIV/AIDS prevention for migrants and ethnic minorities: three phases of evaluation. *Soc Sci Med* 1999;49(10):1357-72.
- 200 Dodds C, Hickson F, Weatherburn P, Reid D, Hammond G, Jessup K, et al. BASS Line 2007 survey: assessing the sexual HIV prevention needs of African people in England. London: Sigma Research; 2008. Available at URL: [www.sigmaresearch.org.uk](http://www.sigmaresearch.org.uk).
- 201 Fenton KA, Chinouya M, Davidson O, Copas A, MAYISHA study team. HIV testing and high risk sexual behaviour among London's migrant African communities: a participatory research study. *Sex Transm Infect* 2002;78(4):241-5.
- 202 Sadler KE, McGarrigle CA, Elam G, Ssanyu-Sseruma W, Othieno G, Davidson O, et al. Mayisha II: pilot of a community-based survey of sexual attitudes and lifestyles and anonymous HIV testing within African communities in London. *AIDS Care* 2006;18(4):398-403.
- 203 Sadler KE, McGarrigle CA, Elam G, Ssanyu-Sseruma W, Davidson O, Nichols T, et al. Sexual behaviour and HIV infection in black-Africans in England: results from the Mayisha II survey of sexual attitudes and lifestyles. *Sex Transm Infect* 2007;83(7):523-9.
- 204 Fenton KA, Mercer CH, McManus S, Erens B, Wellings K, Macdowall W, et al. Ethnic variations in sexual behaviour in Great Britain and risk of sexually transmitted infections: a probability survey. *Lancet* 2005;365(9466):1246-55.
- 205 Coleman L, Testa A. Sexual health beliefs, attitudes and perceptions among black and minority ethnic youth. *Education and Health* 2008;26(2):32-6. Available at: URL: [www.sheu.org.uk/publications/eh/eh262cat.pdf](http://www.sheu.org.uk/publications/eh/eh262cat.pdf).
- 206 Belza MJ. Risk of HIV infection among male sex workers in Spain. *Sex Transm Infect* 2005;81(1):85-8.
- 207 Zaro I, Rojas D, Navazo T. Trabajadoras transexuales del sexo:el doble stigma. Madrid: Ministerio de Sanidad y Consumo; 2009.
- 208 Jeannin A, Rousson V, Meystre-Agustoni G, Dubois-Arber F. Evolution of lifetime recourse to prostitution among men in the general population of Switzerland, 1987-2000. *Sex Transm Infect* 2008 [Epub ahead of print].
- 209 Balthasar H, Jeannin A, Dubois-Arber F. Surveillance des comportements face au VIH/sida chez les hommes ayant des rapports sexuels avec des hommes en Suisse, 1992-2004 [Surveillance of HIV/AIDS-related behaviors among men who have sex with men: Switzerland, 1992-2004]. *Int J Pub Health* 2007;52(1):27-38.
- 210 Ward H, Day S, Weber J. Risky business: health and safety in the sex industry over a 9 year period. *Sex Transm Infect* 1999;75(5):340-3.
- 211 Ward H, Day S. What happens to women who sell sex? Report of a unique occupational cohort. *Sex Transm Infect* 2006;82(5):413-7.
- 212 RIVM National Institute for Public Health and the Environment. Annual report 2007. Bilthoven: The Institute; 2008. Available at URL: [www.rivm.nl/cib/themas/soa](http://www.rivm.nl/cib/themas/soa).

## 8 Appendix 1 Overview of HIV/STI related behavioural data collected in Europe

Table 8.1 General population

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No											
<b>Belgium</b>	Yes	General Health Survey	National health interview survey – Belgium	1997 2001 2004 2008	Yes 2008	General population aged 15 and more	Repeated cross-sectional	(?)	Face-to-face interview	10 000	National	<a href="http://www.iph.fgov.be/epidemio/epifr/index4.htm">www.iph.fgov.be/epidemio/epifr/index4.htm</a>
<b>Belgium</b>	Yes	Cause of infection study	Epidemiology of AIDS and HIV-infected in Belgium	1985-2007	Yes 2008	AIDS reference Centres	Repeated cross-sectional	AIDS reference centres	Other		National	<a href="http://www.iph.fgov.be/epidemio/epini/index0000.htm">www.iph.fgov.be/epidemio/epini/index0000.htm</a>
<b>Belgium</b>	Yes	Cause of infection study	STI surveillance system by means of a network of clinicians in Belgium	2000-2005	Yes	Clinicians	Repeated cross-sectional	Clinicians	Paper questionnaire	50	National	<a href="http://www.iph.fgov.be/epidemio/epini/index0000.htm">www.iph.fgov.be/epidemio/epini/index0000.htm</a>
<b>Belgium</b>	Yes	Cause of infection study	SIDSIDA	2005 2006 2007	No	HIV testing centres attenders	Other (specify in comment)	HIV testing centres	Paper questionnaire	2 500	Regional	Routine data collection in 5 HIV testing centres
<b>Bulgaria</b>												

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Cyprus</b>	Yes	KABP study	Study on the knowledge, attitudes and behaviour regarding AIDS, sex and sexually transmitted diseases	2000–2001	No	Cypriots and foreigners aged 18–50 years residing in the Limassol district for 3 months or more	Other (specify in comment)	Household	Telephone interview	504	Regional	Done once as cross sectional pilot study that was later implemented in the whole population
<b>Cyprus</b>	Yes	KABP study	National household survey on the knowledge, attitudes and behaviour regarding AIDS and sex	2006–2007	No	Cypriots and foreigners aged 18–50 years living in each community for 3 months or more	Other (specify in comment)	Household	Paper questionnaire	1 218	National	Questionnaire filled by participant anonymously and placed in sealed box
<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Denmark</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Estonia</b>	Yes	Health behaviour study	Health behaviour among Estonian adult population	Every second year starting from 1990 HIV questions added starting from 2000	Yes, 2008	General population aged 16–64	Repeated cross-sectional	Household	Paper questionnaire	3 000	National	<a href="http://www2.tai.ee/uuringud/TKU2006.pdf">www2.tai.ee/uuringud/TKU2006.pdf</a>

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Estonia</b>	Yes	Population survey (?)	Population survey	After every 5 years starting from 1998, drug and HIV questions added from 2003	Yes, 2008	General population aged 15-69	Repeated cross-sectional	Household	Paper questionnaire	1 900	National	<a href="http://www2.tai.ee/uuringud/TKU2006.pdf">www2.tai.ee/uuringud/TKU2006.pdf</a>
<b>Finland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>France</b>	Yes	KABP study	KABP	1990 1992 1994 1998 2004[121-124]	Yes, 2010	General population, aged 18-69	Repeated cross-sectional	Household (?)	Telephone interview	2 500	National	<a href="http://www.ors-idf.org/etudes/pdf/Rapport_KABP_FR_2004.pdf">www.ors-idf.org/etudes/pdf/Rapport_KABP_FR_2004.pdf</a>
<b>France</b>	Yes	KABP study	KABP	2001[122,125,126]	No	General population, aged 18-54	Repeated cross-sectional	Household (?)	Telephone interview	2 635	National	<a href="http://www.ors-idf.org/etudes/pdf/Rapport_KABP_FR_2004.pdf">www.ors-idf.org/etudes/pdf/Rapport_KABP_FR_2004.pdf</a>
<b>France</b>	Yes	Multi-thematic study	Baromètre santé	2000 2005[127]	Yes, 2010	General population aged 12-75	Repeated cross-sectional	Household (?)	Telephone interview	13 685 in 2000 30 514 in 2005	National	Multithematic study Some questions on sexual behaviour and contraception <a href="http://www.inpes.sante.fr/">www.inpes.sante.fr/</a>
<b>France</b>	Yes	(?)	CSF	2006	(?)	General population aged 18-69	(?)	Household (?)	Telephone interview	12 364	National	Premiers résultats de l'enquête CSF: contexte de la sexualité en France [Dossier de presse]. Paris: ANRS, INSERM, INED; 2007.
<b>France</b>	Yes	(?)	ACSF	1992	(?)	General population aged 18-69	(?)	Household (?)	Telephone interview	20 055	National	ACSF Investigators. AIDS and sexual behaviour in France. Nature 1992;360(6403):407-9.
<b>Germany</b>	Yes	AIDS awareness study	Public awareness of AIDS	Since 1991 annual[128-130]	Yes, 2008	General population 16 years and older	Repeated cross-sectional	Household (?)	Telephone interview	5 000 (1992) - 7 000 (2007)	National	Germany



General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Germany</b>	Yes	AIDS awareness study	Public awareness of AIDS	1987–1990	No	General population 16 years and older	Repeated cross-sectional	Household (?)	Telephone interview	2 000	National	West-Germany
<b>Greece</b>	Yes	Study for UNGASS country report (?)	UNGASS country report 2008	2007	Yes, 2009	General population	Repeated cross-sectional	Convenience sample	Paper questionnaire	700	National	<a href="http://www.keel.org.gr">www.keel.org.gr</a>
<b>Hungary</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Iceland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Ireland</b>	No	Sexuality survey	Irish study of sexual health and relationships (ISSHR)	2004[131-135]	No	General population aged 18–64 years	Cross-sectional	Household	CATI	7 441	National	It is hoped to repeat this survey, but nothing is planned
<b>Ireland</b>	No	Survey to elicit baseline data with the focus on crisis pregnancy	Irish contraception and crisis pregnancy (ICCP) study	2004[136]	No	18–45 general population	Cross-sectional	Household	Telephone interview	3 317	National	Survey to elicit baseline data with the focus on crisis pregnancy
<b>Ireland</b>	No	General Health survey	Sexual health of the Irish adult population: findings from Slán	2004[137]	No	18–50 general population	Other (specified in comment)	–	Paper questionnaire	4 000	National	Slán is a national survey of general health conducted 1998, 2002 and 2007; only a small number of items pertain to sexual health. In 2004 the CPA commissioned a more in depth analysis than was available in the published reports, of findings from both the 1998 and 2002 surveys combined

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Ireland</b>	No	Study on women of childbearing age (contraception etc.)	Women and healthcare in Ireland	1996	No	Females	Repeated cross-sectional	-	Telephone interview	-	National	No copy of this report at hand but believe it was a survey of 2 000 women of childbearing age and was one of the first done in Ireland that addressed sex and contraception
<b>Italy</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Latvia</b>	No	Population survey on addictive substances	Population survey on addictive substances	2003 2007	No	General population aged 15-64	Repeated cross-sectional	Household (?)	Face-to-face interview	4500	National	Instrument: EMQ – European Model Questionnaire; EMCDDA, 2002
<b>Latvia</b>	No	Reproductive Health and Behaviour study	On reproductive health and behaviour	1997	No	General Population	Repeated cross-sectional	Household (?)	Other (for females, face-to-face interviews, for males; paper questionnaires – filled in by themselves)	4 568	National	Survey sponsored by UNFPA Research coordinator Latvia's Association for Family Planning and Sexual Health 'Papardes ziedis'
<b>Latvia</b>	No	Reproductive Health and Behaviour study	Reproductive health of inhabitants	2003	No	General Population	Repeated cross-sectional	-	Face-to-face interview	2 452	National	Survey sponsored by UNFPA Research coordinator - Latvia's Association for Family Planning and Sexual Health 'Papardes ziedis'
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	No	Survey of tolerance to PHLWA	Survey of tolerance to PHLWA	1990, 1997, 1999, 2003, 2005 <sup>1</sup>	No	General	Repeated cross-sectional	Household (?)	Face-to-face interview	1 000	National	Repeated data collection <a href="http://www.iasociety.org">www.iasociety.org</a> <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a>

<sup>1</sup> Caplinskiene I. Lithuanian population's tolerance towards vulnerable groups. 15th International AIDS Conference, Bangkok, 11-16 Jul 2004. Abstract book, vol 1 p522.  
Caplinskiene I. Attitudes of Lithuanian population towards HIV/AIDS. 2nd Open Europe AIDS Conference 'Europe and HIV/AIDS: new challenges, new opportunities', Vilnius, 16-18 Sept 2004. Abstract book (ISBN 9986-720-16-8) p58.

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Lithuania</b>	No	Survey of tolerance to PHLWA (healthcare workers)	Survey of tolerance to PHLWA	1990, 1993, 1996, 1998 <sup>2</sup>	No	Healthcare workers	Repeated cross-sectional	Household (?)	Paper questionnaire	500–1 500	National	Repeated data collection <a href="http://www.iasociety.org">www.iasociety.org</a> <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a>
<b>Lithuania</b>	No	Survey on knowledge, attitudes and information sources regarding HIV/AIDS	National survey on knowledge, attitudes and information sources regarding HIV/AIDS	2003 <sup>3</sup>	Yes, 2009	General	Repeated cross-sectional	Household (?)	Face-to-face interview	1 001	National	Repeated data collection <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a> <a href="http://www.iasociety.org/Default.aspx?pageId=11&amp;abstractId=2172378">www.iasociety.org/Default.aspx?pageId=11&amp;abstractId=2172378</a>
<b>Lithuania</b>	No	Survey of public attitude to HIV/AIDS	Survey of public attitude to HIV/AIDS	1990, 1999 <sup>4</sup>	Yes, 2009	General	Repeated cross-sectional	Household (?)	Paper questionnaire	100–300	Regional	Repeated data collection <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a>

<sup>2</sup> Rakickiene J, Zimush S, Barkovska T, Pimpiene O, Trechiokas A, Chaplinskas S. Medical workers' attitude to HIV infection and to the patients. HIV infection and AIDS in countries of Central and Eastern Europe: European conference on methods and results of psycho-social AIDS research AIDS in Europe the behavioural aspect', Berlin, 25-29 September 1994. Abstract:– St. Petersburg: Pasteur institute, 1994. p15.

Rakickiene J, Zimush S, Barkovska T, Pimpiene O, Trechiokas A, Chaplinskas S. Medical workers' attitude to HIV infection and patients. 'AIDS in Europe – the behavioural aspect' conference, Berlin, 26-29 September 1994. Abstract – Berlin: Ed. Sigma, 1995. vol. 5, p 227-228.

Rakickiene J, Zimush S, Barkovska T, Pimpiene O, Trechiokas A, Chaplinskas S. Healthcare workers attitude changes to HIV infection. East and Central Europe Congress 'Ten years with AIDS', the evaluation of best practice in HIV/AIDS and STI prevention, Vilnius, 3-4 June 1999. Abstracts – Vilnius, 1999, p 43.

Chaplinskas S, Krupenkaitė R. AIDS prevention in Lithuania. Vilnius: Lithuanian AIDS Centre, 1995; p 40 (ISBN 9986-720-01-X).

Rakickiene J, Zimush S, Barkovska T, Pimpiene O, Trechiokas A, Chaplinskas S. Medical workers' attitudes to HIV infection and its patients. Збірник тез першої національної науково-практичної конференції з проблем ВІЛ/СНІД з міжнародною участю, Київ, Січня 24-26, 1995. Abstract – [Київ, 1995] С. 32-33.

<sup>3</sup> Caplinskiene I. National survey on knowledge, attitudes and information sources regarding HIV/AIDS. 15th International AIDS Conference, Bangkok, 11-16 Jul 2004. Abstract – vol 2, Bangkok, 2004; p 499.

Caplinskiene I. HIV knowledge and information sources of Lithuanian population. 3rd Baltic Region Conference 'Together against AIDS!'. Riga, Latvia, 11-13 Sept 2003. Abstract – Riga, 2003; p 30.

<sup>4</sup> Stonienė L, Čaplinskas S. Lietuvos visuomenės požiūris į AIDS problemą palyginimas. Tarptautinis kongresas 'Narkomanija ir AIDS – vienykime atsaką'. rugsėjo 19 d. Vilnius, 2000: pranešimų tezės. – ISBN 9986-720-06-0. Vilnius: Lietuvos AIDS centro leidykla, 2000; p 39.

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Lithuania</b>	No	Knowledge on HIV/AIDS and risky behaviour study	Knowledge on HIV/AIDS and risky behaviour assessment in uniformed personnel of Lithuania	2005 <sup>5</sup>	No	Uniformed personnel	Repeated cross-sectional	Institutions	Paper questionnaire	248	Regional	Repeated data collection www.iasociety.org/Default.aspx?pageId=11&abstractId=200704550 www.aids.it/publik.php www.aidsconference.spb.ru/conf_program/2007eng.pdf
<b>Lithuania</b>	No	Lithuanian AIDS centre	Survey on knowledge regarding HIV/AIDS	1990 <sup>6</sup>	No	General	Other (specify in comment)	Venue-based (?)	Telephone interview	514	Local	Kaunas and Vilnius regions Kaunas University of medicine Lithuanian AIDS centre www.aids.it/publik.php www.aids.it
<b>Lithuania</b>	No	KAB study	Survey on knowledge, attitude and behaviour regarding HIV/AIDS	2002 <sup>7</sup>	No	General	Other (specify in comment)	Internet	Internet questionnaire	132	National	www.aids.it/publik.php www.aidsconference.spb.ru/conf_program/2002eng.pdf

<sup>5</sup> Caplinskas S, Caplinskiene I, Stoniene L. Assessment of risky sexual behaviour in uniformed personnel of Lithuania. Russian journal 'HIV/AIDS and public health: 16th International conference : HIV/AIDS and public health', Saint Petersburg, 28 May-1 June 2007. Abstracts – 2007, 11(1);p 108-109.

Caplinskas S, Caplinskiene I. Knowledge on HIV/AIDS assessment in uniformed personnel of Lithuania. Hannover, 2007 – CDC090 – 4th IAS conference on HIV pathogenesis, treatment and prevention, Sydney, 22-29 July 2007. [www.pharmaservice.de](http://www.pharmaservice.de).

<sup>6</sup> Stonienė L, Čaplinskas S. Lietuvos visuomenės požiūris į AIDS problemą palyginimas. Tarptautinis kongresas 'Narkomanija ir AIDS – vienykime atsaką', rugsėjo 19 d. Vilnius, 2000: pranešimų tezės – ISBN 9986-720-06-0. Vilnius: Lietuvos AIDS centro leidykla, 2000; p 39.

<sup>7</sup> Mazonaitė P, Čaplinskas S, Stonienė L. The project 'You to me vs. me to you'. Russian journal 'HIV/AIDS and related problems': 10th International conference: 'HIV/AIDS and related problems', Saint Petersburg, 26-31 May 2002. Abstract – 2002, 6(1); p 73-74.

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Lithuania</b>	No	Awareness of prevention activities	Awareness of prevention activities	2003 <sup>8</sup>	No	School teachers	Other (specified in comment)	Schools	Paper questionnaire	27	Local	Time/place sampling, pre- and post-project <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a> <a href="http://www.iasociety.org/Default.aspx?pageId=11&amp;abstractId=8025">www.iasociety.org/Default.aspx?pageId=11&amp;abstractId=8025</a>
<b>Lithuania</b>	No	HIV/AIDS and drug situational analysis	The evaluation of HIV/AIDS and drug situational analysis in municipalities	2003 <sup>9</sup>	No	Municipality specialists	Other (specified in comment)	Internet	Internet questionnaire	66	Regional	5 municipalities (Vilnius, Marijampole, Visaginas, Alytus, Druskininkai) <a href="http://www.aids.lt/publik.php">www.aids.lt/publik.php</a>
<b>Lithuania</b>	No	(?)	AIDS prevention	2005[138]	No	General	Repeated cross-sectional	Household (?)	Face-to-face interview	1 002	National	Repeated data collection <a href="http://ec.europa.eu/health/ph_publicati on/eb_aids_en.pdf">ec.europa.eu/health/ph_publicati on/eb_aids_en.pdf</a>
<b>Lithuania</b>	No	KAB study	National survey on knowledge, attitudes and information sources regarding HIV/AIDS	2009	No	General	Repeated cross-sectional	Household (?)	Face-to-face interview	1 000	National	-
<b>Luxembourg</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Malta</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Netherlands</b>	Yes	Survey on sexual health	Sexual health in the Netherlands	2006	(?)	General	Repeated cross-sectional	Household	Telephone interview	4 100	National	Representative sample of the Dutch general population. Second survey (first one in 1991)

<sup>8</sup> Stoniene L, Caplinskas S. Input methodological programmes in formation of attitude to HIV/AIDS. 2nd open Europe AIDS conference 'Europe and HIV/AIDS: new challenges, new opportunities', Vilnius, 16-18 September 2004. Abstract (ISBN 9986-720-16-8) Vilnius: Publishing house of the Lithuanian AIDS centre, 2004; p 67.

Stoniene L. Arrangement of methodological material for educational institutions. Print Only: The XIV International AIDS Conference, abstract no. F11926. Barcelona, 2002.

<sup>9</sup> Caplinskas S. The evaluation of HIV/AIDS and drug use situational analysis in municipalities. 2nd open Europe AIDS conference 'Europe and HIV/AIDS: new challenges, new opportunities', Vilnius, 16-18 September 2004. Abstract (ISBN 9986-720-16-8) Vilnius: Publishing house of the Lithuanian AIDS centre, 2004; p 57-58.

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Norway</b>	Yes	Survey on Sexual behaviour (?)	Seksualvaneundersøkelsen 1987	1987, 1992, 1997, 2002	Yes, 2008	General population 18–60 years of age	Repeated cross-sectional	Household (?)	Paper questionnaire	10 000 – 100 000	National	–
<b>Poland</b>	Yes	Psychoactive substances: Attitudes and behaviours	Substancje psychoaktywne Postawy i zachowania. (psychoactive substances: attitudes and behaviours". general population survey)	2002[139] 2006[140]	Yes, 2010	General population 15–64	Repeated cross-sectional	(?)	Face-to-face interview	2 500	National	<a href="http://www.narkomania.gov.pl/">www.narkomania.gov.pl/</a>
<b>Poland</b>	Yes	–	VCT centers annual survey	Since 2001[141]	–	Clients of VCT centres	Repeated cross-sectional	–	Face-to-face interview	11 185	National	Includes face-to-face interview and paper-based self-administered questionnaire. Sample size based on total number of HIV tests conducted in VCT centres in 2001–2007. The study report is available only in Polish version <a href="http://www.aids.gov.pl">www.aids.gov.pl</a>
<b>Poland</b>	Yes	Evaluation of multimedia campaign	Annual study of the effectiveness of the national multimedia campaigns against HIV/AIDS in Poland	Since 2004	Ongoing	General population	Repeated cross-sectional	–	Face-to-face interview	1 200	National	Target age groups and indicators are not all repeated in all surveys. The study report is available only in Polish version <a href="http://www.aids.gov.pl">www.aids.gov.pl</a>
<b>Poland</b>	Yes	–	Study on knowledge of Poles on HIV/AIDS and sexual behaviour	2005	–	General population aged 15–49	Repeated cross-sectional	–	Face-to-face interview	3 200	National	Izdebski Z. Study on knowledge of Poles on HIV/AIDS and sexual behaviour, 2005. Study commissioned by the National AIDS Centre, conducted by TNS-OBOP

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Portugal</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Romania</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Slovenia</b>	No	Sexual Lifestyles, Attitudes and Health Survey	Slovenian national sexual lifestyles, attitudes and health survey	2000[142-146]	No	General population 18-49 years old	Cross-sectional	Household (?)	Other	1 752	National	The data were collected in 1999-2001
<b>Spain</b>	Yes	Health and Sexual Behaviour Survey (HSBS)	Health and sexual Behaviour survey (HSBS)	2003[147]	Yes, date unknown	General population aged 18-49 years	Repeated cross-sectional	(?)	Other	(?)	National	Computer- assisted self interview most of the questionnaires <a href="http://www.ine.es/prodyser/pubwebweb/saludyhs03/saludyhs03.htm">www.ine.es/prodyser/pubwebweb/saludyhs03/saludyhs03.htm</a>
<b>Sweden</b>	Yes	KABP study	Swedish KABP survey	1986 1987 1988 1989 1994 1997 2000 2003 2007	Yes, 2011	16-44 yrs	Repeated cross-sectional	Household (?)	Paper questionnaire	40 000	National	-
<b>Switzerland</b>	Yes	AIDS prevention study	EPSS (Enquête téléphonique périodique sur la Prévention du Sida en Suisse)	January 1987 October 1987 1988[148]	-	General population aged 17-30 living in Switzerland	Repeated cross-sectional	Household	Telephone interview	1 200	National	Some parts of country not included
<b>Switzerland</b>	Yes	AIDS prevention study	EPSS (Enquête téléphonique périodique sur la Prévention du Sida en Suisse)	1989, 1990, 1991, 1992, 1994, 1997, 2000[148,149], 2007	Yes	General population aged 17-45 living in Switzerland	Repeated cross-sectional	Household	Telephone interview	2 800	National	Planned to be repeated if the AIDS module is not included in the next wave of the ESS survey <a href="http://www.lumsp.ch">www.lumsp.ch</a>

General population												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Switzerland</b>	Yes	General Health survey	ESS (Enquête Suisse sur la santé / Swiss Health Survey)	2007[150]	Yes, 2012 (?)	General population aged 17 or more living in Switzerland	Repeated cross-sectional	Household	Telephone interview	18 700	National	No assurance that the AIDS module will be included again in the 2012 wave <a href="http://www.bfs.admin.ch/bfs/portal/en/index/news/publikationen.Document.112191.pdf">www.bfs.admin.ch/bfs/portal/en/index/news/publikationen.Document.112191.pdf</a>
<b>UK</b>	Yes	Survey on Sexual Attitudes and Lifestyles (NATSAL)	National survey Sexual attitudes and lifestyles (NATSAL)	1990, 2000[151-157]	Yes, 2010	General population with different age limits by year of survey	Repeated cross-sectional	Household (?)	Face-to-face interview	11 000	National	Survey representative of Britain
<b>UK</b>	Yes	General Health survey with sexual health module	Omnibus survey	1997[58]	(?)	General population 16+ Upper age limit varies by sex and wave of survey	Repeated cross-sectional	Household (?)	Face-to-face interview	3 000	National	Sexual health module included in regular surveys of the general population conducted by the Omnibus survey <a href="http://www.statistics.gov.uk/downloads/theme_health/contraception2006-07.pdf">www.statistics.gov.uk/downloads/theme_health/contraception2006-07.pdf</a>
<b>UK</b>	Yes	(?)	Ipsos Mori	2000, 2005[159], 2007[160]	(?)	General population 16+	Repeated cross-sectional	(?)	Face-to-face interview	2 000	National	Survey representative of the UK
<b>UK</b>	Yes	General Household survey (GHS)	General household survey (GHS)	1983-1997[161]	(?)	General population	Repeated cross-sectional	Household (?)	Face-to-face interview	-	National	-



Table 8.2 Young people<sup>10</sup>

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No											
<b>Belgium</b>	Yes	General health survey	Health Interview Survey (HIS)	1997–2001 2004–2008	Yes	15+ (15–24)	Repeated cross-sectional survey	Household	Face-to-face interview	1 000	National	<a href="http://www.iph.fgov.be/epidemiologie/crospfr/hisfr/table04.htm">www.iph.fgov.be/epidemiologie/crospfr/hisfr/table04.htm</a>
<b>Belgium</b>	–	General health survey	HBSC (Health Behaviour of School Children)	1986 1988 1990 1992 1994 1998 2002 2006	Yes, 2010	Secondary school children	Cluster sample	School classes	Paper questionnaire	13 200	National	Conducted separately in the two linguistic regions
<b>Bulgaria</b>	–											
<b>Cyprus</b>	Yes	Survey	Evaluation of the peer education programme on AIDS and sex in schools	2005–2008	Yearly	Secondary school students	Repeated cross-sectional survey	Public secondary school	Paper questionnaire	1 400	National	Conducted before and after the sessions
<b>Czech Republic</b>	No											
<b>Denmark</b>	No											
<b>Estonia</b>	Yes	KABP	HIV related knowledge, attitudes and behaviour among Estonian youth	2003 2005 2007	Yes, 2010	10–29	Repeated cross-sectional survey	Random sample of schools and classes (10–18), random sample (19–29)	Paper questionnaire	4 300– 7 600	National	<a href="http://www.tai.ee/failid/Youth_HIV_study_2005.pdf">www.tai.ee/failid/Youth_HIV_study_2005.pdf</a>

<sup>10</sup> Mentioned in this table are the main studies considered as relevant for behavioural surveillance. Other one-off, regional or local studies, as well as qualitative studies, are not included here.

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Estonia</b>	Yes	KABP	Idem	2003 2005 2007	Yes 2009	19–29	Repeated cross-sectional survey	Random sample	Mail questionnaire	See above	National	–
<b>Finland</b>	Yes	General health survey	School Health Survey	1995–2008	Yes, 2009	Secondary school and high school classes 8, 9 and 10, age 13–19	Cluster sample	School classes	Paper questionnaire	75 000	National	Alternating years, 50% regional coverage
<b>France</b>	No (not specific)	General health survey	Baromètre santé[127]	2000 2005	Yes, 2010	General population aged 12–75 (15–19)	Cross-sectional survey	Household	CATI	13 685 in 2000; 30 514 in 2005	National	Multi-thematic study. Young people aged 15–19, as subgroup of the general population
<b>France</b>	No (not specific)	General health survey	Baromètre santé jeunes	1997	–	12–19	Cross-sectional	Household	CATI	4 115	National	Youth sample included in the general population survey since 2000 (see above)
<b>France</b>	No (not specific)	Sexuality study	Analyse sur le comportement sexuel des jeunes (ACSJ)	1994	–	15–18	Cross-sectional	Cluster sample of school classes. Upper secondary schools (general and vocational)	Paper questionnaire	6 182	National	Presented to pupils by the research team
<b>France</b>	No (not specific)	Drug questionnaire	ESPAD	2003	–	12–19	Cross-sectional	Cluster sample of school classes Middle and Upper secondary schools (general and vocational)	Paper questionnaire	16 833	National	Module (more than 30 questions) added. Presented to pupils by a nurse or a school doctor

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Germany</b>	Yes	KABP[128-130]	Public awareness of AIDS	2007	Yes, 2008 (annual)	General population subgroup 16-20	Cross-sectional	Household	CATI	2 000	National	General population of Germany aged 16-20 as subgroup
<b>Germany</b>	Yes	KABP	Public awareness of AIDS	1994-2006	-	General population subgroup 16-20	Cross-sectional	Household	CATI	400	National	General population of Germany aged 16-20 as subgroup
<b>Germany</b>	Yes	KABP	Public awareness of AIDS	1987-1993	-	General population subgroup 16-20	Cross-sectional	Household	CATI	150-200	Western Germany	General population of Germany aged 16-20 as subgroup
<b>Germany</b>	Yes	KABP	Public awareness of AIDS	1991-1993	-	General population subgroup 16-20	Cross-sectional	-	Face-to-face interview	80-200	Eastern Germany	General population of Germany aged 16-20 as subgroup
<b>Greece</b>	No	KABP	UNGASS REPORT 2008	-	Yes, 2009	15-24?	-	-	Paper questionnaire	700	-	Behaviour survey. Started in 2008 (UNGASS reporting)
<b>Hungary</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Iceland</b>	No	General health survey	HBSC	2006	Yes, 2010	15	Cohort	-	Paper questionnaire	4 000	National	All students surveyed
<b>Iceland</b>	No	Drug questionnaire	ESPAD	1995, 1999, 2003, 2007	Yes, 2011	15	Cohort	-	Paper questionnaire	4 000	National	All students surveyed
<b>Iceland</b>	No	KABP	Attitudes and knowledge on sexual matters	2001-05-06	-	16	Cross-sectional	Cluster sample of school classes	Paper questionnaire	200-400	Regional (2 main towns)	-
<b>Ireland</b>	No	Sexuality survey	Irish Study of sexual health and relationships (ISSHR)[131]	2004	No	General population aged 18-64 years	Cross-sectional	Household	CATI	7 441	National	Young people aged 18-24, as subgroup, survey hoped to be repeated

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Ireland</b>	No	-	College Lifestyle and Attitudinal National (CLAN) survey	2002	-	College students aged 17+	Cross-sectional	Purposive sampling	Paper questionnaire	3 259	National	Several other one-off local or regional surveys
<b>Italy</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Latvia</b>	No	General health survey	HBSC	1990, 1994, 1998, 2002, 2006	Yes, 2010	11-13-15	Cohort	School classes	Paper questionnaire	4 000	National	Questionnaire on sexuality only to 15-year-olds
<b>Latvia</b>	-	Drug questionnaire	ESPAD	2003, 2007	Yes, 2011	15	Cohort	-	Paper questionnaire	10 000	National	Special Laspad study
<b>Latvia</b>	No	-	Overview on the reproductive health in Kuldīga and Ludza	2004	-	Secondary and vocational school students	-	Cluster sample of school classes	-	3 639	National	WHO survey
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	Yes	General health survey	HBSC	1994, 1998, 2002, 2006	Yes, 2010	Secondary school students	Repeated cross-sectional	School classes	Paper questionnaire	3 700	National	-
<b>Lithuania</b>	Yes	Drug questionnaire	ESPAD	1995, 1999, 2003, 2007	Yes, 2011	15	Repeated cross-sectional	School classes	Paper questionnaire	3 200-5 000	National	-
<b>Lithuania</b>	Yes	-	ECAD survey youth in Europe	2007	-	School youth	Cross-sectional	School classes	Paper questionnaire	4 799	Regional	Knowledge about AIDS prevention



Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Poland</b>	Yes	-	Study of the effectiveness of the national multimedia campaigns against HIV/AIDS in Poland	2006	-	General population aged 13-18, parents of teenagers aged 13-18	Cross-sectional	-	Face-to-face interview	614	National	-
<b>Poland</b>	Yes	Drug consume questionnaire	ESPAD	1995, 1999, 2003, 2007	Yes, 2011	15-18	Repeated cross-sectional	School classes	Paper questionnaire	8 000	National	<a href="http://www.narkomania.gov.pl/">www.narkomania.gov.pl/</a>
<b>Portugal</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Romania</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Slovenia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Spain</b>	Yes	-	HBSC	1986, 1990, 1994, 1998, 2002, 2006	-	School Population aged 11-18	Repeated cross-sectional	School classes	Paper questionnaire	21 811	National	-
<b>Spain</b>	Yes	General multi-thematic survey	Youth in Spain report (INJUVE)	1996, 2000, 2004, 2008	-	General population aged 15-29	Repeated cross-sectional	Representative sample	Face to face	5 014	National	<a href="http://www.injuve.mtas.es/injuve/contenidos.item.action?id=1729623244&amp;menuId=1627100828">www.injuve.mtas.es/injuve/contenidos.item.action?id=1729623244&amp;menuId=1627100828</a>
<b>Spain</b>	Yes	Drug consume questionnaire	National Survey of Drug use on School Population (ESTUDES)	1994, 1996, 1998, 2000, 2002, 2004, 2006	-	School population aged 14-18	Repeated cross-sectional	School classes	Paper questionnaire	26 454	National	<a href="http://www.pnsd.msc.es/Categoria2/observa/pdf/Estudes2006.pdf">www.pnsd.msc.es/Categoria2/observa/pdf/Estudes2006.pdf</a>

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Spain</b>	Yes	Sexuality survey	Health and Sexual Habits Survey (ESHS) [163,164]	2003	-	General population aged 18-49	Cross-sectional	Representative sample	Internet questionnaire (CASI)	10 980	National	4 135 young people aged 18-29
<b>Sweden</b>	Yes	Multi-thematic survey	Youth barometer	Annually since 1994	Yes, 2009	15-24 years old	Repeated cross-sectional	-	Internet questionnaire	5 000	National	Another study about adolescents and young people, planned in 2009, to be repeated every fourth year
<b>Sweden</b>	Yes	KABP	-	1989,-1994-1997-2000-2003[165]	-	General population 16-44	-	Random sample of general population	Self-administered mail questionnaire	4 000-6 000	National	Other studies have been reviewed in 2000[166] and 2005
<b>Switzerland</b>	Yes	KABP	EPSS (Enquête téléphonique périodique sur la prévention du sida en Suisse)[24]	1987, 1988, 1989, 1990, 1991, 1992, 1994, 1997, 2000, 2007	Yes (?)	General population aged 17-45 living in Switzerland	Repeated cross-sectional	Random sample of general population	CATI	2 800	National	Planned to be repeated if the AIDS module is not included in the next wave of the ESS survey
<b>Switzerland</b>	Yes	General health survey	ESS (Enquête suisse sur la santé / swiss health survey)	2007	Yes, 2012	General population aged 17 or more living in Switzerland	Repeated cross-sectional	Random sample of general population	CATI	18 700	National	No assurance that the AIDS module will be included again in the 2012 wave
<b>Switzerland</b>	Yes	HBSC	HBSC (Health behaviour of school children)	1986, 1990, 1994, 1998, 2002, 2006	Yes, 2010	School children aged 11-15 years	Repeated cross-sectional	Cluster sample of school classes	Paper questionnaire	5 600	National	-

Young people												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Switzerland</b>	Yes	Sexuality study	Sexualité des adolescents et sida[167,168]	1995	-	16-20 years old	One-off	Upper secondary and vocational school	CASI	4 283	National	-
<b>UK</b>	Yes	Sexuality study	National survey sexual attitudes and lifestyles (NATSAL)[169]	1990, 2000	Yes, 2010	General population	Repeated cross-sectional	Household	Face-to-face interview	11 000	National	Approx. 1 200 young (<25) people in 2000
<b>UK</b>	Yes	Omnibus survey	Omnibus survey	1987-	-	General population 16+ Upper age limit varies by sex and wave of survey.	Repeated cross-sectional	-	Face-to-face interview	3 000	National	Approx. 300 young (<25) people in 2006/7 <a href="http://www.statistics.gov.uk/downloads/theme_health/contraception2006-07.pdf">www.statistics.gov.uk/downloads/theme_health/contraception2006-07.pdf</a>
<b>UK</b>	Yes	-	Teenage pregnancy strategy evaluation (TPSE)	2000-2004	-	Young people 13-21 years old	Repeated cross-sectional	-	Face-to-face interview	8 000	National	<a href="http://www.dcsf.gov.uk/research/programmeofresearch/projectinformation.cfm?projectId=14562&amp;resultsPage=1">www.dcsf.gov.uk/research/programmeofresearch/projectinformation.cfm?projectId=14562&amp;resultsPage=1</a>
<b>UK</b>	Yes	General health questionnaire	Lifestyle and health survey Scotland (LHSS)[170]	1988-1993	-	General population	Repeated cross-sectional	-	Telephone	4 000	National	Sample from national (Scotland) survey
<b>UK</b>	Yes	-	Sexual health knowledge, attitudes, behaviour among black and minority ethnic youth in London [171,172]	2006	-	Young people from black and ethnic minority groups	-	-	Paper questionnaire	2 500-3 000	Local	-



**Table 8.3 MSM**  
 (\* indicates that the country did not consider it had a system of behavioural surveillance among MSM but nonetheless had conducted behavioural surveys among this population)

MSM	Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
	<b>Austria</b>	No	-	-	-	-	-	-	-	-	-	-	-
	<b>Belgium</b>	Yes	Sexual behaviour and lifestyle	Les modes de vie des gays et le sida	2004–2005	-	MSM	Cross-sectional survey	Gay press Community Venues internet sites	Paper and internet questionnaires	942	Regional	All convenience samples: recruited through the press, community, venues and internet
	<b>Belgium</b>	Yes	Sexual behaviour and lifestyle	Les modes de vie et comportements des gays face au sida	1998	-	MSM	Cross-sectional survey	Gay press Community Venues internet sites	Paper and internet questionnaires	1 162	Regional	French speaking part of Belgium only
	<b>Belgium</b>	Yes	Sexual behaviour and lifestyle	Connaissances, attitudes et pratiques en milieu homosexuel masculin dans la communauté française de Belgique	1992	-	MSM	Cross-sectional survey	Gay press Venues	Paper questionnaire	541	Regional	-
	<b>Cyprus</b>	No	-	-	-	-	-	-	-	-	-	-	-
	<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	-
	<b>Denmark</b>	Yes	Sexual behaviour and lifestyle	Sex life survey	2000, 2001, 2002, 2006	Yes, 2009	MSM	Cross-sectional survey	Venues internet sites	Paper and internet questionnaires internet only from 2009	2 000	National	Convenience sample: venues and internet

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Estonia</b>	Yes	Sexual behaviour and lifestyle	HIV prevalence and risk behaviours among MSM in Tallinn and Harju County: pilot study using respondent-driven sampling	2007	Not yet decided	MSM	Respondent-driven sampling	Community	Paper questionnaire	60	Regional	Tallinn and Harju County Sampling method did not work
<b>Estonia</b>	Yes	Sexual behaviour and lifestyle	HIV/AIDS-related knowledge and behaviour among MSM visiting gay websites	2004, 2005, 2007	Not yet decided	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	300	National	Recruited MSM through gay websites
<b>Finland*</b>	No	Sexual behaviour and lifestyle	Safely among men	2006	-	MSM	Cross-sectional survey	Gay press	Paper questionnaire	400	National	Recruited MSM through a gay magazine
<b>France</b>	Yes	Sexual behaviour and lifestyle	Enquête presse gay[156,173-176]	1985–1993 1995, 1997, 2000, 2004	Yes, 2010	MSM	Cross-sectional survey	Gay press internet sites	Paper and Internet questionnaires	4 000	National	Convenience samples recruited from gay periodicals and since 2004, internet sites
<b>France</b>	Yes	Sexual behaviour and lifestyle	Baromètre gay <sup>11</sup> [177]	2000, 2002, 2005	Yes, 2009	MSM	Cross-sectional survey	Venues	Paper questionnaire	3 000	National/local	Venue-based Paris (2000, 2005); national (2002)
<b>France</b>	Yes	Sexual behaviour and lifestyle	Net gay baromètre <sup>11</sup> [177]	2005	Yes, 2009	MSM	Cohort	Internet sites	Internet questionnaire	15 000	National	Recruited through the internet

<sup>11</sup> [www.gaystudies.org/NGB2006.pdf](http://www.gaystudies.org/NGB2006.pdf).

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>France</b>	Yes	Sexual behaviour and lifestyle	Enquête cohorte gay <sup>12</sup>	2006, 2007	-	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	5 000	National	Recruited through the internet
<b>France</b>	Yes	Sexual behaviour and lifestyle	Sex drive	2004	-	MSM	-	Community, internet sites	Internet questionnaire	3 000	National	Recruited through the internet and in the community
<b>Germany</b>	Yes	Sexual behaviour and lifestyle	Gay men and AIDS <sup>13</sup>	1991–2007	-	MSM	Cross-sectional survey	Gay press Venues Community internet sites	Paper and internet questionnaires	(?)	National	All convenience samples: recruited through the press, community, venues and internet
<b>Germany</b>	Yes	Sexual behaviour and lifestyle	KaBSTI <sup>14</sup>	2006	-	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	6 000	National	Recruited through the internet
<b>Germany</b>	Yes	Sexual behaviour and lifestyle	KaBSTI	2006	-	MSM	Cross-sectional survey	STI clinics	Paper questionnaire	800	National	Recruited through clinics
<b>Germany</b>	Yes	Sexual behaviour and lifestyle	MSM substudy within STD sentinel[11]	2002, 2003	-	MSM	Cross-sectional survey	STI clinics	Paper questionnaire	169	Local	STI patients in Berlin and Frankfurt
<b>Greece*</b>	No	-	UNGASS country report 2008	2007	-	MSM	Respondent-driven sampling	Internet sites	Internet questionnaire	200	Regional	-
<b>Hungary</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Iceland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Ireland</b>	Yes	Sexual behaviour and lifestyle	Real lives	2003–2008	Yes, 2010	MSM	Cross-sectional survey	Community internet sites	Internet questionnaire	900	National	Community and internet recruitment

<sup>12</sup> Reducing non-premeditated risk-taking in MSM: new intervention protocol to increase vigilance and control tested for efficacy in a prospective RTC. Presented by John De Wit, Australia. Oral session 'Responding to the HIV Epidemics among Men who Have Sex with Men', AIDS 2008 International AIDS Conference.

<sup>13</sup> [www.wzb.eu/bal/ph/download/hivriskreduction.pdf](http://www.wzb.eu/bal/ph/download/hivriskreduction.pdf).

<sup>14</sup> [www.rki.de/nm\\_271502/DE/Content/InfAZ/S/STD/Studien/KaBaSTI/KaBaSTI.html](http://www.rki.de/nm_271502/DE/Content/InfAZ/S/STD/Studien/KaBaSTI/KaBaSTI.html).

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Ireland</b>	Yes	Sexual behaviour and lifestyle	Vital statistics	2000	Yes, 2009	MSM	Cross-sectional survey	Community	Face-to-face interview	1 290	National	Community-based recruitment
<b>Ireland</b>	Yes	Sexual behaviour and lifestyle	The Irish study of sexual health and relationships	2006	-	Population in Ireland	Cross-sectional survey	Community	Telephone interview	7 441	National	Time-place sampling
<b>Latvia*</b>	No	Sexual behaviour and lifestyle	Study of sexual behaviour in men who have sex with men in Latvia	2001	-	MSM	Cross-sectional survey	Community	Paper questionnaire	107	National	Various recruitment strategies
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	Yes	Sexual behaviour and lifestyle	Survey of MSM <sup>15,16,17,18,19</sup>	2003, 2006, 2007	-	MSM	Cross-sectional survey	-	Paper and internet questionnaires	100-200	Regional	Sample recruited from gay venues and internet sites
<b>Luxembourg</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Malta</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Netherlands</b>	Yes	Sexual behaviour and lifestyle	Monitor-onderzoek	2000, 2003	-	MSM	Cross sectional survey	Venues	Paper questionnaire	1500	National	Men recruited in venues
<b>Netherlands</b>	Yes	Sexual behaviour and lifestyle	Monitor-onderzoek	2004	-	MSM	Cross-sectional survey	Venues	Paper questionnaire	800	Local	Amsterdam

<sup>15</sup> Čaplinskienė I. Ar gali ŽIV infekcija iš didelės rizikos tikslinių grupių plisti į bendrąją populiaciją Lietuvoje. Bibliogr.: 7 pavad. Medinfo. 2004, Nr. 3, p. 37-39.

<sup>16</sup> Rizika užsikrėsti ŽIV Lietuvoje, santykiaujant vyru su vyru. Irma Čaplinskienė, Arūnas Gričius, Saulius Čaplinskas. Bibliogr.: 7 pavad. Lietuvos bendrosios praktikos gydytojas. 2004, t. 8, Nr. 5, p. 325-327.

<sup>17</sup> Caplinskas S, Caplinskas I, Gričius A. Risk factors of HIV spread in Lithuanian men having sex with men (MSM) community. XV international AIDS conference 'Access for all', Bangkok, Thailand, 11-16 Jul 2004. Abstract – Bangkok, 2004, vol 2, p 121.

<sup>18</sup> Strujeva O, Caplinskas S, Gričius A. Sexual behaviour and HIV prevalence among Lithuanian men who have sex with men (MSM). 4th IAS Conference on HIV pathogenesis, Treatments and prevention incorporating the 19th ASHM conference 22-25 July 2007, Sydney, Australia. Abstract: CD Rom publication.

<sup>19</sup> Čaplinskas, S. Homoseksualių santykių turinčių vyrų lytinio elgesio ir ŽIV/AIDS žinių tyrimas. Socialinis darbas. 2006, Nr. 5(2), p 121-126.

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Netherlands</b>	Yes	Sexual behaviour and lifestyle	Schorer Monitor	2006, 2007, 2008	Yes, 2009	MSM	-	Internet sites	Internet questionnaire	4 500	National	Men recruited through the internet
<b>Norway</b>	Yes	Sexual behaviour and lifestyle	MSM Internet-tunders okelse	2007	Yes, 2009	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	2 300	National	Men recruited through the internet
<b>Poland*</b>	No	Sexual behaviour and lifestyle	The study on MSM group	2004	-	MSM	Respondent-driven sampling	Community	Paper questionnaire	(?)	National	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Slovenia</b>	Yes	Sexual behaviour and lifestyle	Unlinked anonymous monitoring of HIV among MSM (behavioural component added in 2000)	2000-2007	Yes	MSM	Cross-sectional survey	Venue	Paper questionnaire	100	Local	Convenience sampling at a community MSM venue in the capital, Ljubljana
<b>Slovenia</b>	Yes	Sexual behaviour and lifestyle	Bordernet project	2006, 2007	Yes, 2009	MSM	Cross-sectional survey	Community	Paper questionnaire	100	Regional	Community-based recruitment
<b>Slovenia</b>	Yes	Sexual behaviour and lifestyle	SIALON (behavioural surveillance among MSM)	2008, 2009	-	MSM	Cross-sectional survey	Venues	Paper questionnaire	400	Regional	In addition to the paper questionnaire, some individuals will be asked to participate in face-to-face interviews
<b>Spain</b>	Yes	Sexual behaviour and lifestyle	HIVHOM-CESCAT-Stop SIDA[29]	1995, 1998, 2000, 2002, 2004	-	MSM	Cross-sectional survey	Venues Community	Paper questionnaire	728	Regional	MSM recruited from gay clubs and the Gay-Lesbian Coordinating Committee of Catalonia
<b>Spain</b>	Yes	Sexual behaviour and lifestyle	EHGAM group questionnaire	2000	-	MSM	Cross-sectional survey	Community	Paper questionnaire	95	Local	Questionnaire distributed by the EHGAM Group (Basque country)

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Spain</b>	Yes	Sexual behaviour and lifestyle	Cuidate.info	2003	-	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	895	National	MSM recruited through the internet
<b>Spain</b>	Yes	Sexual behaviour and lifestyle	SPNS/COGAM	1998	-	MSM	Cross-sectional survey	Community	Paper questionnaire	157	Local	MSM associated to the NGO COGAM
<b>Sweden</b>	Yes	Sexual behaviour and lifestyle	MSM survey <sup>20</sup>	2006, 2008	Yes, 2012	MSM	Cross-sectional survey	Internet sites	Internet questionnaire	3 000	National	Swedish-speaking men who are members of the largest LGBT - internet community (Cruiser)
<b>Switzerland</b>	Yes	Sexual behaviour and lifestyle	Gaysurvey[178-181]	1987, 1990, 1992, 1994, 1996, 2000, 2004, 2007	Yes, 2009	MSM	Cross-sectional survey	Gay press Venues Community Internet sites	Paper and internet questionnaires	1 000	National	Convenience sample recruited from gay newspapers, gay organisations, some bathhouses and gay websites.
<b>Switzerland</b>	Yes	Sexual behaviour and lifestyle	Evaluation de la campagne de prévention 'Mission : Possible' de l'Aide suisse contre le sida	2008	-	MSM	Cross-sectional survey	Venues	Paper questionnaire	1 244	Regional	Time-place sampling
<b>Switzerland</b>	Yes	Sexual behaviour and lifestyle	Geneva gay men's health survey[182]	2003	-	MSM	Cross-sectional survey	Venues	Laptop computer	477	Local	Geneva, self-administered with laptop on site
<b>Switzerland</b>	Yes	Sexual behaviour and lifestyle	Zurich men's survey	1998	-	MSM	Cross-sectional survey	Venues	Laptop computer	Unknown	Local	Zurich, self-administered with laptop on site

<sup>20</sup> Person, situation och relation (Swedish report) dspace.mah.se:8080/handle/2043/5780.

MSM												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>UK</b>	Yes	Sexual behaviour and lifestyle	Gay men's sex survey (GMSS) <sup>21</sup> [72, 183]	Annually 1993–2008 (not 1996)	Yes, 2009	MSM	Cross-sectional survey	Venues Gay Pride Services Internet sites	Paper and internet questionnaires	10 000	National	MSM recruited in venues, Pride, services and, since 2001, through the internet
<b>UK</b>	Yes	Sexual behaviour and lifestyle	Gay men's sexual health survey (GMSHS)[184–186]	Annually 1996–2008	Yes, 2010	MSM	Cross-sectional survey	Venues Clinics	Paper questionnaires	2 000	Local (London, Brighton, Manchester)	Venue-based sampling including anonymous HIV testing of saliva samples since 2000
<b>UK</b>	Yes	Sexual behaviour and lifestyle	The gym study[187–190]	1998–2005	Yes, 2008	MSM	Cross-sectional survey	Gyms	Paper questionnaire	800	Local (London)	A number of gyms in central London have been surveyed almost annually since 1998
<b>UK</b>	Yes	Sexual behaviour and lifestyle	Scottish gay men's sexual health survey[184, 191–194]	1996, 1999, 2002, 2005, 2008	Yes, 2011	MSM	Cross-sectional survey	Venues	Paper questionnaire	1 200	Local (Edinburgh and Glasgow)	Anonymous saliva samples collected (2005, 2008) from men attending gay venues in Edinburgh and Glasgow
<b>UK</b>	Yes	Sexual behaviour and lifestyle	Internet and HIV study	2002–2003	–	MSM	–	Venues Clinics Internet sites	Paper and internet questionnaires	4 000	Local (London)	–
<b>UK</b>	Yes	Sexual behaviour and lifestyle	MESH project	2007–2008	–	MSM	Cross-sectional survey	Venues Gay press Clinics Internet sites	internet questionnaire	15 000	National	–

<sup>21</sup> [www.sigmaresearch.org.uk/go.php/local/gay/local07](http://www.sigmaresearch.org.uk/go.php/local/gay/local07)

Table 8.4 IDU

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No											
<b>Belgium</b>	Yes	Repeated survey	Snowball survey	1993–2007	Yes, 2008	IDU	Network sampling	Community	Face-to-face interview	1 000	Regional	Hepatitis/HIV peers prevention project. Only in French Community. Category 'DO NOT KNOW' is missing in mode of administration
<b>Belgium</b>	–	Repeated survey	Needle exchange programme	2001–2007	Yes, 2008	IDU	Service-based (clinic, etc.)	Needle exchange programme	Face-to-face interview	200	Regional	Only in Flemish Community. The main aim of this project is not data collection but prevention and harm reduction
<b>Belgium</b>	–	Repeated survey	Syringe exchange programme	1994–2007	Yes, 2008	IDU	Service-based (clinic, etc.)	Syringe exchange programme	Face-to-face interview	3 000	Regional	Only in some cities of the French Community. The main aim of this project is not data collection but prevention and harm reduction
<b>Bulgaria</b>	–	–	–	–	–	–	–	–	–	–	–	–
<b>Cyprus</b>	–	–	–	–	–	–	–	–	–	–	–	–
<b>Czech Republic</b>	Yes	–	–	–	–	–	–	–	–	–	–	Existing system, no details provided by the country
<b>Denmark</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Estonia</b>	Yes	Repeated survey	Study on the prevalence of HIV and other infections and risk behaviour among IDU	2005, 2007	Yes, 2009	IDU in Tallinn (capital) and Kohtla-Järve	Respondent-driven sampling	–	Face-to-face interview	700	Regional	In two towns most affected by HIV



IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Estonia</b>	-	Repeated survey	Study on knowledge and risk behaviour of new and regular visitors of needle exchange sites	Yearly, starting from 2003	Yes, 2008	IDU visiting needle exchange sites in Tallinn and East-Estonia	Service-based (clinic, etc.)	Needle exchange programme	Paper questionnaire	1 500	Regional	In regions most affected by HIV. 1 500 – sample size of new visitors, 400 – sample size of regular visitors
<b>Finland</b>	Yes	Repeated survey	IDU-sentinel	2001–2005 2007 (close to national coverage)	Yes, 2009	IDU (visitors of low-threshold health service centres i.e. NEP)	Service-based (clinic, etc.)	Low-threshold services	Paper questionnaire	100–300	Regional	Anonymous but linked to seroprevalence study using self-collected oral fluid samples
<b>France</b>	Yes	Repeated survey	Prelud study	2006	Yes, 2008	Drug users	Venue-based sampling	Low-threshold agencies	Paper questionnaire	1 000	Other	Multicentre (with biological sampling)
<b>France</b>	-	Repeated survey	Caarud study	2006	Yes, 2008	Drug users	Venue-based sampling	Low-threshold agencies	Paper questionnaire	3 000	Other	Multicentre
<b>France</b>	-	Repeated survey	Coquelicot study	2004	Yes, 2009	Drug users recruited in all the structures providing specific services to DU	Cross-sectional	Various types of structures (accommodation services, drug treatment centres, low-threshold services, outreach work teams)	Face-to-face interview	1 462	Other	Multicentre (with biological testing and random sampling design), Complementary socio-anthropological study (N=99) to understand social determinants of at-risk behaviours

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>France</b>	-	Repeated survey	OPPIDUM system	Every year since 1990, national coverage since 1995	Yes, 2009	Patients met in hospitals and treatment centres (during the month of October)	Service-based (clinic, etc.)	-	Paper questionnaire	3 743	National	Last edition available 2006
<b>France</b>	-	Using TDI	RECAP system	2005	Yes, continuous data collecting system	Treatment centres	Service-based (clinic, etc.)	-	Other	45 000	National	Activity files from treatment centres
<b>France</b>	-	One-off survey	Pratiques et opinions liées aux usages des substances psychoactives dans l'espace festif 'musiques électroniques'	2003-2005	NA	Techno events and dubbing population	Venue-based sampling	Techno events and clubs	Face-to-face interview	1 496	National	-
<b>Germany</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Greece</b>	Yes	Repeated survey	Drug-related infectious diseases indicator	2002-2006	Yes, 2007 (?)	IDU in contact with drug services	Service-based (clinic, etc.)	Drug services	Paper questionnaire	1 800	National	Test results for each IDU tested after contacting the services (Hep B, Hep C, HIV/AIDS)
<b>Hungary</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Iceland</b>	Yes	-	-	-	-	-	-	-	-	-	-	Existing system since 1991, no more details provided by the country

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Ireland</b>	Yes	TDI-based reporting system	National drug treatment reporting system	Since 1990 Dublin, nationally since 1995	Yes, continuous data collecting system	IDU	Service-based (clinic, etc.)	Treatment centres	Other	Unknown	National	-
<b>Ireland</b>	-	One-off	Hepatitis B, hepatitis C and HIV in Irish prisoners part I: prevalence and risk in committal prisoners 1999.	2000	-	Irish prisoners	Venue-based sampling	Prisons	Face-to-face interview	600	National	-
<b>Ireland</b>	-	One-off	Hepatitis B, hepatitis C and HIV in Irish prisoners: prevalence and risk	1999	-	Irish prisoners	Venue-based sampling	Prisons	Face-to-face interview	1 200	National	-
<b>Italy</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Latvia</b>	Yes	One-off	Second generation HIV surveillance among IDU	1997	-	IDU	Venue-based sampling	State Addiction Agency and Methadone program clients (Riga)	Face-to-face interview	194	Local	Blood sample and questionnaire (anamnesis of drug using etc.),
<b>Latvia</b>	-	One-off	Second generation HIV surveillance among IDU	2001	-	IDU	Venue-based sampling	Clients of Low-threshold Centres in Riga	Face-to-face interview	261	Local	Blood sample
<b>Latvia</b>	-	One-off	Second generation HIV surveillance among IDU	2002	NA	IDU	Venue-based sampling	Clients of LTCs in Riga and Riga region	Face-to-face interview	455	Regional	Blood sample, self reported prevalence

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Latvia</b>	-	One-off	Second generation HIV surveillance among IDU	2003	NA	IDU	Venue-based sampling	Low Threshold Centre clients in Riga	Face-to-face interview	205	Local	Rapid tests
<b>Latvia</b>	-	One-off	Second generation HIV surveillance among IDU	2005	NA	IDU	Venue-based sampling	LTC clients from whole Latvia	Face-to-face interview	325	National	Rapid tests
<b>Latvia</b>	-	Cohort study	Injecting drug users' cohort study	2006	NA	IDU	Snowball sampling	IDU from whole Latvia	Face-to-face interview	555	National	-
<b>Latvia</b>	-	Cohort study	Injecting drug users' cohort study	2007	NA	IDU	Snowball sampling	IDU from whole Latvia	Face-to-face interview	614	National	-
<b>Latvia</b>	-	One-off	Prevalence of HIV and other infections and risk behaviour among injecting drug users and their main sex partners in Latvia, Lithuania and Estonia	2008	NA	IDU and their main sex partners	Respondent-driven sampling	-	Face-to-face interview	562 IDU 61 sex partners	National	-
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	Yes	Repeated survey	HIV-related behavioural and biological indicators in injecting drug users	2000	Yes, 2002, 2004 (?)	IDU	Cross-sectional	Low-threshold facilities (LTF) with needle exchange programmes	Face-to-face interview	142	Local	Behavioural surveillance among drug users attending LTF

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Lithuania</b>	-	Repeated survey	Assessment of behavioural and biological indicators in injecting drug users	2004	Yes, 2005 (?)	IDU	Cross-sectional	Vilnius gypsy camp	Face-to-face interview	123	Local	Only IDU who purchased opiates in Vilnius gypsy camp were enrolled
<b>Lithuania</b>	-	Repeated survey	IDU characteristics and risk behaviour	2006	Yes, 2007	IDU	Cross-sectional	-	Face-to-face interview	320	Local	-
<b>Lithuania</b>	-	Repeated survey	WHO collaborative study on substitution therapy of opioid dependence and HIV	2003-2005	No	IDU	Cohort	-	Face-to-face interview	100	National	-
<b>Lithuania</b>	-	One-off	Assessment of risk behavioural among participants of methadone programmes	2006	No	IDU	Cross-sectional	-	Face-to-face interview	288	National	-
<b>Lithuania</b>	-	One-off	Prevalence of HIV and other infections and risk behaviours in IDU	2007-2008	No	IDU and sex partners	Respondent-driven sampling	-	Face-to-face interview	400+71	Regional	ENCAP No. 2005305 preliminary research report
<b>Luxembourg</b>	Yes	TDI-based reporting system	RELIS	Since 1994	Yes, continuous data collecting system	Treatment centres	Service-based (clinic, etc.)	-	Other	Unknown	National	-

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
			Prevalence et propagation des hépatites virales A, B, C et du HIV au sein de la population d'usagers problématiques de drogues d'acquisition illicite									
<b>Luxembourg</b>	-	One-off		2006	NA	Problem drug users	Time-place sampling	-	Face-to-face interview	397	National	-
<b>Malta</b>	No	-	Repeated HIV surveys among IDU	-	-	-	-	-	-	-	-	-
<b>Netherlands</b>	Yes	Repeated survey		1994-2002	Yes 2008-2009	IDU	Venue-based sampling	-	Face-to-face interview	400	Local	Saliva or blood sample taken for HIV antibody testing
<b>Netherlands</b>	-	Cohort	Longitudinal cohort study among drug users in Amsterdam	1985 onwards	No	Drug users	Cohort	-	Face-to-face interview	Unknown	Local	-
<b>Norway</b>	No	-		-	-	-	-	-	-	-	-	-
<b>Poland</b>	Yes	Repeated survey	Evaluation of hepatitis C, HIV and hepatitis B prevalence among intravenous drug users	2002, 2004, 2005	Yes, 2008	Ever injectors	Service-based and snowball	-	Face-to-face interview	330	Regional	Partly service-based recruitment, partly snow-ball but not formally RDS
<b>Portugal</b>	-	-		-	-	-	-	-	-	-	-	-
<b>Romania</b>	-	-		-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-		-	-	-	-	-	-	-	-	-

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Slovenia</b>	Yes	Repeated cross-sectional survey	Survey of all low-threshold programmes for IUD in Slovenia	2007, 2008	Yes, 2009	IDU in low-threshold programmes in Slovenia	Cross-sectional	Low-threshold programmes	Paper questionnaire	110	National	Information provided by Milian Krek
<b>Slovenia</b>	-	TDI-based reporting system	First treatment demand indicator	1996-2007	Yes, planned to be continued	IDU within drug using population demanding treatment	Service-based (clinic, etc.)	Treatment centres	Other	225 during 1999-2004	National	Data collected by personnel at the Centres for Prevention and treatment of illegal drug use and entered on a paper questionnaire
<b>Spain</b>	Yes	Repeated survey	Survey to heroin or cocaine users admitted to treatment	1996, 2000, 2004	Yes, year not known	A sample of heroin and cocaine users admitted to treatment (injectors and non-injectors)	Service-based (clinic, etc.)	Treatment centres	Face-to-face interview	3 000	National	-
<b>Spain</b>	-	Repeated survey	Monitoring the prevalence of HIV infection and related behaviours among injecting drug users (IDU-CEEISCAT)	1993, 1996, 1998, 2000, 2002, 2004, 2006	Yes, not known	IDU	Venue-based sampling	-	Face-to-face interview	200	Regional	-
<b>Spain</b>	-	TDI-based reporting system	Treatment admission indicator	Yearly since 1991	Yes, yearly	People admitted to treatment	Service-based (clinic, etc.)	Treatment centres	Other	40 000	National	-

IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Sweden</b>	No	-	No name, but the project is called Social - medicinska Häktesprojektet	Planned	Yes, 2009	IDU	Service-based (clinic, etc.)	Outreach activity in Stockholm	Face-to-face interview	NA	Other	New monitoring system will be fully functional beginning 2009, in 3 sentinel cities, the system will also include state prisons
<b>Switzerland</b>	Yes	Repeated survey	SBS: enquête nationale auprès de la clientèle des structures à bas seuil d'accès	1993, 1994, 1996, 2000, 2006	Yes (?)	Users of low-threshold facilities(LTF) and who ever injected drugs	Service-based (clinic, etc.), time-place sampling	All facilities which provide sterile needles or syringe	Paper questionnaire partly self-administered, partly face-to-face	966	National	Zurich LTFs did not participate in the survey in 1993, 1994 and 2000.
<b>UK</b>	Yes	Repeated survey	UAPMP survey of IDU	1990 onwards	Yes, annual	IDU	Service-based (clinic, etc.)	-	Paper questionnaire	3 200	National	England, Wales and Northern Ireland, also collects oral fluid samples for anti-HIV, anti-HBc and anti-HCV testing. Data items have changed over time
<b>UK</b>	-	Repeated Survey check	CRDHB surveys - London	1990-1993, 1996-1998, 2001, 2002	No	IDU	Service-based (clinic, etc.)	Community and agencies	Face-to-face interview	400	Local	Community and agencies 1990 to 1993 (part of WHO study) Community settings only in 1996, 1997/8 (plus six other cities across England, n~900) and 2001/2 (plus Brighton). Survey instruments have changed over time, but have included many similar questions. Inclusion criteria changed over time but possible to confine to current IDU and examine trends



IDU												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
UK	-	Repeated survey	Glasgow community-wide surveys	1990-1994 1996, 1999, 2000, 2002, 2004	No	IDU	Community-based recruitment	-	Face-to-face interview	500	Local	Cross-sectional surveys recruiting from NE, treatment and street settings (originally part of WHO study) Inclusion criteria changed over time but possible to confine to current IDU and examine trends
	-	Repeated survey	Needle exchange surveillance initiative (NESI)	2005, 2007	Yes, 2008	IDU	Service-based (clinic, etc.)	-	Face-to-face interview	2 750	Regional	New system for Scotland. Piloted in 2005 and 2007 in parts of Scotland; in 2008, Scotland-wide sampling commenced
UK	-	Repeated survey	Not known	1992-1994	No	IDU	Other	-	-	200	Local	Three surveys in Edinburgh No longer running
UK	-	One-off	Leeds UA respondent-driven sampling survey	2008	NA	IDU	Respondent-driven sampling	-	Face-to-face interview	302	Local	-
	-	One-off	Bristol UA respondent driven sampling survey	2006	NA	IDU	Respondent-driven sampling	-	Face-to-face interview	299	Local	-
UK	-	One-off	UA seven cities community survey pilot study	2003, 2005	NA	IDU	Community-based recruitment	-	Face-to-face interview	1 058	National	-
UK	-	One-off	Welsh cohort, baseline study	2004	NA	IDU	Service-based (clinic, etc.)	-	Face-to-face interview	700	Local	-
UK	-	One-off	Not known	1997, 1999	NA	IIDU	Other	-	Face-to-face interview	407	Local	-
UK	-	One-off	Not known	1994, 1995	NA	IDU*	Other	-	Face-to-face interview	2 740	Local	-

**Table 8.5 Migrants and ethnic minorities**

Note: one or two old and clearly one-off studies mentioned in the questionnaires are not listed here (if no publications were listed for them and if none could be found in Google or Google Scholar).

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Belgium</b>	No	-	-	-	-	-	-	-	-	-	-	No common understanding of what is meant by 'migrant pop'. No systematic surveillance, but some indicators from 1) general health survey, 2) HIV testing centres (French community)
<b>Belgium</b>	Yes	Repeated cross-sectional	Health interview survey, Belgium (HIS) <sup>22</sup>	1997, 2001, 2004, 2008	Yes	General population, aged 15+	Cross-sectional	Respondent's home	Face-to-face interview	1 200	National	General health survey has info about nationality, see <a href="http://www.iph.fgov.be/epidemo/epifr/index4.htm">www.iph.fgov.be/epidemo/epifr/index4.htm</a>
<b>Belgium</b>	Yes	-	Sida et jeunes Congolais en communauté française de Belgique [195]	1997	-	Young people from Congo (12-18 years old)	Community based	-	Other	124	National	-
<b>Belgium</b>	Yes	-	La prévention de l'infection à VIH au départ des consultations prénatales et des nourrissons: évaluation du processus et perspectives de développement	1998	-	Migrant mothers	Service-based	-	Other	194	National	No references found on internet
<b>Bulgaria</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cyprus</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Denmark</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Estonia</b>	No	-	-	-	-	-	-	-	-	-	-	-

<sup>22</sup> Protocol: [www.iph.fgov.be/epidemo/epifr/index4.htm](http://www.iph.fgov.be/epidemo/epifr/index4.htm); Results: [www.iph.fgov.be/epidemo/epifr/crospfr/hisfr/table04.htm](http://www.iph.fgov.be/epidemo/epifr/crospfr/hisfr/table04.htm)

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Finland</b>	No											
<b>France</b>	No	KAPB	Les populations africaines d'Ile-de-France face au VIH/sida: connaissances, attitudes, croyances et comportements <sup>23</sup> [68]	2005	Yes	(Born in Sub-Saharan Africa) aged 18–49	Time-place sample	Streets, metro & bus stations, markets, post offices & supermarkets	Face-to-face interview	1 874	Regional	–
<b>France</b>	No	KAPB + social relations	Le recours tardif aux soins des personnes séropositives pour le VIH: modalités d'accès et contextes socioculturels <sup>24</sup>	2003, 2004	–	Infected people with a delay in seeking medical care	Service-based	Hospital	Face-to-face interview	267	Regional	Infected people with a delay in seeking medical care
<b>Germany</b>	No	KAPB	HIV/AIDS und Migranten/Innen-Gesundheitsrisiken, soziale Lage und Angebote einschlägiger Dienste	2005	–	Migrants	Community-based	–	Face-to-face interview	359	Regional	Part of an European project <sup>25</sup>
<b>Greece</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Hungary</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Iceland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Ireland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Italy</b>	–	–	–	–	–	–	–	–	–	–	–	–
<b>Latvia</b>	No	–	–	–	–	–	–	–	–	–	–	Migrants not a priority target group

<sup>23</sup> Protocol see: [www.inpes.sante.fr/700000/dp/07/dp070628.pdf](http://www.inpes.sante.fr/700000/dp/07/dp070628.pdf)

<sup>24</sup> [www.invs.sante.fr/publications/2006/recours\\_tardifs\\_vih/recours\\_tardifs\\_vih.pdf](http://www.invs.sante.fr/publications/2006/recours_tardifs_vih/recours_tardifs_vih.pdf)

<sup>25</sup> Immigrants from European Southern and Eastern borders: HIV/Health risks, social condition and service provision re-orientation. Description available at [www.eurosurveillance.org/ViewArticle.aspx?ArticleId=2622](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=2622)

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Luxembourg</b>	No	-	-	-	-	-	-	-	-	-	-	Not enough data to fill out questionnaire
<b>Malta</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Netherlands</b>	Yes	Repeated	Rotterdam HIV survey <sup>26</sup>	2002, 2003, 2006	-	Different migrant groups (Cape Verdean, Surinamese and Antillean)	Venue-based sampling	-	Face-to-face interview	1 000	Local	Saliva sample for HIV testing
<b>Netherlands</b>	Yes	Repeated	Amsterdam HIV survey <sup>27</sup>	2003, 2004	-	Different migrant groups (Surinamese, Ghanaian, Antillean)	Venue-based sampling	-	Face-to-face interview	1 000	Local	Saliva sample for HIV testing
<b>Netherlands</b>	Yes	Repeated	The Hague HIV survey <sup>28</sup>	2005	-	Different migrant groups	Venue-based sampling	-	Face-to-face interview	1 000	Local	Saliva sample for HIV testing
<b>Netherlands</b>	Yes	Repeated	PLUS project on HIV-related stigma	2007	2009	Africans, Surinamese and Antilleans living in the Netherlands	Network sampling	-	Face-to-face interview	100	National	Broad-based qualitative study that sought to establish the determinants of HIV-related stigma, settings and manifestations in which stigma occurs among ethnic groups

<sup>26</sup> English Summary available at [www.rivm.nl/bibliotheek/rapporten/441100019.html](http://www.rivm.nl/bibliotheek/rapporten/441100019.html). Full Report in Dutch (95 pgs) at [www.rivm.nl/bibliotheek/rapporten/441100019.pdf](http://www.rivm.nl/bibliotheek/rapporten/441100019.pdf).

<sup>27</sup> English Summary available at [www.rivm.nl/bibliotheek/rapporten/441100021.html](http://www.rivm.nl/bibliotheek/rapporten/441100021.html).

<sup>28</sup> English Summary available at [www.rivm.nl/bibliotheek/rapporten/441100023.html](http://www.rivm.nl/bibliotheek/rapporten/441100023.html).

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Netherlands</b>	Yes	One-off	Research on the sexual health of HIV positive heterosexuals from black and minority ethnic backgrounds in Netherlands [196]	2006	-	Ethnic minority groups living in the Netherlands	Service-based	Homes of interviewees or of researcher	Face-to-face interview	20 migrants 9 nurses, 1 social worker	National	-
<b>Netherlands</b>	Yes	One-off	'Facing HIV in Netherlands. Lived experiences of migrants living with HIV [63]	2008	-	Ethnic minority groups, especially Africans	Network sampling	-	Face-to-face interview	15	National	-
<b>Netherlands</b>	Yes	One-off	Sex under the age of 25 <sup>29</sup>	2005	-	Young people, 12–25	Cross-sectional	Schools, homes	Internet questionnaire	4 821	national	-
<b>Netherlands</b>	Yes	One-off	Islam and sexuality safe sex behaviour and behavioural determinants among young Moroccans and Turks [197]	2006	-	Young Moroccans and Turks	Community-based	-	Internet questionnaire	701	National	-
<b>Norway</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Poland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Portugal</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Romania</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	No behaviour studies because low HIV incidence
<b>Slovenia</b>	No	-	-	-	-	-	-	-	-	-	-	-

<sup>29</sup> Mexico AIDS conference abstract at [www.aidsactioneurope.org/uploads/tx\\_windpublications/874-0.pdf](http://www.aidsactioneurope.org/uploads/tx_windpublications/874-0.pdf).

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Spain</b>	No	One-off	Behavioural study on Latin-American and Maghrebian Migrants CEEISCAT <sup>30</sup>	2003	-	Latin-American and Maghrebian migrants identified in care centres	Convenience sampling	-	Personal interview	238	Local	-
<b>Sweden</b>	No	-	-	-	-	-	-	-	-	-	-	There are various categories of migrants <sup>31</sup>
<b>Switzerland</b>	Yes	-	Sentinel survey among migrant women	2008	Year not yet planned	Patients of ambulatory gynaecological/obstetric service at University Hospital Lausanne which includes about 50% of non-Swiss women	Service-based	Outpatient ob/gyn clinics	Paper questionnaire	700	Local	This population is considered to be a sentinel population. If the study is repeated (not yet planned), it should also include an ob/gyn service in German-speaking Switzerland
<b>Switzerland</b>	Yes	-	Swiss Health Survey	2007	2012	Resident population (including about 20% non-Swiss)	Cross-sectional	Home	Telephone interview	15 000	National	A module on sexuality was introduced in 2007. Will probably be repeated.

<sup>30</sup> Ríos E, Ferrer L, Casabona J, Caylá J, AVECILLA À, Gómez J, et al. Conocimiento sobre el VIH y las infecciones de transmisión sexual en inmigrantes latinoamericanos y magrebies en Cataluña. Gaceta Sanitaria, in press.

<sup>31</sup> In Sweden, asylum seekers are offered health checks on arrival but only 50% are seen by a doctor. Most checks include voluntary testing, but with no counselling. Statistics about employment/unemployment among people born abroad say nothing about how long they have lived in Sweden. The national health report, published every five years, shows that people born abroad have general poorer health than the rest of the population.

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Switzerland</b>	Yes	-	Monitoring of the health of migrants [71,198]	2004	Year not yet planned	Representative sample of some migrant communities in Switzerland: Kosovo, Ex-Yugoslavia, Turkey and Sri Lanka	Cross-sectional	Home	Telephone interview	3 000	National	Sample derived from central register of foreigners in Switzerland, included some questions about sexuality. However, in many of these population the refusal rate was high and data, therefore, not analysed in depth
<b>Switzerland</b>	Yes	-	Evaluation of HIV/AIDS prevention for migrants and ethnic minorities[199]	1995	-	Spanish, Portuguese, Turkish migrants	Community-based	Various: community centers, homes, schools	Face-to-face interview	980	-	-
<b>UK</b>	Yes	-	BASS line survey[200]	2007, 2008	-	Black Africans living in England	Community-based through internet or community organisations	-	Internet questionnaire or paper	4 200	National	-

Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>UK</b>	Yes	-	MAYISHA <sup>32</sup> [201-203]	1999, 2004	-	Black Africans living in England	Community-based, through community groups, advertising in local media & venues	Inner London social and commercial venues (bars and night-clubs, hairdressers, shops, community centres, universities and colleges, churches, community events, football events social gatherings)	Paper questionnaire in 1999, unlinked anonymous HIV test in 2004	748 in 1999, 1 400 in 2004	National	MAYISHA II included anonymous saliva testing for HIV and a qualitative component.
<b>UK</b>	Yes	-	National survey sexual attitudes and lifestyles (NATSAL)[204]	1990, 2000	2010	General population 16+ with 'ethnic boost' (black Caribbean, black African, Indian, Pakistani )	Other Random, based on census data, postal codes, including for ethnic boost	Interviewees homes	Computer-assisted self-interview & face-to-face	11 000 plus 950 black and ethnic minority	National	Results show importance of population-based probability sample studies – clinic-based sampling may lead to bias (in this case overestimation of STI in ethnic minority populations)
<b>UK</b>	Yes	-	Unlinked anonymous survey of genitourinary medicine clinic attendees (GUMANON) <sup>33</sup>	1990	-	Attendees of sentinel GUM clinics (currently 16)	Service-based	GUM clinics	-	-	National	Uses unlinked anonymous technique on leftover specimens taken for syphilis tests to measure the HIV prevalence amongst all GUM attendees

<sup>32</sup> [www.aohn.org/downloads/publications/Mayisha\\_I.pdf](http://www.aohn.org/downloads/publications/Mayisha_I.pdf)

<sup>33</sup> Information available at [www.hpa.nhs.uk/serivet/Satellite?childpagename=HPAweb%252FHPAwebPrinterFriendly&c=HPAweb\\_C&p=1201094588821&pagename=HPAwebWrapper&cid=1202115496235](http://www.hpa.nhs.uk/serivet/Satellite?childpagename=HPAweb%252FHPAwebPrinterFriendly&c=HPAweb_C&p=1201094588821&pagename=HPAwebWrapper&cid=1202115496235).



Migrants and ethnic minorities												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/ sampling	Setting	Administration mode	Sample size	Coverage	Comment
UK	Yes	-	SALLEE (Sexual attitudes and lifestyles of East Europeans in London) <sup>34</sup>	2007	-	Migrants from Central & Eastern European and accession countries	Time-place sample plus clinic, internet and respondent-driven sampling for men who have sex with men	Community, internet, clinic, RDS	Face-to-face interview	2 000	National	-
UK	Yes	-	Sexual health knowledge, attitudes, behaviour among black and minority ethnic youth in London [171,172]	2006	-	Young people from black and ethnic minority groups	Cross-sectional	Schools	Paper questionnaire self-completed	3 000	Local	Follow-up study currently being conducted: 50 in-depth interviews[205]
UK	Yes	-	Project Nasah: an investigation into the HIV treatment and other needs of African people with HIV resident in England[67]	2002	-	African people with HIV	Community-based, snowball	-	Brief questionnaire orally administered by researcher of same nationality	435	National	Available at <a href="http://www.sigmarresearch.org.uk/files/report2003a.pdf">www.sigmarresearch.org.uk/files/report2003a.pdf</a>

<sup>34</sup> Study was ongoing when this report was written. Preliminary information available at [www.ssees.ac.uk/salleee.htm](http://www.ssees.ac.uk/salleee.htm).

Table 8.6 Sex workers

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Belgium</b>	Yes, 1989	-	Connaissances et comportements des personnes prostituées exerçant en Communauté française de Belgique en matière de prévention du Sida <sup>35</sup> (Espace P)	1989, 1998, 2003, 2007	Yes, not defined	FSW	Venue-based sampling	-	Face-to-face interview	200	Regional	Repeated surveys are set up by an NGO responsible for Aids prevention among female sex workers in the French-speaking part of Belgium (Brussels and Walloon regions) In the last survey, efforts were made to recruit migrant sex workers in the sample. French-speaking part of Belgium only
<b>Cyprus</b>	No	-	-	-	-	-	-	-	-	-	-	No official pubs Two epidemiology bulletins Only local studies are performed
<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	Local studies are performed
<b>Denmark</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Estonia</b>	Yes, 2004	-	HIV related knowledge and risk behaviour of SW visiting healthcare services	2004–2007	-	SW visiting STI services in Tallinn	Service-based	STI clinic	Paper questionnaire	130	National	Regular study among SW visiting STI diagnostics services 2004–2007, separate study in 2006
<b>Estonia</b>	Yes, 2004	-	HIV prevalence and risk behaviour among SW in Tallinn[77]	2006	-	FSW in Tallinn	Other	-	Face-to-face interview	230	Regional	Respondent-driven sampling mixed with other methods
<b>Finland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>France</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Germany</b>	No	-	-	-	-	-	-	-	-	-	-	-

<sup>35</sup> [www.espacep.be](http://www.espacep.be)

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Hungary</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Iceland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Ireland<sup>78</sup></b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Latvia</b>	No	One-off	Prevalence of HIV, hep B&C & syphilis infections in different risk behaviour groups in Latvia	1997	-	FSW & other	Other	-	Paper questionnaire	198	National	Sampling approach: various recruitment strategies Full study report is not available
<b>Latvia</b>	No	One-off	HIV/AIDS and STD prevalence study among prostitutes working in Riga streets and pubs	2003	-	FSW	Other	-	Other	92	National	Organised by AIDS Prevention Centre Similar surveys conducted by AIDS Prevention Centre (since 2007 – Public Health Agency's AIDS and STI Prevention Centre) also in 2001 (n=78) and 2002 (n=92). Only prevalence data known
<b>Liechtenstein</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Lithuania</b>	Yes	Sexual health & behaviour	STI and HIV prevalence in Vilnius sex workers <sup>36</sup> (LAC)	1999–2005	-	Sex worker	Cohort	-	Face-to-face interview	56	Local	No documentation of sexual orientation

<sup>36</sup> Jarasuniene R, Caplinskas S. STI and HIV prevalence in Vilnius sex workers. 6th Nordic-Baltic congress on infectious disease in cooperation with the task force on communicable disease control in the Baltic sea region 'Current strategies for prevention and treatment of infectious diseases'. Palanga, 3–6 June 2004. Poster. Vilnius, 2004, p 46.

Jarasuniene R, Kulsis S, Caplinskas S. STI and HIV prevalence in Vilnius sex workers. XV international AIDS conference 'Access for all'. Bangkok, Thailand, 11–16 July 2004. Abstract – Bangkok, 2004.

Jarasuniene R, Caplinskas S. Behavioural changes and user-friendly services as a tool to reduce prevalence of STI and HIV in Vilnius street sex workers. 3rd IAS Conference on HIV Pathogenesis and Treatment. Rio de Janeiro, Brazil, 24–27 July 2005. Abstract no. MoPe10.7P07.

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Lithuania</b>	Yes	-	Commercial sex workers and their risk for HIV/STI social and demographic data, knowledge and attitude to HIV/STI <sup>37</sup> (LAC)	2002	-	Sex worker	Venue-based sampling	-	Face-to-face interview	96	Local	No documentation of sexual orientation
<b>Lithuania</b>	Yes	-	BSS surveillance among FSW in Vilnius city Women Health site (LAC)	2006-7	-	Sex worker	Service-based sampling	-	Face-to-face interview	100	Local	Sample compose clients – the Women Health Site in Vilnius (?)
<b>Luxembourg</b>	Yes, 2006	-	Cartographie de la prostitution au Grand-Duché de Luxembourg <sup>38</sup>	2006	Yes, not defined	Sex workers	Service-based sampling	-	Face-to-face interview & paper questionnaires	30	National	-
<b>Malta</b>	No	-	-	-	-	-	-	-	-	-	-	It does not happen on regular basis by the same institute, but a lot of research is done by different organisations and institutes
<b>Netherlands</b>	Yes	-	Rotterdam HIV survey	2002-3	-	CSW	Venue-based sampling	-	Face-to-face interview	200	Local	National Institute for Public Health and the Environment (RIVM) CSW at different venues, clubs, brothels and streetzone Saliva sample for HIV antibody testing

<sup>37</sup> Čaplinskas S. Komerčinis seksas ir darbuotojų rizikingo elgesio ŽIV/LPI atžvilgiu tyrimas; socialiniai ir demografiniai duomenys, žinios ir požiūris į ŽIV/LPI. Santr. angl. Bibliogr.: 16 pavad. Socialinis darbas. 2003, Nr. 2, p 124-130.

<sup>38</sup> Čaplinskienė I. Ar gali ŽIV infekcija iš didelės rizikos tikslinių grupių plisti į bendrąją populiaciją Lietuvoje. – Bibliogr.: 7 pavad. Medinfo. 2004, Nr.3, p 37-39.

<sup>39</sup> [www.mega.public.lu/publications/1\\_brochures/2007/cartographie/index.html](http://www.mega.public.lu/publications/1_brochures/2007/cartographie/index.html).

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Netherlands</b>	Yes	-	Amsterdam HIV survey	2003-4	-	CSW	Venue-based sampling	-	Face-to-face interview	200	Local	National Institute for Public Health and the environment (RIVM) CSW at different venues, window prostitution, streetzone, drug addicted CSW Saliva sample for HIV antibody testing
	Yes	-	The Hague HIV survey	2005	-	CSW	Venue-based sampling	-	Face-to-face interview	200	Local	National Institute for Public Health and the Environment (RIVM) CSW at different venues, window prostitution, streetzone, drug addicted CSW Saliva sample for HIV antibody testing
<b>Poland</b>	No	One-off	The study on habits and behaviour of female sex workers	2002	-	FSW	Venue-based sampling	-	Paper questionnaire	400	National	Paper questionnaire and HIV test Study conducted by Prof. Z. Izdebski in collaboration with research company TNS OBOP Study made on request of the National AIDS Centre
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	Not performing behavioural studies at the present time, partly due to low incidence of HIV infection.
<b>Slovenia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Spain</b>	Yes, 1991	Sexual behaviour & lifestyle	Epi-VIH Study[206] Secretariat of the National Plan on AIDS	1991-2008	2009	STI/HIV Clinics attendees	Cross-sectional	-	Other	4 700	National	HIV prevalence in sex workers available since 1991. Sample size: Around 4 500 FSW & 200 MSW each year.
<b>Spain</b>	Yes	-	Epi-ITS Study <sup>39</sup> (Secretariat of the National Plan on AIDS)	2005-2008	2009	STI/HIV Clinics attendees	Cross-sectional	-	Other	-	National	For all other comments see Survey on STI clinics attendees

<sup>39</sup> [www.msc.es/ciudadanos/enfLesiones/enfTransmisibles/sidar/vigilancia/home.htm](http://www.msc.es/ciudadanos/enfLesiones/enfTransmisibles/sidar/vigilancia/home.htm)

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Spain</b>	Yes	-	Behavioural monitoring in Transgender Sex Workers [207]	2009	-	Transgender sex workers	Venue-based sampling	-	Paper questionnaire	58	Local	Self-administered
<b>Spain</b>	Yes	One-off	MDM Study	2001	-	FSW	Venue-based sampling	-	Paper questionnaire	1 057	National	15 cities around Spain Female sex workers users of a risk-reduction programme
<b>Spain</b>	Yes	One-off	Ambit Prevenció study	2000	-	MSW	Venue-based sampling	-	Paper questionnaire	150	Local	Barcelona
<b>Spain</b>	Yes	One-off	SPNS/APRAM Study	1998	-	MSW	Venue-based sampling	-	Paper questionnaire	84	Local	Madrid, users of a risk-reduction programme
<b>Spain</b>	Yes	One-off	SPNS/APRAM Study	1998	-	Travestis/Transsexuals sex workers	Venue-based sampling	-	Paper questionnaire	132	Local	Madrid, users of a risk-reduction programme.
<b>Spain</b>	Yes	One-off	MDM/SPNS Study	1998	-	FSW	Venue-based sampling	-	Paper questionnaire	122	Local	Madrid, users of a risk-reduction programme
<b>Sweden</b>	No	-	-	-	-	-	-	-	-	-	-	Not specifically, there are several projects collecting individual data and these are to be merged into a more coherent surveillance system for 2009

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Switzerland</b>	No	-	EPSS [208] (IUMSP)	1987–2007	Yes, not defined	General population (17–45yrs)	Cross-sectional		Telephone interview	2 800	National	No behavioural surveillance system, but we do ask questions to clients of sex workers in our general population surveys: to have paid someone to have sexual intercourse and use of condom on this occasion (since 1987) We also have specific questions in: – the repeated survey among MSM: question about having paid to have sexual intercourse, having been paid to have sexual intercourse, and use of condoms on these occasions (since 1992); – the repeated survey among ever IDU recruited in low-threshold services distribution syringes: only questions about having been paid to have sexual intercourse and use of condoms on this occasion (since 1993); – a recent study among female migrants in gynaecology/obstetric ambulatory service: question about having ever been paid or having received a present to have sexual intercourse (since 2008).
<b>Switzerland</b>	No	Sexual attitudes & behaviour	Gay survey [209] (IUMSP)	1992, 1994, 1997, 2000, 2004, 2007	Yes, 2009	MSM	Other	-	Paper questionnaire	-	National	Repeated cross-sectional survey

Sex workers												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Switzerland</b>	No	Lifestyle & behaviour	SBS[79] (IUMSP)	1993, 1994, 1996, 2000, 2006	Yes, not defined		Venue-based sampling	–	Face-to-face interview	–	National	Repeated cross-sectional survey, IDU
<b>UK</b>	No	Sexual attitudes & lifestyle	NATSAL[85]	1990	2010	General population	Other	–	Other	10 000	National	This national probability sample includes questions on men who pay for sex
<b>UK</b>	No	Sexual health & behaviour	Praed St Project [81,210,211] (Imperial College London)	1985–2002	–	FSW	Service-based	–	Face-to-face interview	100	Local	Registration of service users has been analysed to look at changes over time
<b>UK</b>	No	–	Working Men's project[80] (Imperial College London)	1994–2003	–	MSW	Service-based	–	Face-to-face interview	100	Local	Registration of service users has been analysed to look at changes over time



Table 8.7 PLWHA

PLWHA												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Belgium</b>	Yes	Cohort	Epidemiological surveillance of HIV patients under follow-up	From 2006	-	HIV+ patients under medical follow-up	Cohort, annual follow-up	Hospitals	Data from medical chart	Not known	National	No information on behaviour, only medical information
<b>Bulgaria</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cyprus</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Denmark</b>	No	-	-	-	-	-	-	-	-	-	-	A study was carried out in 2005 by PLWHA organisation on quality of life but not mentioned in the questionnaire
<b>Estonia</b>	Yes	Cross-sectional	Quality of life and discrimination of PLWHA	2005, 2008	-	Patients at medical visit	Cross-sectional convenient sample, quota of 150 patients was enrolled in each setting	Hospitals	Interview by physician and medical chart	450	Tallinn and Eastern Estonia	Study on quality of life
<b>Finland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>France</b>	Yes	One-off survey	VESPA study	2003	2010	National sample of patients visiting hospital outpatient clinics	Cross-sectional	Hospitals	Interview and medical chart	3 000	National	The VESPA study covers the all range of information mentioned in table B + Social information on resources, living conditions, employment, ethnicity, parenthood, social network, quality of life
<b>Germany</b>	Yes	Cohort	CompNet	Since 2004	-	Adults and children in treatment sites	Cohort monitored twice a year	Treatment sites	Medical information	8 200	-	No information on behaviour, but could be added

PLWHA												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
Greece	No	-	-	-	-	-	-	-	-	-	-	-
Hungary	No	-	-	-	-	-	-	-	-	-	-	-
Iceland	No	-	-	-	-	-	-	-	-	-	-	An expert signalled that a cross-sectional survey including Norway, Sweden and Iceland by a PLWHA organisation has been carried out on quality of life in 2006–2007
Ireland	No	-	-	-	-	-	-	-	-	-	-	-
Italy	No	-	-	-	-	-	-	-	-	-	-	-
Latvia	No	-	-	-	-	-	-	-	-	-	-	Latvia participated in the Eurosupport survey on sexual health among PLWHA, n=29
Liechtenstein	No	-	-	-	-	-	-	-	-	-	-	-
Lithuania	No	-	-	-	-	-	-	-	-	-	-	Information from GP study
Luxembourg	No	-	-	-	-	-	-	-	-	-	-	-
Malta	No	-	-	-	-	-	-	-	-	-	-	-
Netherlands	No	-	-	-	-	-	-	-	-	-	-	-
Norway	Yes	Repeated cross-sectional survey	Living conditions and quality of life among PLWHA in Norway	2001, 2008	-	PLWHA in the community	Cross-sectional	Community organisations	Interview	308	National	Information is about attitudes, quality of life, experience, expectations; nothing on sexual behaviour Besides this study, an expert signalled that a cross-sectional survey including Norway, Sweden and Iceland by a PLWHA organisation has been carried out on quality of life in 2006–2007
Poland	No	-	-	-	-	-	-	-	-	-	-	-
Portugal	No answer	-	-	-	-	-	-	-	-	-	-	-

PLWHA												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Romania</b>	No answer	-	-	-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Slovenia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Spain</b>	Yes	Repeated cross-sectional survey	Annual prevalence day	Since 1995, behaviours since 2000	Annual	PLWHA attending hospitals during that day	Cross-sectional	Public hospitals	Questionnaire administered by a doctor or a nurse	700	National	Four indicators published annually: sexual activity in the last 12 month, living with a partner, condom use at last sexual intercourse, injecting drug use and being on methadone in the last month
<b>Sweden</b>	No	-	-	-	-	-	-	-	-	-	-	A cross-sectional survey including Norway, Sweden and Iceland by a PLWHA organisation has been carried out on quality of life in 2006–2007
<b>Switzerland</b>	Yes	Cohort	The Swiss Cohort	Since 1988, behaviours since 2000	-	Patients attending specialised outpatient clinics and practices	Open cohort, data collection every six months	Hospitals and private practices	Questionnaire administered by a physician or a nurse	6 500	National	Publication on behaviours for the three first years of follow-up Data collected: Sex with steady partners and occasional partners and frequency of condom use over the last six months
<b>UK</b>	Yes	-	-	-	-	-	-	-	-	-	-	Data in MSM Gay Men Sexual Health Survey and migrant surveys (MAYISHA) linking behaviour with HIV positive result in saliva samples

Table 8.8 STI clinic attenders

STI clinic attenders												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Austria</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Belgium</b>	Yes	Continuous	Sentinel STI surveillance by a network of physicians in Belgium <sup>40</sup>	Since October 2000	Continuous since 2005	People with STI diagnosis	Service-based	Physician offices	Paper questionnaire	Not reported	National	Participating sites are spread over the country but the geographical distribution is not representative
<b>Bulgaria</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cyprus</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Czech Republic</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Denmark</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Estonia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Finland</b>	Yes	Continuous	STI sentinel network[13,14]	Since 1995	2008	STI clinic attenders	Service-based	STI clinics	Paper questionnaire	200 000	National	-
<b>France</b>	Yes	-	Not described	-	-	-	-	-	-	-	-	-
<b>Germany</b>	Yes	Continuous	STD sentinel surveillance system[15-20]	Since 2002	2010	People with STI diagnosis	Service-based	Dermatovenerologists, gynaecologists, urologists, HIV clinics, STI clinics in local health offices and specialised out-patient clinics in hospitals	Paper questionnaire	22 500	National	In 2002/2003 recruitment of 58 local health offices, 14 hospital based clinics and 160 private practitioners in 112 cities in all federal states Data available from cumulative clinic attendance forms per quarter, individual diagnoses forms filled in by clinicians and patient forms voluntarily filled in by patients
<b>Germany</b>	Yes	On-off	MSM substudy	2002-2003	-	MSM with STI diagnosis	Service-based	STI clinics	Paper questionnaire	-	-	-

<sup>40</sup> [www.iph.fgov.be/epidemiolo/aids](http://www.iph.fgov.be/epidemiolo/aids)

STI clinic attenders												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Greece</b>	Planned	On-off	UNGASS country report	2007	2009	STI clinic attenders	Service-based	STI clinics	Face-to-face interview	500	National	Planned to be repeated every two years
<b>Greece</b>	Planned	Continuous	Differences in HIV testing among EU patients with STI: trends in the history of HIV testing and knowledge of current serostatus	1993–2001	–	STI clinic attenders	Service-based	STI clinics	Face-to-face interview	Not reported	Local	–
<b>Greece</b>	Planned	Continuous	HIV-1 infection associated risk factors among STD patients in Athens, Greece 1990–1996	1990–1996	–	STI clinic attenders	Service-based	STI clinics	Paper questionnaire	Not reported	Local	–
<b>Hungary</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Iceland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Ireland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Italy</b>	Yes	–	Sentinel STD Surveillance <sup>41</sup>	Since 1990	2008	STI clinic attenders	Service-based	STI clinics	Face-to-face interview	5 000	Sentinel	–
<b>Latvia</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Liechtenstein</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Lithuania</b>	Yes	Continuous	STI repeated routine data collection	2003–2007	–	People with STI diagnosis	Service-based	STI clinics	Face-to-face interview	1 000	National	Annual repeated routine data collection
<b>Luxembourg</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Malta</b>	No	–	–	–	–	–	–	–	–	–	–	–

<sup>41</sup> [www.iss.it](http://www.iss.it)

STI clinic attenders												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Netherlands</b>	Yes	Continuous	Anonymous HIV surveillance [212]	-	-	STI clinic attenders	Cross-sectional	STI clinics	Face-to-face interview	3 000	Local	-
<b>Netherlands</b>	-	Continuous	LGV enhanced surveillance [22, 23]	2004–2006		High-risk MSM	Other	STI clinics	Face-to-face interview	34	National	Includes diagnosed LGV cases only. No data from Amsterdam
<b>Norway</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Poland</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Portugal</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Romania</b>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Slovakia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Slovenia</b>	No	-	-	-	-	-	-	-	-	-	-	-
<b>Spain</b>	Yes	Continuous	Epi-VIH	1991–2008	2009	People newly diagnosed with HIV	Cross-sectional	STI clinics	Paper questionnaire	20 000 average	National	From 1991 to 1999, 10 centres located in main cities around the country. From 2000, the number of centres increased to 19. Information collected by the attending physician in an standardised questionnaire
<b>Spain</b>	Yes	Continuous	Epi-ITS Study	2005–2008	2009	People diagnosed with gonorrhoea or syphilis	Cross-sectional	STI clinics, prisons	Paper questionnaire	1 000	National	14 STI clinics located in the main cities around the country. Starting in 2008, also included patients diagnosed in all Spanish prisons, except in Catalonia. Information collected by the attending physicians in an standardised questionnaire

STI clinic attenders												
Country	System in place	Study type	Study name	Years done	Next study planned	Target population	Design/sampling	Setting	Administration mode	Sample size	Coverage	Comment
<b>Spain</b>	Yes	One-off	Estudio Anónimo no relacionado de la seroprevalencia de VIH en pacientes de consultas de ITS	1998–2002	–	STI clinic attenders	Other	STI clinics	Paper questionnaire	10 886	National	7 STI clinics around the country
<b>Sweden</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>Switzerland</b>	No	–	–	–	–	–	–	–	–	–	–	–
<b>UK</b>	Yes	Continuous	Enhanced surveillance of syphilis	Since 1999	2009	STI clinic attenders with syphilis	Service-based	STI clinics	Paper questionnaire	3 000	National	–
<b>UK</b>	Yes	Continuous	Enhanced surveillance of gonorrhoea	Since 2000	2009	STI clinic attenders with gonorrhoea	Service-based	STI clinics	Paper questionnaire	1 700	National	–
<b>UK</b>	Yes	Continuous	Enhanced surveillance of LGV	Since 2003	2009	STI clinic attenders with LGV	Service-based	STI clinics	Paper questionnaire	150	National	–
<b>UK</b>	Yes	Continuous	GUMANON	Since 1990	2009	STI clinic attenders having syphilis serology	Service-based	STI clinics	Paper questionnaire	–	National	–

## 9 Appendix 2

# Main behavioural surveillance indicators in use

**Table 9.1** General population (newly specified or defined topic in bold text)

Indicator	Country reporting use	Topic
<b>Knowledge and attitudes</b>		
Attitudes towards people with HIV/AIDS: % of people with a discriminatory attitude towards PLWHA	Belgium	Attitudes towards PLWHA
Number of people who answer 'Yes' or 'Rather yes' to item 'Do you think that well-informed HIV-positive people take precautions not to infect other people?'	Switzerland	Attitudes towards PLWHA
Number of persons agreeing to statements indicating right to work, right to confidentiality, right to improved healthcare, will to take care of close person falling ill with AIDS	Poland	Attitudes towards PLWHA
Correct identification of false statements on HIV infection	Belgium	Knowledge about HIV/AIDS infection <b>(means of transmission)</b> and/or treatments
Number of people aged 18–69 years who declared they know AIDS could be transmitted by using public restrooms/through mosquito bites, etc.	France	Knowledge about HIV/AIDS infection and/or treatments
Number of people aged 18–69 years who declared they know AIDS could be prevented by using condoms/by making an HIV test/by choosing partners, etc.	France	<b>Knowledge about means of protection</b>
Correct identification of false protection methods against HIV	Belgium	<b>Knowledge about means of protection</b>
Number of people aged 18–50 years who may correctly cite at least two acceptable ways of protecting themselves	Cyprus	<b>Knowledge about means of protection</b>
Number of persons that name at least two of three statements on HIV prevention	Poland	<b>Knowledge about means of protection</b>
Mentions (unaided recall) of means of protection (may include both right and wrong answers)	Switzerland	<b>Knowledge about means of protection</b>
Seriousness and curability of HIV/AIDS	Belgium	<b>Vulnerability/proximity</b>
Number of people aged 18–69 years who declared they know someone living with HIV/AIDS	France	<b>Vulnerability/proximity</b>
Number of people aged 18–69 years who declared they were more at risk of being infected than the average of other people	France	<b>Vulnerability/proximity</b>
Number of people who answer 'Yes' or 'Somewhat' to item 'Are you sometimes afraid of becoming infected by AIDS?'	Switzerland	<b>Vulnerability/proximity</b>
<b>Sexual relationships and sexual partners</b>		
Number of people aged 18–69 years who declared they have had two or more partners in the past year among those ever declaring sexual intercourse	France	<b>Number of partners</b>



Indicator	Country reporting use	Topic
Total lifetime number of partners	Switzerland	<b>Number of partners</b>
Number of partners in last 12 months	Switzerland	<b>Number of partners</b>
Number of people aged 18–69 years who declared they have begun a relationship in the past year among number of people aged 18–69 years sexually active in the last twelve months (had at least one intercourse in the past year)	France	<b>New partner</b>
Number of sexually active people who acquired a new steady partner during the 12 months before the survey	Switzerland	<b>New steady partner</b>
Number of people among the sexually active who had one or more casual partners in the last six months	Switzerland	Casual partners
Number of people who had a casual sexual partner while in stable relationship	Poland	Concurrency
<b>Sexual activity and lifestyle</b>		
Use of contraception by women	Belgium	Birth control (contraception)
Number of people aged 18–54 years among those sexually active in the past five years who declared they had an abortion in the past five years/in the past year	Germany	Birth control (contraception)
Number of people aged 15–54 among those sexually active who have ever used emergency contraception pills	Germany	Birth control (contraception)
Use of different contraception methods by women	Belgium	Birth control (contraception)
Age at first intercourse	Switzerland	<b>Age first intercourse</b>
Number of men who report having paid for sex in the last six months	Switzerland	Recourse to prostitution (as client)
<b>Exposure to risk of infection</b>		
Number of people aged 18–69 years sexually active over the past year who declared they used a condom during the last intercourse	France	Condom use at last intercourse
Number of people aged 18–69 years among those sexually active who declared they used a condom at first intercourse	France	<b>Condom use at first intercourse</b>
Number of sexually active people who used a condom at last intercourse	Switzerland	Condom use at last intercourse
Number of people aged 18–50 years who reported the use of a condom during last sexual intercourse with a non-regular partner	Cyprus	Condom use with different types of partner
Number of people aged 18–69 years reporting a new relationship in the past year who declared they never used a condom in the past year	France	Condom use with different types of partner
Number of people who always, often, occasionally or never used condoms among those beginning a new sexual relationship in the past 12 months	Germany	Condom use with different types of partner
Number of people who always, often, occasionally or never used condoms with casual sex partners in the past 12 months among those reporting several partners in the past 12 months	Germany	Condom use with different types of partner
Number of people who always, often, occasionally or never used condoms in spontaneous sexual contacts with unknown partners in 12 months among those reporting this behaviour	Germany	Condom use with different types of partner

Indicator	Country reporting use	Topic
Number of people who always, often, occasionally or never used condoms in spontaneous sexual contacts with unknown partners on holiday in the past three years among those reporting this behaviour	Germany	Condom use with different types of partner
Number of people who used condoms during last casual sex among persons that ever had a casual partner while in steady relationship with somebody else	Poland	Condom use with different types of partner
Number of people aged 16–44 who had sexual intercourse on a first date without the use of a condom during the preceeding 12 months among those reporting sexual intercourse in the past 12 months	Sweden	Condom use with different types of partner
Number of people who consistently ('always') used condom with their casual partners in the last six months among those reporting casual partners over that period	Switzerland	Condom use with different types of partner
Number of people who used condoms with their new steady partner at least at the beginning of the relationship among those reporting a new steady partner within the previous 12 months	Switzerland	Condom use with different types of partner
Number of men who consistently ('always') used condom with their paid partners in the last six months among those paying for sex over the past six months	Switzerland	Condom use with different types of partner
Use of condoms by sexually active singles	Belgium	<b>Assiduity of condom use</b>
Number of persons always using a condom in the last 12 months among those sexually active in the last 12 months	Belgium	<b>Assiduity of condom use</b>
Number of people aged 18–69 years who declared they never used a condom in the past year among people aged 18–69 years who declared two or more partners in the past year	France	<b>Assiduity of condom use</b>
Number of sexually active people consistently using condoms with all partners	Poland	<b>Assiduity of condom use</b>
Number of people aged 18–50 years who report being in a position to acquire a condom	Cyprus	<b>Condom accessibility</b>
Number of people aged 16–45 who actually possess condoms	Germany	<b>Condom accessibility</b>
Risk at STI <sup>1</sup> : sexually active singles	Belgium	?
Distribution of the population (15 years and more) according to the type of sexual behaviour potentially at-risk for STI during the last 12 months	Belgium	?
<b>HIV and other STI</b>		
HIV testing: percentage of population older than 15 that has tested for HIV	Belgium	HIV testing
Distribution of the population (15 years and more) having already had a test for HIV, and whose last test was justified by...	Belgium	HIV testing
% of the population (15 years and more) having already had a test for HIV according to the period between the last test and the day of the survey	Belgium	HIV testing
Number of people aged 18–69 years who reported having had an HIV test in the past year	France	HIV testing

<sup>1</sup> The English has not been corrected as it is not entirely clear if 'risk of' is meant or 'experience of'.

Indicator	Country reporting use	Topic
Number of persons ever tested for HIV	Poland	HIV testing
Number of people ever tested for HIV	Switzerland	HIV testing
Date of last HIV test	Switzerland	HIV testing
HIV test result (prevalence): persons tested Elisa +	Belgium	Result of HIV test (measured)
Number of respondents declaring one or more STI in the last 12 months	Belgium	Current or past STI other than HIV and hepatitis
Number of people aged 18–69 years sexually active over the past five years who declared they had an STI in the past five years	France	Current or past STI other than HIV and hepatitis
Number of people aged 18–69 years sexually active over the past five years who reported having had a an STI in the past year	France	Current or past STI other than HIV and hepatitis
Number of persons ever diagnosed with genital herpes, gonorrhea, syphilis, Chlamydia (from 2007)	Poland	Current or past STI other than HIV and hepatitis
<b>Drugs and substance use</b>		
Number of persons who shared needles or other injection material among respondents who ever injected drugs	Belgium	Injecting drug use
Number of persons who had unprotected sex under the influence of alcohol/drugs	Belgium	Use of psychoactive substances (including alcohol) and intercourse
Using drugs: lifetime prevalence, prevalence in the last 12 months and prevalence in the last 30 days	Poland	Use of psychoactive substances (including alcohol) and intercourse

**Table 9.2 Youths, by topic, according to country respondents, UNGASS and HBSC**

Topic/indicator	Country (or else) proposing the indicator
<b>1 Knowledge and attitudes</b>	
<b>1.1 Attitudes towards PLWHA</b>	
Attitude towards people with HIV/AIDS, % of the 15–24-years-old population with a discriminatory attitude towards PLWHA	<b>Belgium</b>
Attitudes towards those living with HIV	<b>Lithuania</b>
<b>1.2 Knowledge about HIV/AIDS infection and/or treatments</b>	
Percentage of young women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	<b>UNGASS</b>
Several questions on HIV knowledge: five variables: 1) whether one can get infected by having a meal together with someone, 2) mosquitoes, 3) healthy person can be infected, 4) condom use can safeguard from HIV, 5) risk is decreased if having sex with only one known partner	<b>Latvia</b>
Correct identification of false statement on HIV-infection for people aged 15–24 years	<b>Belgium</b>
Proportion of people able to cite at least two acceptable ways of protecting themselves from HIV	<b>Cyprus</b>
Knowledge about HIV prevention/percentage of general populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	<b>Lithuania</b>
Knowledge of means for protecting oneself against HIV/AIDS infection	<b>Switzerland</b>
<b>1.3 Knowledge about STI infection and/or treatments</b>	
Percentage of the 15–24-years-old population having a correct estimation of the seriousness and curability of HIV/AIDS	<b>Belgium</b>
<b>1.4 Awareness of prevention activities</b>	
Sex or AIDS education at school	<b>Switzerland</b>
Topics discussed in sex or AIDS education at school	<b>Switzerland</b>
<b>2 Sexual relationships and sexual partners</b>	
<b>2.1 Types of partners/relationships, such as regular partner, casual partners</b>	
Proportion of young people who had one or more casual partners during the six months before the survey	<b>Switzerland</b>
Proportion of young people who acquired a new steady partner during the 12 months before the survey	<b>Switzerland</b>
<b>3 Sexual activity and lifestyle</b>	
Percentage of young women and men aged 15–24 years who have had sexual intercourse before the age of 15	<b>UNGASS</b>
Having sex before age of 15	<b>Latvia</b>
Risk for STI: sexually active single (15–24 years old)	<b>Belgium</b>
15-year-olds who have had sexual intercourse	<b>Luxembourg, HBSC</b>
Mean age at first sexual relationship: interpreted as an indicator of potential risk of infection among young people	<b>Spain</b>
Age at first intercourse	<b>Sweden, Switzerland</b>
Mean age of first intercourse, 15 years old	<b>HBSC</b>
Risk for STI: sexually active single (15–24 years old)	<b>Belgium</b>
Distribution of the 15–24-years-old population following the type of sexual behaviour potentially at the risk for STI during the last 12 months	<b>Belgium</b>
Sexual activity and relationship	<b>Belgium</b>
Higher-risk sex	<b>Lithuania</b>

Topic/indicator	Country (or else) proposing the indicator
<b>3.2 Sexual activity, such as number of partners, frequency of sexual contacts</b>	
Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months	<b>UNGASS</b>
Number of partners in the last 12 months: interpreted as indicator of potential risk of infection among young people	<b>France</b>
Number of sex partners (lifetime total)	<b>Sweden, Switzerland</b>
Sex with irregular partners during last 12 months	<b>Latvia</b>
Number of sex partner during last 12 months	<b>Latvia</b>
<b>3.3 Contraception</b>	
Use of contraception by sexually active women (15–24 years old) during the last 12 months	<b>Belgium</b>
Distribution of women (15–24 years old) by type of contraception methods	<b>Belgium</b>
Use of condom and contraception	<b>Belgium</b>
Use of emergency contraceptive pills: interpreted as indicator of risky behaviour among young people	<b>France</b>
15-years-olds who used contraceptive pill at last sexual intercourse	<b>Luxembourg</b>
Using at least one contraceptive method in most recent sexual intercourse, sexually active 15-years-olds (%)	<b>HBSC</b>
<b>4 Exposure to risk of infection</b>	
Proportion of people who can acquire a condom	<b>Belgium</b>
Condom possession as an intention to protect	<b>Germany</b>
<b>4.1 Condom use at first intercourse</b>	
Condom use at the first sexual intercourse	<b>France</b>
<b>4.2 Condom use at last intercourse</b>	
Percentage of women and men aged 15–49 who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse	<b>UNGASS</b>
15-year-olds who used a condom at last sexual intercourse	<b>Luxembourg</b>
Using a condom in most recent sexual intercourse, sexually active, 15-years-olds (%)	<b>HBSC</b>
Proportion of people reporting the use of a condom during the most recent act of sexual intercourse with a non-regular sex partner	<b>Cyprus</b>
Condom use at last intercourse	<b>Latvia, Sweden Switzerland</b>
<b>4.3 Condom use with different types of partners</b>	
Use of condoms in the last 12 months by sexually active single	<b>Belgium</b>
Condom use in new relationships	<b>Germany</b>
Condom use with casual partners	<b>Germany</b>
Condom use in spontaneous sexual contacts	<b>Germany</b>
Condom use in spontaneous sexual contacts in holidays	<b>Germany</b>
Condom use during higher-risk sex	<b>Lithuania</b>
Consistent condom use with casual partners	<b>Spain, Switzerland</b>
Condom use with steady partner	<b>Switzerland</b>
<b>5 HIV and other STI</b>	
<b>5.1 HIV testing</b>	
HIV testing: percentage of the 15–24-years-old population that has tested for HIV	<b>Belgium</b>
Distribution of the 15–24-years-old population having already had a test according to the period between the last test and the period of the survey	<b>Belgium</b>

Topic/indicator	Country (or else) proposing the indicator
Percentage of the 15–24-years-old population having already had a test for HIV, and whose last test was justified by...	<b>Belgium</b>
HIV testing	<b>France</b>
<b>5.7</b> Current or past STI other than HIV and hepatitis	
Frequency of STI: interpreted as indicator of risky behaviour among young people	<b>France</b>
<b>6</b> <b>Drugs and substance use</b>	
Prevalence of drug use among young people	<b>Poland</b>
Injecting drug use	<b>Poland</b>
<b>7</b> <b>Other topics followed (please specify in Comments)</b>	
Prevalence of abortion: interpreted as indicator of risky behaviour among young people	<b>France</b>
Annual rates of voluntary interruption of pregnancy: interpreted as indirectly indicator of potential risk of infection among young people	<b>Spain</b>
Questions in schools surveys had to be kept to a minimum due to limited time allocated by the schools to the Ministry of Health officials conducting the peer education programme and the survey. The inclusion of questions on abortions and on drug use had been considered and may be effected in future evaluations	<b>Cyprus</b>
All surveys publish a wide variety of indicators which are monitored over time	<b>UK</b>

**Table 9.3 MSM**

Topic/indicator	Country reporting use
<b>Unprotected anal intercourse (UAI)*</b>	
UAI with any partner	Sweden, UK
UAI with a casual partner	France, Switzerland, UK
UAI with a main partner	Sweden, Switzerland
UAI with a partner of unknown or opposite status	Denmark, Switzerland, UK
UAI with a partner of unknown status	Netherlands
UAI with a casual partner of unknown or discordant HIV status	Belgium, UK
UAI with a main partner of unknown or discordant status	UK
Number of UAI partners	Denmark
Frequency of UAI	Denmark
UAI at last sexual encounter	Sweden
UAI at last sexual encounter with a man of unknown HIV status	Sweden
<b>Condom use</b>	
Used condom during last anal intercourse (AI)	Denmark, Lithuania, Slovenia, Sweden
Used condom during most recent AI with casual partner	Belgium
Used condom during last AI with partner of unknown or discordant HIV status	Denmark
Always used condom in last 12 months	Slovenia
Always used condom with casual partner in last 12 months	Spain
Always used condoms with main partner in last 12 months	Spain
<b>Number of partners*</b>	
Number of anal sex partners	Denmark, Switzerland
Number of steady and casual partners	Denmark
Number of partners for anal or oral sex	Slovenia, Spain, Switzerland
Number of men reporting more than 10 partners	France
<b>HIV testing</b>	
Ever tested for HIV	Belgium, Denmark, France, UK
Tested for HIV in the last 12 months	Belgium, Denmark, Slovenia, Switzerland, UK
Tested for HIV in the last 12 months and knows the results	Lithuania
Percentage with undiagnosed HIV	UK
Percentage who tested HIV positive	Belgium, Denmark, France, Spain, Switzerland, UK
Percentage of HIV-positive MSM who are on treatment	Switzerland
Percentage of HIV-positive men with a detectable viral load	Switzerland

\* For UAI and the number of sexual partners, most countries used a 12-month time period but some used a three- or six-month period.

Table 9.4 IDU

UK	Switzerland	Slovenia	Poland	Luxembourg	France	Finland	Belgium	Country
Yes, last month and last six months	Borrowing and passing on, last six months	Yes, last month and last time					Yes, NK	Sharing N/S
		Yes, last month and last time					Yes, NK	Sharing other
Yes, last month and last six months			Yes, last month, last year, ever	Borrowing only last 30 days.	Borrowing only last 30 days.	Yes, last month		Sharing any
Yes, lifetime	Yes, lifetime		Yes, last year and ever	Yes, last five months and ever			Yes, last year	HIV test
Yes, lifetime	Yes, lifetime		Yes, last year and ever	Yes, last five months and ever			Yes, NK	HCV test
						Yes	Yes	Age first injected
	Yes, last time, last six months, with regular and casual partners	Yes, last time		Yes, last time (by gender)		Yes, last six months (regular or casual partners)		Condom use
			Yes, last year and ever					CSW
			Yes, last year					No partners
Yes								HBV vaccination
Yes, last six months, and among those starting inject during previous three years								NEX usage
							Yes, ever	Drug use treatment
			Yes, last year and ever					Homelessness
			Yes, last year					Imprisonment



**Table 9.5 Migrants and ethnic minorities**

Country reporting use	Indicator	Numerator	Denominator	Comment
Switzerland	HIV/AIDS info	Reporting good info	Migrant women	
France	Knowledge modes of transmission	N reporting	18–49 years, African	
Belgium	Knowledge HIV infection		General population, age 15+	Identify false statements
France	Knowledge prevention means	N reporting	18–49 years, African	
Belgium	Knowledge prevention means	N reporting	General population, age 15+	Identify false statements
Belgium	Discriminatory attitude, PWHA	N reporting	General population, age 15+	
Belgium	Seriousness & curability, HIV/AIDS		General population, age 15+	
France	Know someone with HIV	N reporting	18–49 years, African	
France	Risk perception	N reporting	18–49 years, African	
Belgium	Risk perception	N reporting	Sexually active singles	'Risk of STI'
UK	HIV test	N reporting	+16 years, self-identified African	Never tested
France	HIV test	N reporting	18–49 years, African	Ever tested, lifetime
Switzerland	HIV test	N reporting	Migrants	Ever tested, lifetime
Belgium	HIV test	N reporting	General population age 15+	Ever tested, lifetime
Switzerland	Recent STI	N reporting	Sexually active migrant women	Past year
UK	N sex partners	N reporting	+16 years, self-identified African	Past 12 months
Switzerland	N sex partners	N reporting	Sexually active migrant women	Past 12 months
France	Multiple partners	N reporting	18–49 years, African	
Switzerland	Stable partner	N reporting	Sexually active migrant women	Past 12 months
Switzerland	Casual partner	N reporting	Sexually active migrant women	Past 12 months
Switzerland	Sexual concurrency	N reporting different partners over same time period	Sexually active migrant women	Past 12 months
Switzerland	Sex work	Ever accepted money or gift for sex	Sexually active migrant women	Lifetime
France	Abortion (lifetime)	N reporting	18–49 years, African, at least one intercourse	
Belgium	Use of contraception	N reporting	General population age 15+	Also use of 'different contraception methods'
Belgium	Condom use	N reporting	Sexually active singles	

Country reporting use	Indicator	Numerator	Denominator	Comment
<b>UK</b>	'Frequency of condom use'	N reporting	+ 16 years, self-identified African	
<b>France</b>	Never used condoms	N reporting	18–49 years, African, two or more partners past year	Past year
<b>Switzerland</b>	Always used condom with stable partner	N reporting	Migrant women, stable partner	Past year
<b>Switzerland</b>	Always used condom with casual partner	N reporting	Migrant women, casual partner past year	Past year
<b>Switzerland</b>	Condom used at last intercourse	N reporting	Sexually active migrant women	
<b>France</b>	Condom used at first intercourse	N reporting	18–49 years, African, at least one intercourse	
<b>Netherlands</b>	HIV nurse addresses sex life in consult with patient	N reporting	N HIV+ ethnic minority patients who felt sex needs not adequately addressed	

**Table 9.6 Sex workers**

Main indicators currently used	Country reporting use
<b>Transactional sex (client)</b>	
Ever paid for sex ( <b>males</b> )	Switzerland
Paid for sex in the last year ( <b>males, MSM</b> )	Switzerland
<b>Transactional sex (SW)</b>	
Ever worked as a sex worker ( <b>IDU</b> )	Switzerland
Sex work in the past six months ( <b>IDU</b> )	Switzerland
Received money for sex in last year ( <b>MSM</b> )	Switzerland
<b>Condom use (SW)</b>	
Used condom with most recent client	Lithuania
Condom use with clients by type of sex (vaginal, anal, oral) ( <b>FSW</b> )	Belgium
Always used condom with clients in last month ( <b>FSW, MSW, TSW</b> )	Spain
Always used condom with clients in last year (oral, receptive AI) ( <b>MSW</b> )	Switzerland
Always used condoms with transactional sex in last six months ( <b>IDU &amp; SW</b> )	Switzerland
Always used condom with clients in last six months (vaginal, anal, oral) ( <b>FSW</b> )	Spain
Always used condom in private life in last six months (vaginal, anal, oral) ( <b>FSW</b> )	Spain
Always used condom in private life in last month ( <b>MSW, TSW</b> )	Spain
Have more than five clients (on ten) ask for sexual intercourse without condom	Belgium
<b>Condom use (client)</b>	
Used condom at last paid intercourse, within the last year ( <b>male client</b> )	Switzerland
<b>HIV testing and prevalence</b>	
Ever tested for HIV	Belgium
Tested for HIV in last 12 months and knows the result ( <b>FSW</b> )	Lithuania
Percentage of FSW HIV positive	Spain
Percentage of MSW HIV positive	Spain
<b>Access to health services</b>	
Have a regular gynaecologist	Belgium

**Table 9.7 PWLHA**

Main indicators currently used	Country reporting use
Injecting drug use (12 months/six months)	Spain, Switzerland
Non-injecting use of illegal substances (six months)	Switzerland
Being on methadone (12 months)	Spain
Consistent condom use with stable partner (six months)	Switzerland
Consistent condom use with occasional partners (six months)	Switzerland
Condom use at last intercourse (penetrative sex) (12 months)	Spain

**Table 9.8 STI clinic attenders**

Indicator	Country reporting use	Topic
<b>Sexual relationships and sexual partners</b>		
Percentage of STI-infected men and women who are in a regular relationship, age-stratified	Germany	Type of partner
Percentage of STI-infected men who had sex with men in the past six months, stratified by age and disease	Germany	Type of partner
Percentage of STI-infected people who had concurrent sexual partners in the last six months, stratified by number of concurrent partners and gender	Germany	Concurrency
<b>Sexual activity and lifestyle</b>		
Male sexual preference	Netherlands	Sexual orientation
Percentage of STI-infected people who received money, drugs or shelter for sexual intercourse in the last six months, stratified by age, gender, migration status	Germany	Prostitution (as sex worker)
Female sex work in last six months	Netherlands	Prostitution (as sex worker)
Percentage of STI-infected people who paid for sexual contact in the last six months	Germany	Prostitution (as client)
Male client of female sex worker in last six months	Netherlands	Prostitution (as client)
Percentage of people who supposedly have acquired the STI abroad, by gender and age	Germany	How and where partners are met
Sexual contact abroad in last six months	Netherlands	How and where partners are met
<b>Exposure to risk of infection</b>		
Percentage of STI-infected people who always / more than 50% of times / less than 50% of times / never-very rarely used condoms for vaginal or anal intercourse in the last six months, stratified by gender, age and regular partner / casual partner / commercial sex worker	Germany	Condom use with different types of partner, type of practice
Condom use at last sexual contact	Netherlands	Condom use at last intercourse
<b>HIV and other STI</b>		
Prior HIV test	Netherlands	HIV testing (self-report)
History of gonorrhoea, Chlamydia or syphilis	Netherlands	STI testing (self-report)
Trends in specific STI according to sexual orientation, partner numbers, condom use, sexual practices, HIV status	France	STI testing (measured)
HIV prevalence among people with STI and specific populations	Spain	HIV results (measured)
<b>Drugs and substance use</b>		
Percentage of STI-infected people who have used drugs or alcohol during presumed transmissional intercourse, stratified by gender, age and various different drugs	Germany	Use of psychoactive substances
Percentage of STI-infected people who have used drugs intravenously, stratified by gender, age, nationality	Germany	Injecting drug use
Injecting drug use in last six months	Netherlands	Injecting drug use
<b>Health and access to care</b>		
Percentage of patients diagnosed by: (1) routine health check (2) partner referral (3) due to health problems, by gender	Germany	Health and access to care

<b>Socio-demographic characteristics</b>		
Percentage of infected people who have no school leaving certificate / are still a student / have completed different types of schools / have completed high school / have – have not completed apprenticeship / have completed university	<b>Germany</b>	Education
Percentage of STI-infected people who perceive their financial situation as good / moderate / not good	<b>Germany</b>	Financial position
Percentage of STI-infected people who are of German origin / born elsewhere, stratified by age, gender, risky sexual health behaviour	<b>Germany</b>	Nationality
Percentage of STI-infected people who speak German fluently / moderately / very little-none	<b>Germany</b>	Language
Percentage of STI-infected people who live in a metropolitan city / city / small town / countryside	<b>Germany</b>	Area of residence
<b>Infection related indicators</b>		
Number of men who have sex with men diagnosed with gonorrhoea who also have HIV infection	<b>UK</b>	Co-infection
Number of men who have sex with men diagnosed with syphilis who also have HIV infection	<b>UK</b>	Co-infection
Number of men who have sex with men diagnosed with lymphogranuloma venereum who also have HIV infection	<b>UK</b>	Co-infection

# 10 Appendix 3

## Questionnaires: population specific and surveillance system

**IUMSP**  
Institut universitaire de médecine sociale et préventive

Rue du Bugnon 17  
CH-1005 Lausanne  
Tél. +41 21 314 72 72  
Fax +41 21 314 73 73  
www.iumsp.ch



ECDC-mandated 2008 survey of Behavioural Surveillance related to HIV and STI  
in European Union member states and other countries

### Surveillance System questionnaire

#### What is this questionnaire ?

This questionnaire is part of the survey of behavioural surveillance programmes related to HIV and STI in EU and other countries undertaken for the European Centre for Disease Control (ECDC) by an international team of specialists led by the Institute of Social and Preventive Medicine (IUMSP), University Hospital Centre and University of Lausanne, Lausanne, Switzerland.

The survey is divided into nine questionnaires. The questionnaires are in English. The present one, the "Surveillance System questionnaire", addresses the existence, scope and functioning of the surveillance system and is comprised of two sections: Section 1) the Behavioural Surveillance System (questions A to C), and Section 2) the Second Generation Surveillance System integrating biological surveillance and behavioural surveillance (questions D to E). In both sections, the focus is on the system level.

The other eight questionnaires are population-specific: general population, young people, men having sex with other men, injecting drug users, sex workers, STI clinics attendees, people living with HIV/AIDS, ethnic minorities and migrants. These questionnaires are to be sent to the appropriate designated people.

A **glossary** of terms is provided at the end of this questionnaire.

#### Who should complete this questionnaire ?

This questionnaire should be completed by the most relevant person. This will generally be the person responsible for the behavioural surveillance programmes related to HIV and STI, or someone involved in or well-informed about these activities. The questionnaire is provided as a computer file and can be transmitted to as many people as necessary (see below: "How to complete the questionnaire").

#### How to complete this questionnaire ?

The questionnaire is provided as a computer file: a Microsoft Word 2000 form containing three types of fields. The Tick fields are filled by clicking with the mouse; the Comment fields are text fields that will expand as needed to accommodate any amount of text; in the Drop-down lists, only one option can be chosen. If you need to give more information, please write this in the 'Comments' field.

When using acronyms, be sure to include the unabbreviated form of the expression when the acronym is first used.

It may be necessary to get the needed information from different people. The questionnaire can be transmitted to as many people as necessary. If that is the case, please make sure this is done sequentially and that the responses from the different people are entered in only one file. Only one questionnaire file, containing all the responses, should be sent back to the IUMSP team.

Some questions request published or unpublished scientific articles, reports or other documents. If at all possible, provide these in electronic form and send them by email to the IUMSP team. If no electronic version exists, please send us a paper copy by postal mail.

Some of the questions require judgements. Please answer these to the best of your knowledge.

**Where and how to return the completed questionnaire and other information ?**

The completed questionnaire and other electronic documents are to be returned by email to [andre.jeannin@chuv.ch](mailto:andre.jeannin@chuv.ch)

The postal address for paper documents is: IUMSP, attn A. Jeannin, rue du Bugnon 17, CH 1005 Lausanne, Switzerland.

**Please complete the questionnaire and return it by August 15th, 2008.**

**Contact persons at the IUMSP**

André Jeannin <a href="mailto:andre.jeannin@chuv.ch">andre.jeannin@chuv.ch</a> Tel. +44 21 314 7296	Brenda Spencer <a href="mailto:brenda.spencer@chuv.ch">brenda.spencer@chuv.ch</a> Tel. +44 21 314 7297	Françoise Dubois-Arber <a href="mailto:francoise.dubois-arber@chuv.ch">francoise.dubois-arber@chuv.ch</a> Tel. +44 21 314 7290
---	--	--

***Thank you very much for your collaboration – it is greatly appreciated!***

*Person responsible for completing the Surveillance System questionnaire*

Institution

First name, name

E-mail

Postal address

Phone number

Thank you very much for taking part to this survey.

## Section 1 - Behavioural Surveillance System

We focus on behavioural surveillance in various populations as a system: regularly or not regularly repeated surveys or studies or other data collection methods on HIV/Aids-related behaviours, the results of which are used to ascertain the state and evolution of the HIV/AIDS and/or STI epidemics in your country.

### A Behavioural surveillance as a system

- 1 *According to your judgement, is there a system of behavioural surveillance in your country ?* Yes   
No  Comments:
- 
- 2 *If there is such a system in your country, since what year has it been operating ?* since \_\_\_\_\_ Comments:

### B Populations covered by the behavioural surveillance system

*For each line, please answer whether the population is monitored or not monitored as part of the surveillance..*

	Monitored	Not monitored	Comments
<i>General Population</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Young people</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Men having Sex with other Men</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Injecting Drug Users</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Sex Workers</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>STI clinics attenders</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>People Living With HIV/Aids</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Ethnic Minorities and Migrants</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Other (please specify in Comments field)</i>	<input type="checkbox"/>	<input type="checkbox"/>	

### C Functioning of the Behavioural Surveillance System

- 1 *Are there documents establishing or describing the existence and/or functioning of the Behavioural Surveillance System? Please indicate the references and, if possible, send or mail us these documents* References of documents:
- 
- 2 *Is there a centralized body for the management and/or coordination of the Behavioural Surveillance System ? Please indicate its name.* Name of the body or agency:



3	<i>If a full or partial Behavioural Surveillance System currently exists in your country, since when is it operational ?</i>	Since year Comment:
4	<i>How is the Behavioural Surveillance System currently financed in your country ? Please specify whether financing come from the national government or administration, international agencies, national or international grants from foundations, etc.</i>	Financing from (tick all that apply): <input type="checkbox"/> National government/administration <input type="checkbox"/> International agencies <input type="checkbox"/> Grants from foundations <input type="checkbox"/> Research grants <input type="checkbox"/> Other. Specify:
5	<i>According to your judgement, what is the sustainability within a five-year time frame (about 2012) of the Behavioural Surveillance System presently operational in your country? (feel free to add comments if necessary)</i>	Sustainability is assured Comment:
6	<i>Are there published analyses, articles or reports concerning the Behavioural Surveillance System as such ? Please indicate the references and, if possible, send or mail us these documents.</i>	References of documents:

## Section 2 – Second Generation Surveillance System

We focus on Second Generation surveillance as a system, including both a biological surveillance component and a behavioural surveillance component (regularly or not regularly repeated surveys or studies or other data collection methods on HIV/Aids-related behaviours), the integrated results of which are used to ascertain the state and evolution of the HIV/AIDS and/or STI epidemics in your country.

### D Second Generation surveillance as a system

1	<i>According to your judgement, is a Second Generation Surveillance System presently operational in your country? (feel free to add comments if necessary)</i>	Yes, fully operational <input type="checkbox"/> Yes, partly operational <input type="checkbox"/> No <input type="checkbox"/>	Comments:
2	<i>If there is such a system in your country, since what year has it been operating ?</i>	since	Comments:

### E Functioning of the Second Generation Surveillance System

1	<i>Are there documents establishing or describing the existence and/or functioning of the Second Generation Surveillance System? Please indicate the references and, if possible, send or mail us these documents</i>	References of documents:
2	<i>Is there a centralized body for the management and/or coordination of the Second Generation Surveillance System ? Please indicate its name.</i>	Name of the body or agency:
3	<i>If a full or partial Second Generation Surveillance System currently exists in your country, since when is it operational ?</i>	Since year Comment:
4	<i>How is the Second Generation Surveillance System currently financed in your country ? Please specify whether financing come from the national government or administration, international agencies, national or international grants from foundations, etc.</i>	Financing from (tick all that apply): <input type="checkbox"/> National government/administration <input type="checkbox"/> International agencies <input type="checkbox"/> Grants from foundations <input type="checkbox"/> Research grants <input type="checkbox"/> Other. Specify:

5	<i>This question is about the analysis and interpretation of the system-wide information provided by the Second Generation Surveillance system in your country. Is the integration of information done system-wide in a formalized way ?</i>	Tick one: <input type="checkbox"/> Formalized, with a specific entity responsible for this task <input type="checkbox"/> Provided less formally by a network of institutions <input type="checkbox"/> Deficient or non-existing Please describe briefly how this is done:
6	<i>This question is about the diffusion of the system-wide information provided by the Second Generation Surveillance system in your country. Please describe briefly how this is done.</i>	
7	<i>Please describe briefly how the Second Generation Surveillance system works in your country. We refer here to the interplay and/or integration of the biological and behavioural components.</i>	
8	<i>How is the Second Generation Surveillance System currently used in your country ?</i>	Tick all that apply: <input type="checkbox"/> Used as an advocacy tool for increase resources and expanded responses <input type="checkbox"/> Assist in the targeting and evaluation of overall prevention and care programmes <input type="checkbox"/> Indicators of progress for national programmes <input type="checkbox"/> Building support for continued prevention and care efforts <input type="checkbox"/> Interpreting trends in HIV incidence or prevalence <input type="checkbox"/> Programme planning <input type="checkbox"/> Identify the drivers of the epidemic <input type="checkbox"/> To project future prevention and care needs <input type="checkbox"/> Monitoring and evaluation <input type="checkbox"/> Other:
9	<i>According to your judgement, what is the sustainability within a five-year time frame (about 2012) of the Second Generation Surveillance System presently operational in your country? (feel free to add comments if necessary)</i>	Sustainability is assured Comment:
10	<i>Are there published analyses, articles or reports concerning the Second Generation Surveillance System as such ? Please indicate the references and, if possible, send or mail us these documents.</i>	References of documents:
11	<i>This question deals with problems or barriers to the sustainability of the Second Generation Surveillance system. Please describe the problems and barriers you see in establishing such a system if it does not yet exist in your country, or to its sustainability if it exists.</i>	
12	<i>Do you have one or more examples of positive experiences resulting from the existence of a Second Generation Surveillance system in your country ?</i>	

This is the end of the Surveillance System questionnaire.

See return instruction on Page 2

Thank you very much for your participation!

## Glossary

As we need to ask information about behavioural surveillance in many different countries, we give broad and general operational definitions to make clear what information we are seeking.

<b>Behavioural surveillance system</b>	We understand as 'behavioural surveillance system' the collection and use of data from different sources and/or different time points to globally ascertain the state and evolution of the HIV/Aids and/or STI epidemics at the behavioural, as opposed to biological, level.
<b>Concurrency</b>	A concurrent partnership is a sexual partnership in which one or more of the members has other sexual partners, with repeated sexual activity with at least the original partner. [Gorbach PM, et al., 2002]
<b>Judgement or opinion</b>	Some of the questions require expressing a judgement or opinion. We want to know what is the situation according to the best of your knowledge, even in absence of definitive information.
<b>Sexual contacts</b>	We use 'sexual contacts' as a broad term to refer to intercourse or other sexual acts. Their contents may not be the same in different populations.
<b>Sustainability</b>	In the context of behavioural and second generation surveillance systems, we understand 'sustainability' as the ability for the surveillance system to perform its functions over time. This is dependent upon the availability of appropriate resources, such as financing, expertise, political commitment, etc.
<b>WHO recommendations for "Second Generation Surveillance System" in low-level and concentrated epidemics</b>  <i>[Source: UNAIDS/WHO - Working Group on Global HIV/AIDS and STI Surveillance. Guidelines for second generation HIV surveillance. Geneva: UNAIDS/WHO; 2000]</i>	<b>Recommendations for surveillance in a low-level epidemic</b> <ul style="list-style-type: none"> <li>• Cross-sectional surveys of behaviour in sub-populations with risk behaviour</li> <li>• Surveillance of STIs and other biological markers of risk</li> <li>• HIV surveillance in sub-populations at risk</li> <li>• HIV and AIDS case reporting</li> <li>• Tracking of HIV in donated blood</li> </ul> <b>Recommendations for surveillance in a concentrated epidemic</b> HIV surveillance in a concentrated epidemic will contain all of the elements recommended for a low-level epidemic, but will add elements that focus more on the intersection between groups with different levels of risk. <ul style="list-style-type: none"> <li>• HIV and behavioural surveillance in sub-populations with risk behaviour</li> <li>• HIV and behavioural surveillance in bridging groups</li> <li>• Cross-sectional surveys of behaviour in the general population</li> <li>• HIV sentinel surveillance in the general population, urban areas</li> </ul>

ECDC-mandated 2008 survey of Behavioural Surveillance related to HIV and STI  
in European Union member states and other countries

## General Population questionnaire

### What is this questionnaire ?

This questionnaire is part of the survey of behavioural surveillance programmes related to HIV and STI in the EU and other countries undertaken on behalf of the European Centre for Disease Control (ECDC) by an international team of specialists led by the Institute of Social and Preventive Medicine (IUMSP), University Hospital Centre and University of Lausanne, Lausanne, Switzerland.

The survey is divided into nine questionnaires. The questionnaires are in English. This "General Population questionnaire", addresses the existence, scope and functioning of behavioural surveillance in the general population.

There are eight other questionnaires: one addresses behavioural surveillance as a system and the seven others are population-specific: young people, men having sex with other men, injecting drug users, sex workers, STI clinics clients, people living with HIV/AIDS, ethnic minorities and migrants. These questionnaires are to be sent to the appropriate designated people.

A **glossary** of terms is provided at the end of this questionnaire.

### Who should complete this questionnaire ?

This questionnaire should be completed by the most appropriate person for this field. This will generally be the person responsible for behavioural surveillance programmes in the general population, or someone involved in, or well-informed about, these activities. The questionnaire is provided as a computer file and can be forwarded to as many people as necessary (see below: "How to complete the questionnaire").

### How to complete this questionnaire

The questionnaire is provided as a computer file: a Microsoft Word 2000 form containing three types of fields. The boxed Tick fields are filled by clicking with the mouse; the Comment fields are text fields that will expand as needed to accommodate any amount of text; in the Drop-down lists, only one option can be chosen. If you need to give more information, please write this in the 'Comments' field.

When using acronyms, be sure to include the unabbreviated form of the expression when the acronym is first used.

It may be necessary to obtain the required information from different people. If the questionnaire is transmitted to several people, please make sure this is done sequentially, so that the responses from different people are entered in one file only. One single completed questionnaire file, combining all responses, should be sent back to the IUMSP team.

Some questions request published or unpublished scientific articles, reports or other documents. If at all possible, provide these in electronic form and send them by email to the IUMSP team. If no electronic version exists, please send us a paper copy by postal mail.

Some of the questions require expressing a judgement or opinion. Please answer these to the best of your knowledge.

**Where and how to return the completed questionnaire and other information**

The completed questionnaire and other electronic documents are to be returned by email to **andre.jeannin@chuv.ch**

The postal address for paper documents is: IUMSP, attn: A. Jeannin, rue du Bugnon 17, CH 1005 Lausanne, Switzerland.

**Please complete the questionnaire and return it by August 15th, 2008.**

Contact persons at the IUMSP

André Jeannin andre.jeannin@chuv.ch Tel. +44 21 314 7296	Brenda Spencer brenda.spencer@chuv.ch Tel. +44 21 314 7297	Françoise Dubois-Arber francoise.dubois-arber@chuv.ch Tel. +44 21 314 7290
--	--	--

**The completed questionnaire is to be sent back to this person, who is responsible for completing this General Population questionnaire:**

Institution

First name, Family name

E-mail

Postal address

Phone number

--	--

**If other persons participated in completing the questionnaire, please provide their first name, family name, institution, email and telephone in case the research team needs some clarification:**

Person 1

Person 2

Person 3


***Thank you very much to all who provided information for this survey !***

In this questionnaire, we focus on behavioural (as opposed to biological) surveillance) in the general population as a system. We understand a 'behavioural surveillance system' to be the collection and use of data from different sources and/or different time points to globally ascertain the state and evolution of the HIV/Aids and/or STI epidemics at the behavioural, as opposed to biological, level.

**Behavioural surveillance in the General population as a system**

**A** We understand as 'behavioural surveillance system' the collection and use of data from different sources and/or different time points to globally ascertain the state and evolution of the HIV/Aids and/or STI epidemics at the behavioural, as opposed to biological, level.

1 In your view, is there a system of behavioural surveillance of the general population in your country?      yes  no       Comment:

2 If there is such a system in your country, since what year has it been in operation?      since      Comment:

**Topics followed as part of behavioural surveillance in the General population**

**B** Here we want to know whether the following broad themes are included in the surveillance, whatever the data collection method. These do not refer to specific items, each topic may include many items, with various wordings, etc. We do not ask about obvious demographic characteristics such as gender or age. For each line, please answer whether the topic is monitored regularly, irregularly or not monitored as part of the surveillance.

	Regularly monitored	Irregularly	Not	Comments
<b>1 Knowledge and attitudes</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Attitudes towards PLWHA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Knowledge about HIV/Aids infection and/or treatments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Knowledge about STI infection and/or treatments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Awareness of prevention activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>2 Sexual Relationships and sexual partners</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Types of partners/relationships, such as regular partner, casual partners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concurrency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3 Sexual activity and lifestyle</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sexual orientation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sexual activity, such as number of partners, frequency of sexual contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Contraception	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Recourse to prostitution (as client)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	<i>Recourse to prostitution (as sex worker)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>How and where partners are met</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Sexual practices</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4</b>	<b><i>Exposure to risk of infection</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Condom use at last intercourse</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Condom use with different types of partners</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Condom use in different types of sexual practice (e.g. vaginal, anal, oral sex)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Disclosure of HIV status to sexual partners</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5</b>	<b><i>HIV and other STIs</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>HIV testing</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Result of HIV test (self-reported)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Result of HIV test (measured)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Current or past STIs other than HIV and Hepatitis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Hepatitis B vaccine</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Hepatitis B status (self-reported)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Hepatitis B status (measured)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6</b>	<b><i>Drugs and substance use</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Types of drugs consumed</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Injecting drug use</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Use of psycho-active substances (including alcohol) and intercourse</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7</b>	<b><i>Health and access to care</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Antiretroviral treatment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Access to care and support</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>8</b>	<b>Sociodemographic characteristics</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Education</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Employment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Nationality and/or ethnic origin</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Housing conditions</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>9</b>	<b>Other topics followed (please specify in Comments)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Questions D and E** deal with sources of data used for HIV/Aids and STI behavioural surveillance *in the general population* since the start of the HIV/Aids epidemic in 1985. We inquire first about data collected in a repeated way, actual or intended (Question D) and then about one-off studies (Question E). If a one-off study is actually the first in a planned series, please mention it as a repeated study. Please mention only those sources of data that are relevant for behavioural surveillance in the general population.

<b>Repeated cross-sectional surveys, cohorts and other routine or repeated data collection relevant for HIV/Aids and STI behavioural surveillance in the general population</b>									
<b>D1</b>	The focus is on the national studies. Mention the lower-scale studies if they are important for surveillance according to your judgement. Please provide information for each of the series of cross-sectional surveys, cohorts or repeated routine data collection (up to a maximum of 10). Start with the most recent series and work backward in time. If important characteristics (design, target population, sample size, etc.) of the series have changed over time, use one line for each. Use the Comment field to provide details as needed. See example at bottom of table.								
Name of survey or	Institution responsible	Years done	Tick and give year if planned to continue	Target population	Design	Mode of administration	Average sample size	Coverage	Comment
1			<input type="checkbox"/>		repeated	telephone interview	0	national	
2			<input type="checkbox"/>		repeated	telephone interview	0	national	
3			<input type="checkbox"/>		repeated	telephone interview	0	national	
4			<input type="checkbox"/>		repeated	telephone interview	0	national	
5			<input type="checkbox"/>		repeated	telephone interview	0	national	
6			<input type="checkbox"/>		repeated	telephone interview	0	national	
7			<input type="checkbox"/>		repeated	telephone interview	0	national	
8			<input type="checkbox"/>		repeated	telephone interview	0	national	
9			<input type="checkbox"/>		repeated	telephone interview	0	national	
10			<input type="checkbox"/>		repeated	telephone interview	0	national	
<b>Example for Switzerland</b>									
EPSS	Institute Of Social and Preventive Medicine, Lausanne	1989, 1990, 1991, 1992, 1994, 1997, 2000, 2007	<input type="checkbox"/>	General population aged 17-45	repeated cross-sectional	telephone interview	2800	national	Expected to be repeated, but year not known
EPSS	Institute Of Social and Preventive Medicine, Lausanne	jan. 1987, oct. 1987, 1988	<input type="checkbox"/>	General population aged 17-30	repeated cross-sectional	telephone interview	1200	national (Ticino not included)	



<b>D2 Additional information regarding studies mentioned in Table D1</b>			
In this table, please provide additional information about each of the series of study mentioned in Table D1. The name of the study should refer to one of the series of studies in Table D1. Use the 'Comment' field for any additional information you might want to provide.			
1	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
2	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
3	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
4	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
5	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
6	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
7	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
8	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
9	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:
10	<b>Name of the study :</b>	Institution in charge: address, telephone, email, internet site, etc. :	Contact person:
	References or Internet links to the survey protocol if available:	References to published results if available:	Additional information or comment:

<b>E</b> <b>Design of the one-off surveys or studies relevant for behavioural surveillance among THE GENERAL POPULATION</b> Provide information for each of the one-off surveys or studies (up to a maximum of 20), starting with the most recent one and working backward in time. Repeated surveys, cohorts and repeated routine data collection are dealt with in the previous question.								
Name of survey	Year	Target population	Sampling approach	Mode of administration	Total N	Coverage	Comment	
1			venue-based sampling	face-to-face interview	0	national		
2			venue-based sampling	face-to-face interview	0	national		
3			venue-based sampling	face-to-face interview	0	national		
4			venue-based sampling	face-to-face interview	0	national		
5			venue-based sampling	face-to-face interview	0	national		
6			venue-based sampling	face-to-face interview	0	national		
7			venue-based sampling	face-to-face interview	0	national		
8			venue-based sampling	face-to-face interview	0	national		
9			venue-based sampling	face-to-face interview	0	national		
10			venue-based sampling	face-to-face interview	0	national		
11			venue-based sampling	face-to-face interview	0	national		
12			venue-based sampling	face-to-face interview	0	national		
13			venue-based sampling	face-to-face interview	0	national		
14			venue-based sampling	face-to-face interview	0	national		
15			venue-based sampling	face-to-face interview	0	national		
16			venue-based sampling	face-to-face interview	0	national		
17			venue-based sampling	face-to-face interview	0	national		
18			venue-based sampling	face-to-face interview	0	national		
19			venue-based sampling	face-to-face interview	0	national		
20			venue-based sampling	face-to-face interview	0	national		

<b>Main indicators followed as part of behavioural surveillance among the general population</b>					
<b>F</b> Here we inquire about the main indicators according to your judgement. In general, these will be drawn from repeated data collection sources. Provide detailed information for the numerator and denominator, including subgroups concerned, reference periods and names of data sources (see example for Switzerland).					
	<b>Name/Interpretation of indicator and remarks/comments</b>	<b>Name of data source</b>	<b>Numerator</b>	<b>Denominator</b>	<b>Followed in current form since (year)</b>
a					
b					
c					
d					
e					
f					
g					
h					
i					
j					
k					
l					
m					
n					
o					
	<b><i>Example for Switzerland</i></b>				
	<i>Consistent condom use with casual partners: interpreted as indicator of evolution of potential risk of infection in the general population</i>	<i>repeated telephone survey for the evaluation of Aids prevention in Switzerland (EPSS)</i>	<i>number of people aged 17 to 30 years who consistently ("always") used condom with their casual partners in the last 6 months</i>	<i>number of people aged 17 to 30 years who had one or more casual partners in the last 6 months</i>	<i>1987</i>

***If you want to comment about this questionnaire, please do it:***

**This is the end of the General Population Surveillance questionnaire.**

**See return instruction on Page 2**

**Thank you very much for your participation!**

## Glossary

As we need to ask information about behavioural surveillance in many different countries, we give broad and general operational definitions to make clear what information we are seeking.

<b>Behavioural surveillance system</b>	We understand as 'behavioural surveillance system' the collection and use of data from different sources and/or different time points to globally ascertain the state and evolution of the HIV/Aids and/or STI epidemics at the behavioural, as opposed to biological, level.
<b>Concurrency</b>	A concurrent partnership is a sexual partnership in which one or more of the members has other sexual partners, with repeated sexual activity with at least the original partner. [Gorbach PM, et al., 2002]
<b>Judgement or opinion</b>	Some of the questions require expressing a judgement or opinion. We want to know what is the situation according to the best of your knowledge, even in absence of definitive information.
<b>Sexual contacts</b>	We use 'sexual contacts' as a broad term to refer to intercourse or other sexual acts. Their contents may not be the same in different populations.
<b>Sustainability</b>	In the context of behavioural and second generation surveillance systems, we understand 'sustainability' as the ability for the surveillance system to perform its functions over time. This is dependent upon the availability of appropriate resources, such as financing, expertise, political commitment, etc.
<b>WHO recommendations for "Second Generation Surveillance System" in low-level and concentrated epidemics</b>  <i>[Source: UNAIDS/WHO - Working Group on Global HIV/AIDS and STI Surveillance. Guidelines for second generation HIV surveillance. Geneva: UNAIDS/WHO; 2000]</i>	<b>Recommendations for surveillance in a low-level epidemic</b> <ul style="list-style-type: none"> <li>• Cross-sectional surveys of behaviour in sub-populations with risk behaviour</li> <li>• Surveillance of STIs and other biological markers of risk</li> <li>• HIV surveillance in sub-populations at risk</li> <li>• HIV and AIDS case reporting</li> <li>• Tracking of HIV in donated blood</li> </ul> <b>Recommendations for surveillance in a concentrated epidemic</b> <p>HIV surveillance in a concentrated epidemic will contain all of the elements recommended for a low-level epidemic, but will add elements that focus more on the intersection between groups with different levels of risk.</p> <ul style="list-style-type: none"> <li>• HIV and behavioural surveillance in sub-populations with risk behaviour</li> <li>• HIV and behavioural surveillance in bridging groups</li> <li>• Cross-sectional surveys of behaviour in the general population</li> <li>• HIV sentinel surveillance in the general population, urban areas</li> </ul>

# 11 Appendix 4

## Behavioural surveillance system in Bulgaria – Second Generation HIV Sentinel Surveillance (SGSS) among most-at-risk groups

*This summary was provided by the Directorate for Prevention and Control of AIDS, Tuberculosis and STI, Ministry of Health, Bulgaria.*

### Introduction

The organisation and implementation of SGSS is one of the main tasks of the Objective 2 of the Programme 'Prevention and Control of HIV/AIDS', financed by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF).

Major challenge was to ensure the high quality of the SGSS system so that it could be used for monitoring the spread of HIV and high-risk behavioural trends over time and for collecting essential data to guide planning of interventions and to assess the progress in the national HIV response. It includes one national and nine regional Second Generation HIV Surveillance units, which are operational, respectively, at the National Centre of Infections and Parasitic Diseases (NCIPD) and the Regional Inspectorates for Protection and Control of Public Health (RIPCPh) in nine regions of the country.

The successful functioning of this surveillance surveys is the result of the close cooperation among the Ministry of Health, the Program Management Unit, the Objective Coordinators, the RIPCPh and the NGO sub-recipients of the GF grant, which made it possible to gather a pool of medical and non-medical professionals, thus complementing specific skills and competences. It is important to highlight the role of NGO sub-recipients, who were responsible for recruiting respondents from the target groups, which led to the high rates of implementation of the planned sample sizes.

The system was developed to track in parallel biological and behavioural trends among most-at-risk groups regarding HIV, as previously defined in the National Strategy and National Action Plan for Prevention and Control of HIV/AIDS and STI (2001–2007). In particular, the most-at-risk groups targeted by the surveys are:

- Injecting drug users (IDU) (surveyed annually, 2004–2008);
- Sex workers (SW) (annually, 2004–2008);
- Roma people (2004)/Young Roma Men (YRM) (2005–2008);
- Men who have sex with men (MSM) (annually, 2006–2008);
- Prisoners (annually, 2006–2008).

The surveys started in 2004, during the pilot phase, in five major cities – Sofia, Pleven, Plovdiv, Bourgas and Varna. The surveys were expanded geographically in 2005 to eight cities (adding Blagoevgrad, Pazardzhik and Rousse), and in 2006 to nine cities (adding Stara Zagora).

### Methodological notes

#### *Design of the study*

Repeated annual cross-sectional venue-based survey.

#### *Sampling*

Convenience sampling approach.

#### *Venue selection*

Street sites, low-threshold centres and other hot spots where NGO partners in surveillance do regular outreach work aimed at HIV prevention (IDU, SW, YRM); clubs and public places frequented by MSM, as pointed out by key NGO partners experienced in HIV prevention work (MSM); prisons in selected regions (prisoners).

#### *Recruitment*

Trained NGO outreach workers and interviewers from the MSM community directly invite people from the most-at-risk groups to participate in the study (IDU, SW, YRM, MSM); some of the respondents also showed themselves

for participation in the survey after learning from their peers; trained VCT counsellors directly invite prisoners to participate in the study through a take-all approach (prisoners).

### **Eligibility criteria**

Eighteen years old or older (IDU, SW, MSM, prisoners); between 18 and 25 years (YRM); not have already participated in the current phase of the survey. Plus:

- have injected drugs for non-medical purposes in the past 30 days (IDU);
- have offered sexual services for money, gifts, drugs or shelter in the past 30 days (SW);
- have been engaged in HIV risk practices, including having injecting drugs, offered sex for money or gifts, or had male-to-male sex (YRM);
- have had male-to-male sex in the past 30 days (MSM);
- men serving a prison sentence (prisoners).

### **Behavioural data collection**

Behavioural data are collected through FHI-structured questionnaire for face-to-face interview. Each questionnaire is adapted according to the selected target group. Data collection methodology is aligned with *UNGASS Guidelines on Construction of Core Indicators, March 2007*. For the groups of IDU, SW and MSM, interviews are administrated by trained interviewers, selected from the NGOs outreach teams working with these groups. For the Roma population, interviewers are recruited independently and trained additionally. For prisoners, interviewers are selected from the VCT counsellors providing anonymous HIV testing and counselling in prisons. The duration of each interview is between 30 and 50 minutes.

### **Biological data collection**

Venous blood samples are collected by medical specialists after the end of the behavioural interview. Samples are anonymously screened for HIV, HBV, HCV and syphilis. Positive ELISA results for HIV in the laboratories at the Regional SGSS Units are confirmed with Western blot by the National HIV Confirmatory Laboratory.

### **Data processing and analysis**

Data entry, clearing and analysis are performed by the National Second Generation HIV Surveillance Unit at the National Centre of Infectious and Parasitic Diseases. Coded values from valid questionnaires, including biological results, are entered into specifically designed ACCESS-based database by trained and appointed data entry operators. Quantitative analyses are performed with SPSS by a sociologist and/or statistician. Further analyses are performed by a team of competent experts, including staff from the Directorate for Prevention and Control of AIDS, TB and STI at the Ministry of Health, national experts in different programmatic areas and staff from the Monitoring and Evaluation Unit of Programme 'Prevention and Control of HIV/AIDS'.

## **Performance framework of the National Programme for Prevention and Control of HIV and STI (2008–2015)**

The priorities set for the National HIV/STI Programme in Bulgaria are:

- scaling up HIV prevention to avert new infections – (reduce the number of new infections by 2015);
- scaling up HIV testing to increase the number of people who know their status – (at least 85% by 2015); and
- universal access to treatment, care and support for PLWHA – (assured for all in need).

Progress towards these specific objectives is measured through a number of impact and outcome indicators, including:

- HIV-related risk behaviours of most-at-risk groups and young people aged 15–24 years;
- HIV prevalence among most-at-risk groups;
- syphilis prevalence among most-at-risk groups; and
- survival for PLWHA receiving antiretroviral treatment.

In compliance with the national policies and international commitments, such as the UNGASS Declaration of Commitment, the programme monitors coverage and outcome indicators, including:

- HIV testing among most-at-risk groups;
- reach of HIV prevention programmes; and
- HIV-related knowledge among most-at-risk groups and young people aged 15–24 years.

Impact and outcome indicators for the National Programme for Prevention and Control of AIDS and STI, including the GF-funded programme as contributing to the achievement of national goals, are measured through the use of four main types of surveillance data sources, as follows:

- Second Generation HIV Surveillance (Integrated Biological and Behavioural HIV Surveillance – IBBS) for tracking progress against indicators for most-at-risk groups;
- routine HIV surveillance, as used for HIV projection models to estimate biological trends among the general population, including young people aged 15–24 years;
- special national representative surveys to track changes in knowledge, attitudes and behaviour among young people aged 15–24 years;
- information system for monitoring HIV patients registered in HIV treatment sectors for follow-up and provision of antiretroviral therapy.

## 12 Appendix 5

# Discussions in the migrants group at the Behavioural Surveillance Expert Meeting, Montreux, February 2009

Several questions were discussed at the workshop convened for the project in Montreux, Switzerland, in February 2009. The 'migrants' subgroup was composed of seven experts, with extensive experience in conducting HIV-related research in European countries among mobile, migrant and ethnic minority communities.

A first – and major – point of discussion was to go back to basics to reaffirm the 'WHY' of carrying out behavioural surveillance studies among such communities: such studies should be carried out in order to define gaps in HIV prevention, treatment and care – as well as to define special risk and vulnerability factors that concern the target population. The working group stressed that any behavioural surveillance carried out should have a programmatic end point: surveillance should only be carried out if it is possible to improve the target group's access or reduce its vulnerability as a result of the findings.

Another main theme of discussion concerned the definition of the target group. It was noted that definitions of 'migrant' are often extremely lax. 'Migrants' are often lumped together in a large category that is of little use for understanding either issues or epidemiology. After much discussion, the working group refined the categories of migrant or mobile population presented in the main body of this report. Studies relevant to HIV/STI behavioural surveillance have been carried out in European countries among:

- Established communities of 'ethnic minorities' or migrants. The countries of origin, original reasons for migration, culture and living conditions of each are different in various European countries.
- Newly arriving migrants. These may be people seeking asylum, family members of migrants already established in the destination country, labour migrants, or students. Of particular pertinence here is that some may come from high prevalence countries.
- People who are mobile for professional reasons. Many of these will remain in the destination country only briefly. Examples are truck drivers, sailors, sex workers, workers on oil platforms, etc. Agricultural and construction workers would also fall into this category if they returned to their home countries after a season of work.

The category of undocumented migrants (see above), may in fact cut across all of the above: for example, while some may deliberately seek entry to a country without having undergone the required administrative formalities, others may have entered a country legally, for example to join a family member, but become undocumented when their visas expire, and still others may decide to stay on after their application for asylum has been rejected.

Concerning the topic areas that need to be monitored in behavioural surveillance, the group defined the following orders of priority:

- **Access to STI/HIV testing, treatment and care** – Monitoring access is a priority since many migrants have difficulties in this domain and knowledge of HIV status and appropriate treatment reduce the risk of further transmission. Some argued that access to prevention is a 'soft' subject difficult to assess, but that access to testing can serve as a proxy that is easier to monitor. A very important background variable determining access is the migrant's legal status in the country.
- **Knowledge about STI/HIV/AIDS** – Monitoring such knowledge was seen as being important because it is influenced by, on one hand, the fact that migrant and ethnic minority populations may not have access to information that is generally available to others in the destination country. This is usually because the information is presented in ways that are linguistically and culturally inappropriate. On the other hand, some migrants, especially if they come from high prevalence countries well covered by prevention efforts, may have better understanding of AIDS issues than European populations. Still others may have acquired HIV and AIDS knowledge that is not applicable in the destination country: for example those who migrated before HAART became available in their home countries may be unaware of recent progress in HIV treatment.
- **Attitudes towards PLWHA** – Monitoring attitudes is important because of the significant stigma often noted in ethnic minority communities. A point raised by the PLWHA discussion group is also pertinent here: in addition to stigma in the community it is important to also attempt to monitor internalised AIDS stigma among members of ethnic minority communities.



- **Sexual relationships** – As for any other group, this includes types of partners, i.e. casual or regular.
- **Unprotected sexual relations** – For migrant and ethnic minority groups this includes relations in both the host country and that of origin.
- **Injecting drug use** – This question is important everywhere, but particularly pertinent for Central and Eastern Europe.

Concerning community preparation for behavioural surveillance studies, participants from the countries in which most studies have effectively been carried out stressed the need for not only working with the communities to be studied, but also empowering them. They noted that a great deal of effort had gone into equipping members of ethnic minorities communities to carry out the studies that concern them.

Finally, indicators were discussed. The migrants group stressed the need for standardisation to make indicators comparable across studies and across countries. The discussions concerning general indicators are summarised in chapter 5.5, and further elaborated in the next section.

## 'Migrant' and 'mobility' indicators

A key question raised both in the report and in the expert discussions concerns the mobility indicators used in various studies. 'Migrants' are defined in several different ways, including:

- country of birth or of origin;
- nationality; and
- ethnic origin.

Variability in the main definition of 'migrant' or 'ethnic minority' makes comparison between studies – and between countries – extremely difficult, for epidemiological surveillance of HIV and of TB[1], and also for behavioural surveillance. The different definitions were discussed in the experts working group, but no consensus could be reached as to which might be more appropriate. 'Country of birth' (or the slightly less specific 'country of origin') was generally preferred, although 'nationality' was thought to be extremely pertinent in some countries. 'Ethnic origin' was considered important in the UK, but irrelevant – or even offensive – in some other countries. Some of the advantages and disadvantages of each definition are sketched in the following table:

**Table 11.1 Current mobility indicators: advantages and disadvantages**

Indicator	E.g. (examples of HIV studies that use)	Advantages	Disadvantages	Comment
<b>Country of nationality or citizenship</b>	Used by 12 of 15 EU HIV surveillance systems (in early 2000s)[1]; Lot (France); Staehelin (Switzerland); Nikolopoulos (Greece)	Easy to define (passport); denominator available in EU and UN migration data bases; used to track trends in new infections, thus interesting for comparison for behavioural surveillance	May give some indication of integration, but a rather gross one; policies for granting nationality are quite different from country to country; tells nothing about subgroups; migrants may have more than one nationality	ECDC prefers this over 'region of origin' for epidemiological surveillance <sup>1</sup>
<b>Country of birth (or country of origin)</b>	Lot, Chee (France); Anderson & Doyal (UK); Castilla (Spain)	Easy to define; denominator available in EU and UN migration data bases; used to track trends in new infections	Gives no notion of mobility between birth and current residence; does not give information about second generation migrants or ethnic minorities	ECDC prefers this over 'region of origin' for epidemiological surveillance[1,2]
<b>Ethnic origin</b>	UK (most studies cited in this report) Kramer, Gras (Netherlands)	Self-defined, thus presumably reflects cultural traditions that may be pertinent May be helpful reference point for mobilizing community	Self-defined, thus may not be precise or replicable; how to classify people of mixed origin?; may be an euphemism for discredited variable 'race'	

<sup>1</sup> ECDC annual HIV/AIDS surveillance report 2008 [2].

ECDC has suggested using country of nationality and country of birth for epidemiological tracking<sup>2</sup>. These indicators have the advantages of being easy to define (thus repeatable), and are used in many of the studies discussed in this report. In addition, the essential denominators are available in European migration statistics.

However, nationality, especially, is subject to some biases that may not be immediately obvious: in particular, country policies for granting nationality vary considerably between countries. Some countries encourage rapid acquisition of citizenship, while in others immigrants may wait many years before acquiring it. Thus an immigrant from a particular country is more liable to be classified as such in a destination country that does not encourage naturalisation, but to be classified as a national in a country that does. In addition, people who have lived in more than one country increasingly have more than one nationality, and there is nothing to guide which one might be used for any particular study.

Neither nationality nor country of origin will cover 'second generation' migrants whose parents migrated before they were born. Nor will they cover subsequent generations of ethnic minorities<sup>3</sup>. Thus 'ethnicity' or 'ethnic origin' has been extensively used in the UK and to some degree in the Netherlands. The indicator has the potentially great advantage of reflecting belonging to minority groups that may have risk and vulnerability factors in common, and it may also reflect – and serve as – a strong basis for community outreach. The self-defined nature of the indicator is also a disadvantage: it may be entirely subjective, thus not necessarily replicable. In addition, sub-groupings or categories (such as 'Black African' or 'Afro-Caribbean', for example) may be different from country to country. Finally, 'ethnic origin' may serve as a euphemism for the discredited category of 'race'[1].

While 'nationality', 'country of origin' and to some extent 'ethnic origin' may be important for tracking epidemiology, especially of infections among new arrivals, none does particularly well in capturing infections, risks and vulnerabilities in longer-established ethnic minority communities. Other definitions that attempt to assess the migration trajectory more finely are necessary. Some of those currently used, often in conjunction with one or another of the above, are:

- duration of stay in the host country;
- where one's parents were born; and
- where the subject lived between the ages of 10 and 16.

The two first indicators are easy to define, and may capture the beginning and the end of an individual's migration trajectory. The third, used in the UK MAYISHA II study, is a good indicator of mobility in between, and will reflect the cultural (and to some extent social) influences on an individual during adolescence, a critical period for defining sexual attitudes and behaviours. More work is required on the additional intermediate steps of mobility.

None of the indicators above take into account current mobility that is potentially relevant to HIV risks, such as circular mobility between countries of origin and destination, or travel to other countries. This includes return of migrants or ethnic minorities to home and other countries for visits, temporary stays in a country (for example for professional reasons), and mobility for a wide range of other reasons. In the expert consultation mentioned above, working groups discussing two other populations of concern for behavioural surveillance – men who have sex with men and injecting drug users – also defined a need for recognised indicators related to mobility. Those currently used are:

- travel to another country;
- sexual relations during such travel; and
- protection used.

Important work remains to be done, however, in reviewing the exact formulation of the questions used and in proposing ways to standardise the indicators related to mobility (for example time periods covered, and the nature of the relationships established).

## Priority gaps

A first priority is to study the methods and approaches of the behavioural surveillance or other HIV-related social science research that has been done, and to formulate lessons to be learned. Specifically, why is some such research successful (for example, seeing large proportions of the migrants or members of ethnic minority communities approached agree to submit to an HIV test), while other studies do not get started in the first place,

---

<sup>2</sup> See Araujo et al [3] (forthcoming September 2009) for a discussion of the difficulties surrounding epidemiological research carried out with migrant population groups.

<sup>3</sup> There are reasons to think that both 'second generation' migrants and those of subsequent generations may be particularly vulnerable to HIV, but necessary research is lacking, partly because of the definition problem.

or have potential respondents refuse to answer sensitive questions. It was proposed here that one of the key elements is preparation in the community to be studied, but this remains to be verified, and the ways in which such mobilisation might be done need to be examined.

The question of indicators deserves far more attention and elaboration than it could be given here. A second priority is thus to study current and possible indicators of mobility. Since there is very little current behavioural surveillance taking place, it is important to determine which indicators are most commonly used for other studies related to migration and HIV, and to further elaborate their potential advantages and disadvantages for behavioural surveillance.