Syntagma GmbH
Politikanalyse, Evaluation & Beratung

Review of the Swiss HIV Policy by a Panel of International Experts

Study on behalf of the Swiss Federal Office of Public Health

Scientific Background Report

Larissa Plüss, Kathrin Frey, Daniel Kübler and Rolf Rosenbrock

November 6, 2009

Bergwerkstrasse 36, 8810 Horgen, Switzerland
Telefon (+41) 78 815 67 60, Email: syntagma@sunrise.ch

Table of Contents

Index of Tables

Index of Figures

List of Abbreviations

AAS	AIDS Information Switzerland (AIDS-Aufklärung Schweiz)
AG	Canton of Aargau
AHS	Swiss Aids Federation (Aids-Hilfe Schweiz)
AI	Canton of Appenzell Inner Rhoden
AR	Canton of Appenzell Ausser Rhoden
ART	Antiretroviral therapy
ARUD	Association for Risk reduction in Use of Drugs
BerDa	Counselling and data transfer tool (Beratungsleitfaden und Datenverwaltungssystem)
CHF	Swiss Franks
EKAF	Swiss National AIDS Commission
FSW	Female sex worker
GE	Canton of Geneva
GIS	Group for Sex Information and Health Education
GR	Canton of Grisons
GSN	AIDS group Neuchâtel (Groupe Sida Neuchâtel)
HAART	Highly active antiretroviral therapy
HIV	Human immunodeficiency virus
ibid.	ibidem
IDU	Injecting drug user
NE	Canton of Neuchâtel
NGO	Non-governmental organisation
NHAP	National HIV/AIDS Programme
MSM	Men having sex with men
MSW	Male sex worker
PICT	Provider Initiated Counselling and Testing strategy
SFOPH	Swiss Federal Office of Public Health
SG	Canton of St. Gallen
SHCS	Swiss HIV cohort study
STI	Sexually transmitted infection
TI	Canton of Ticino
UN	United Nations
VCT	Voluntary Counselling and Testing strategy
WHO	World Health Organisation
ZAH	Aids Help Zurich (Zürcher Aids-Hilfe)
ZH	Canton of Zurich

0 Abstract

This report lays out the current state of the problems and policies in the field of HIV in Switzerland. It is based on a review of existing literature, as well as on interviews with selected experts from the field of HIV in Switzerland, conducted in May 2009. After introducing the aim of the mandate (chapter 1), the report provides insight into the general epidemiological situation and HIV risk behaviour (chapter 2), outlines the state of activities in the field of primary prevention (chapter 3), as well as treatment and care (chapter 4), before turning to an analysis of issues and structure in terms of governance (chapter 5). The results were used by a panel of international experts to assess the current Swiss HIV-policy, and formulate recommendations for further improvement, as an input to the reformulation of the future National HIV/AIDS Programme. The recommendations have been published in a separate Expert Report (Rosenbrock et al. 2009).

1 Introduction

1.1 Mandate and Aim of the Scientific Background Report

The current HIV policy of the Swiss Confederation is based on the National HIV/AIDS Programme (NHAP) 2004-2008 (SFOPH 2003). In March 2008, this programme was extended for two years – i.e. until 2010. According to the NHAP 2004-2008, the HIV policy in Switzerland focuses on three core fields and three levels of intervention. The core fields read as follows:

1. *Prevention:* The NHAP aims at preventing the spread of HIV and is committed to reduce the number of new cases of HIV infections. To reach this goal, general prevention measures are implemented (information campaigns, prevention in schools and individual prevention counselling), as well as prevention measures in specific target groups showing high HIV prevalence (particularly: MSM, Sub-Saharan African migrants, as well as intravenous drug users).
2. *Therapy*: In order to reduce the negative effects in people living with HIV, the NHAP is committed to ensure that people with HIV receive state-of-the-art counselling, support, treatment and nursing care in accordance with their needs.
3. *Solidarity:* The NHAP is committed to ensure that people with HIV, whether in Switzerland or abroad, are given the same opportunities as non-infected persons in all areas of life and feel accepted as an integral part of society.

The three levels of intervention of the NHAP 2004-2008 comprise the following tasks (SFOPH 2003):

1. Information for the general population
2. Information and motivation of target groups
3. Individual prevention and counselling

With the extension of the programme until 2010, the three levels of intervention were renamed as axes and the third axis was changed as follows: 3) Preventing HIV transmission in serodiscordant couples (www.bag.admin.ch, August 2009).

With respect to the National HIV/AIDS programme beyond 2010, the Swiss Federal Office of Public Health (SFOPH) decided to commission an independent assessment of the current HIV policy by an international expert panel. This decision was motivated by the fact that problems and issues in the field of HIV have fundamentally changed since the mid-1990s with the introduction of highly active antiretroviral therapy (HAART) (Rosenbrock et al. 2000). HIV is no longer a rapidly fatal condition in Switzerland. Since the mid-1990s risk-behaviour has changed (Dubois-Arber et al. 2001), and decision-makers have become less willing to provide funds for prevention (Neuenschwander et al. 2005). This raises the question as to whether the current „policy design" (Knoepfel et al. 1997) defined by the NHAP is still able to provide effective strategies for prevention, treatment and governance, or whether it must be changed.

The final outputs of this review consist of two reports: (i) a comprehensive scientific background report containing a description and analysis of the current state of affairs in the field of HIV policy in Switzerland (this document); (ii) a summary report containing the expert panel's recommendations for a future Swiss HIV policy. The scientific background report provides relevant research results covering the areas of epidemiology and surveillance, primary prevention, treatment and care as well as governance. It is addressed to the programme managers of the SFOPH and its partners as well as other interested specialists in the field of HIV policy.

1.2 Research Questions

The SFOPH has identified three main questions with respect to the functioning of the Swiss HIV system. These three questions relate to the fields of prevention, treatment and governance. The SFOPH seeks answers to these important questions so that it can develop an effective programme from 2010.[1] During the course of the review, the original questions were reformulated without loosing their intentions as follows:

[1] Minutes of the meeting of the 16th of September 2008, Fachstelle Evaluation und Forschung, H. Brunold.

1. **How can Switzerland minimize HIV transmission?**
2. **How can Switzerland assure timely testing of persons infected with HIV, referral for treatment and support services as well as continuity of care?**
3. **What would be the best governance in the Swiss HIV policy system in terms of division of labour, resources and incentives?**

These three questions guided the assessment accomplished. It is important to note that they do not imply to evaluate the effectiveness of single policy measures, but rather focus on the functioning of the Swiss HIV system as a whole, mainly in the fields of primary prevention (question 1), treatment and care (question 2), as well as regarding its governance (question 3).

1.3 Design and Method

To review the current situation in relation to the three research questions and to formulate recommendations, a panel of internationally renowned experts was convened. The expert panel was chaired by Prof. Dr. Rolf Rosenbrock (Wissenschaftszentrum Berlin) – a renowned and internationally recognized scholar active in the field of HIV policy since the very beginning of the epidemic. The further panel members were Calle Almedal, former Senior Adviser at UNAIDS, Prof. Dr. Jonathan Elford, holding the chair in evidence-based healthcare at City University London, Dr. France Lert, director of the unit on Epidemiology of the social and occupational determinants of Health, at INSERM, and Dr. Srdan Matic, head ad int. of the communicable diseases unit of the European Office of the World Health Organisation. Prof. Dr. Daniel Kübler, political scientist at the University of Zurich and member of the Swiss AIDS Commission, was the Swiss representative on the expert panel. The expert panel was supported by a team of scientific collaborators (lic. phil. Larissa Plüss and lic. phil. Kathrin Frey), based at Syntagma Ltd. Horgen (Switzerland) working under Prof. Dr. Daniel Kübler. Additional support was provided by Axel J. Schmidt (MD, MPH), scientific coordinator of the European MSM Internet Survey (EMIS) located at Robert Koch Institute in Berlin.

The review had three phases. The *initial phase* (November 2008 – March 2009) comprised the development of the scientific basis for the assessment. First of all, the expert panel defined the relevant assessment criteria relating to the three questions under investigation. The panel then asked its research team to collect and analyse data to assess the current state of affairs in the field of HIV policy in Switzerland. The results of this research constitute the scientific basis of the review and are synthesised in a scientific background report.

In the *second phase* of the project (April – July 2009), the expert panel read the scientific background report and held meetings with selected actors involved in the implementation of the Swiss HIV policy. These meetings took place in the beginning of May 2009 in Berne and Zurich and 13 people working in the field of surveillance, prevention, therapy and treatment

of HIV in Switzerland were interviewed.[2] The expert panel then answered the three research questions and formulated recommendations for a Swiss HIV policy which are included in an expert report.

The *third phase* (August – October 2009) consisted of a validation of the expert report by the participants in the meetings, whose feedback was incorporated into the final version of the report. The final outputs, the scientific background report and the expert report, were completed in October 2009. Additionally, the expert report is translated into French and German.

The following table shows the methods used for the elaboration of the scientific bases.

Table 1: Methods used to elaborate the assessment

Assessment question	*Methods of data collection and analysis*	*Data*
1 - 3	Literature review and secondary analysis	Research results covering the fields of epidemiology and behavioural surveillance, therapy and treatment as well as governance.
3 (Governance)	Survey core actors (SFOPH, AHS, possibly further NGOs)	Quantitative data of the development of the resources allocated to the different prevention areas.
1 - 3	Interviews with 13 actors in Switzerland	Qualitative data from interviews with actors working in the fields of surveillance, prevention and treatment.

[2] The list of the participants to these meetings is provided in the appendix.

2 Epidemiology and Surveillance

2.1 General Epidemiological Situation

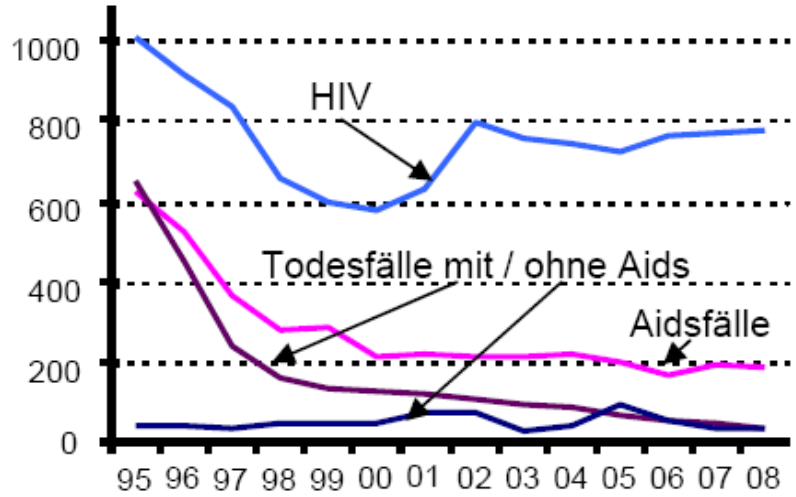
In Switzerland, epidemiological surveillance is carried out by the Swiss Federal Office of Public Health (SFOPH) and consists of the centralised collecting of positive HIV test results which the screening laboratories are obliged to report anonymously. The reported results are complemented by a set of anonymised clinical information (probable route of transmission, stage of disease and CD4 count).

2.1.1 HIV and AIDS

Newly diagnosed HIV infections declined in Switzerland between 1992 and 2000. The year 2000 marks the point with the lowest reported number of new HIV positive test results (578). By 2002, the number of new HIV diagnoses increased by 25% to 793. After 2002 the total number of positive HIV tests was approximately stable (figure 1). The SFOPH estimates that roughly 750 to 850 persons are infected with HIV every year in Switzerland. Given the total population of 7.593 million residents (at the end of 2007), this is equivalent to 98 to 111 HIV infections per million inhabitants every year. In Western European comparison, the rate of newly diagnosed HIV infections in Switzerland is rather high. It is comparable to the one in France, but roughly three times as high as in Germany or Italy.[3]

Cases of diagnosed AIDS have declined since 1996, thanks to the availability of ART, as have the cases of AIDS-related deaths (figure 1). The SFOPH estimates that there are roughly 160 to 190 new AIDS diagnoses every year, an incidence of 21 to 25 per million. Euro HIV data show that, with respect to neighbouring countries, Switzerland has the highest incidence of AIDS.

Figure 1: Newly diagnosed HIV infections, AIDS-cases, deaths per year (1995-2008) (Source: SFOPH)

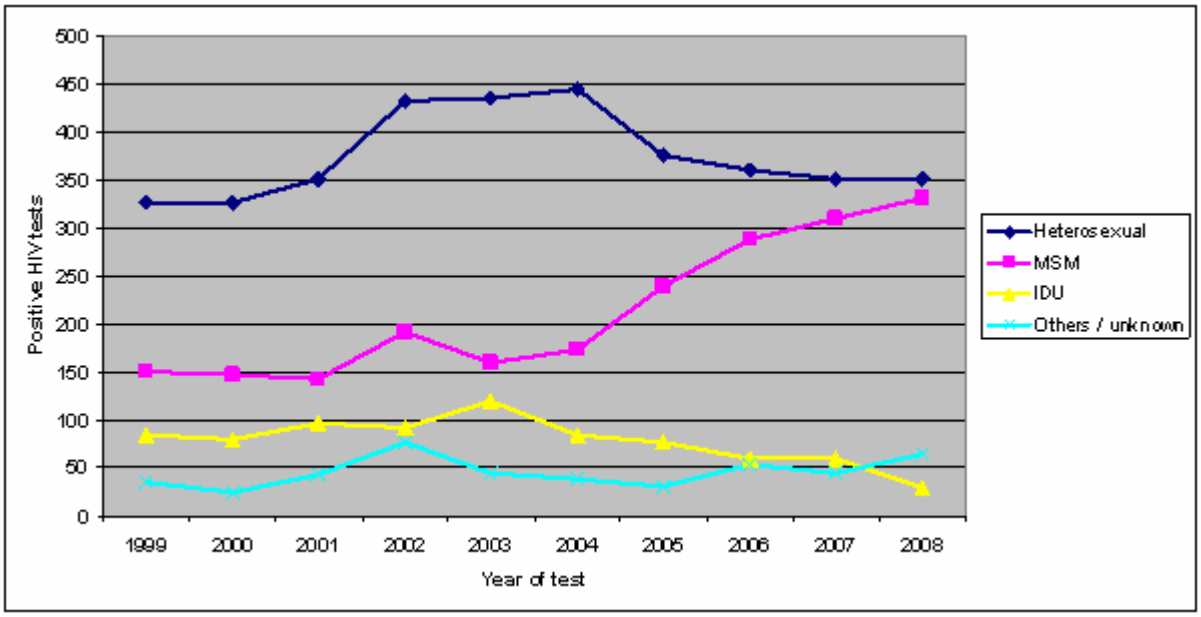


[3] See data provided by Euro HIV.

The number of persons infected with HIV every year is eight to ten times higher than the number of HIV-positive persons who die. Therefore, the number of persons living with HIV in Switzerland increases by roughly 700 every year. This also raises the need for treatment and therapy. At the end of 2008, the SFOPH estimated that there are currently 20'000 to 30'000 persons in Switzerland who are infected with HIV.

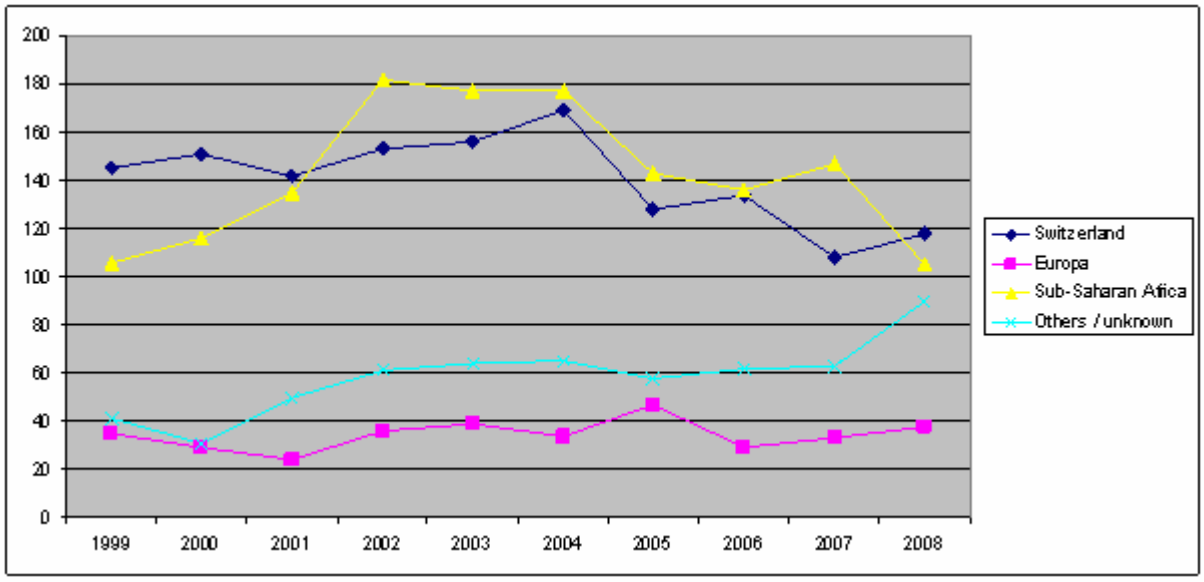
Figure 2 shows the annual number of newly diagnosed HIV infections by transmission groups and year of test. It shows that the rise of newly diagnosed HIV infections in 2002 concerned essentially heterosexual transmission. While heterosexual transmission has declined and stabilized thereafter, transmission among men having sex with men (MSM) has almost doubled since 2004. Simultaneously, transmission among intravenous drug users (IDU) has declined.

Figure 2: Number of new HIV diagnoses according to ways of transmission (1999-2008) (Source: SFOPH)



Regarding heterosexual transmission, an analysis of the countries of origin shows that HIV infections in this group frequently involved persons from countries with high HIV prevalence, i.e. mainly Sub-Saharan Africa (figure 3). Since 2004 however, the yearly number of positive HIV tests from heterosexuals originating from countries with a high HIV prevalence decreased. Among Swiss heterosexuals, there is a change in the proportion of gender: in 2002, 48% men and 52% women, in 2008, 73% men and 27% women.

Figure 3: Heterosexual transmission group: Number of new HIV diagnoses according to region of origin (1999-2008) (Source: SFOPH)



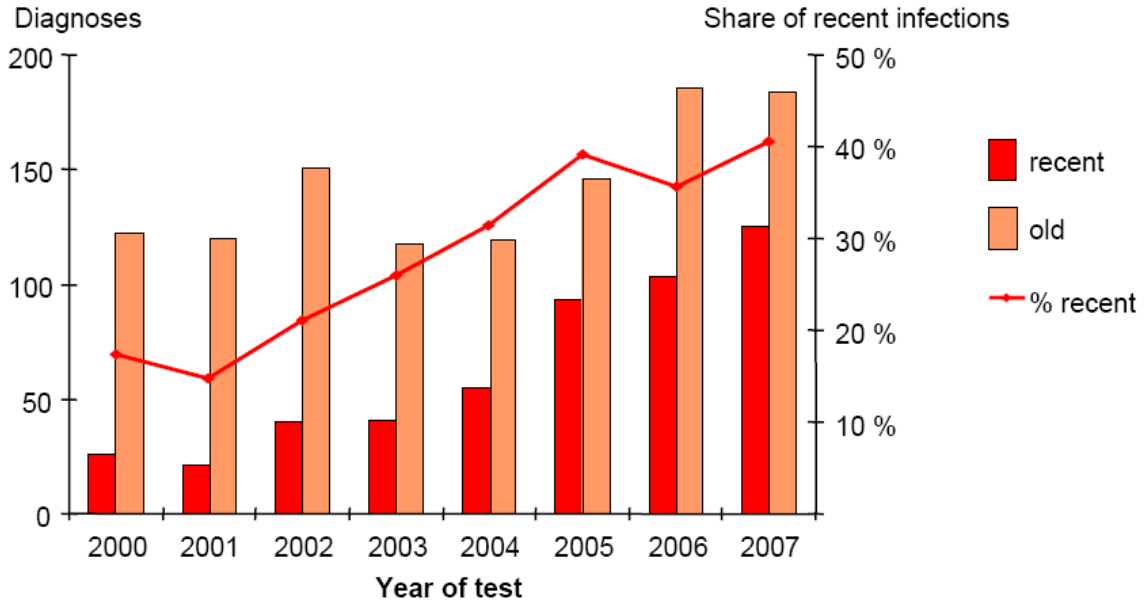
This picture echoes the findings in other Western European countries that can be summarized as follows[4]:

- HIV is transmitted mainly through unsafe sex and, to a much lesser extent, through the use of contaminated equipment by injecting drug users;
- The majority of heterosexually transmitted HIV cases originate in countries with high prevalence in Sub-Saharan Africa;
- The number of new HIV diagnoses in men having sex with men has sharply increased.

Regarding the MSM transmission group, a closer analysis has revealed that the proportion of recent infections, i.e. infections less than 6 months prior to the test, rose significantly (see figure 4) and was very high compared with other transmission groups (e.g. heterosexual transmission: less than 10% recent infections).

[4] UNAIDS (2007). *North America, Western and Central Europe: AIDS epidemic update, regional summary*.

Figure 4: Recent infections (i.e. less than six months prior to test) and old infections among MSM with positive HIV test result according to year of test (2000-2007) (Source: SFOPH)



2.1.2 Other STIs

In general, since the beginning of the new century the number of reported STIs in Switzerland is continually rising – after a decline in the 1990ies (SFOPH 2008c). The number of new cases of chlamydial infection doubled between 1999 and 2005 in men and women (figure 5). The number of gonorrhoea infections tripled between 1999 and 2006 (figure 6). With regard to syphilis, comparisons are more complicated because of disparate registration procedures. Surveillance was stopped in 1999 because of the high workload and initiated again in 2006. During these years, the number of cases tripled, presumably. Due to the described strong increase, the Swiss surveillance system was adapted in 2005. Compulsory registration for gonorrhoea and syphilis infections was introduced. Registration for chlamydial infection has already been compulsory. Recently improved reporting schemes allow more fine-grained analyses. These show that, in the case of gonorrhea and syphilis, high proportions of recently infected men report having had sex with other men (35% of men recently infected with gonorrhea, and 59% of men recently infected with syphilis).

Comparisons with the situation in other countries (e.g. Low 2007) show that the trends in Switzerland reflect those in Europe, but that gonorrhoea and syphilis are more common in Switzerland than in other comparable European countries.

Figure 5: Chlamydia reports in men and women in Switzerland (1988-2005) (Source: SFOPH 2008c)

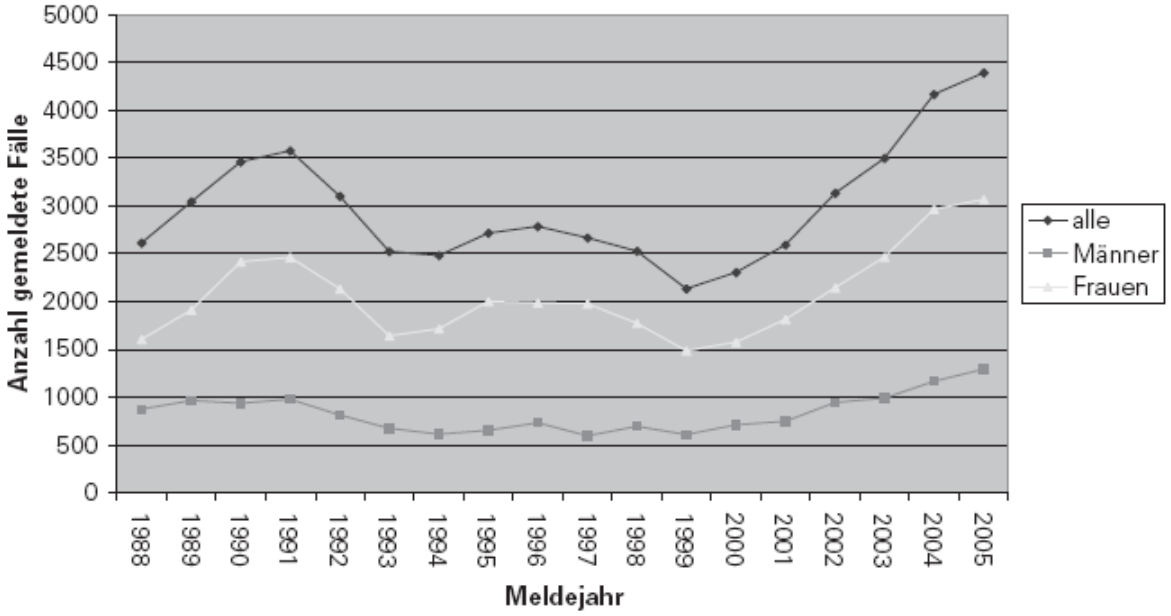


Figure 6: Gonorrhea reports in men and women in Switzerland (1988-2006) (Source: SFOPH 2008c)

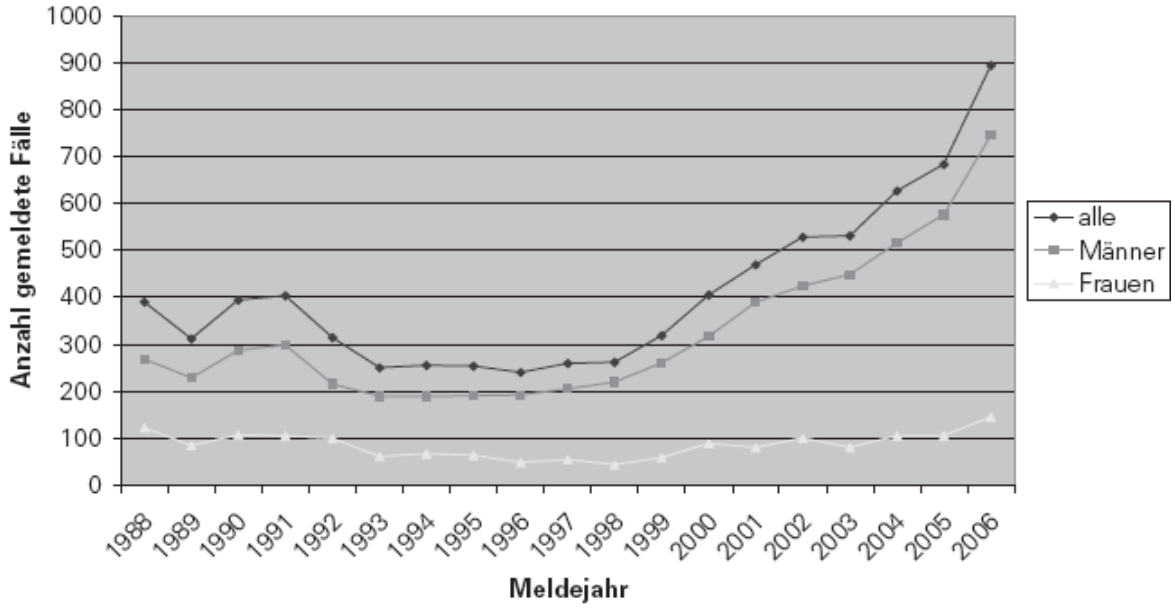
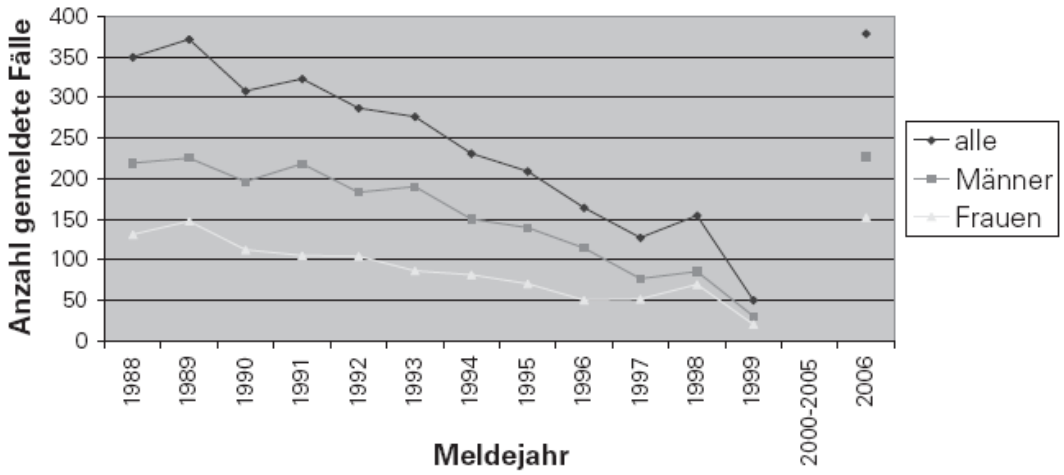


Figure 7: Syphilis reports in men and women in Switzerland (1988-1999, 2006) (Source: SFOPH 2008c)



2.1.3 Context Factors of Risk Taking Behaviour

International studies provide strong evidence that HIV infection is associated with a greater risk for depressive disorder (Ciesla/Roberts 2001). It is found that HIV-positive individuals were 1.99 times more likely to be diagnosed with major depressive disorder than HIV-negative individuals. This finding is consistent with the large body of research demonstrating a strong association between other serious medical illnesses and depression.

In Switzerland, there is a lack of data about the relation between HIV infection and mental health. The only useful information stems from the "Geneva Gay Men's Health Survey" and from a recent study on Swiss sex workers (Bugnon et al. 2009a, 2009b; Bugnon/Chimienti 2009).

The Geneva Gay Men's Health Survey is a cross-sectional venue-based probability survey conducted in 2002 using time-space sampling developed by the Centres for Disease Control and Prevention (Wang et al. 2007b). The main objective of this analysis was to assess possible differences in morbidity and health care utilization between respondents in the Geneva Gay Men's Health Survey and their general male population controls. Wang et al. (2007a) showed that nearly half (43.7%) of the sample fulfilled the criteria for at least one mental disorder: 19.2% had major depression, 21.9% had specific and/or social phobia, and 16.7% had an alcohol and/or drug dependence disorder in the past twelve months. Over one quarter of the cases were comorbid with another kind of disorder, and 35.7% of cases consulted a health care professional in the past twelve months for mental health. However, the connection with HIV disease was not investigated in this survey.

Bugnon et al. (2009b) surveyed 300 organisations related to the Swiss sex market – cantonal authorities who often deal with sex workers and private institutions that work and take sides with sex workers. Among other things, the questionnaire contained questions about the main

health problems of sex workers. The results show that mental health problems rank third. 45.5% of the respondents mentioned that psychological problems (depressions, mental exhaustion) are a serious health problem among Swiss sex workers.

2.2 HIV and Risk Behaviour in Selected Target Populations

In Switzerland, behavioural surveillance was initiated in 1987, in the context of a larger evaluation scheme of the national AIDS prevention policy that included, besides behavioural monitoring, punctual evaluation of particular programmes, as well as programme monitoring (Dubois-Arber et al. 1999; Dubois-Arber et al. 2008). From 2004 onwards, this evaluation scheme was replaced by a second generation surveillance scheme (UNAIDS/WHO 2000) in which behavioural surveillance is continued. It is designed and operated by the Institute of Social and Preventive Medicine of the University of Lausanne (IUMSP).

Constructed progressively, HIV behavioural surveillance currently includes a multitude of behavioural surveys and monitoring schemes in the following target populations (for details see Jeannin et al. 2009: 6):

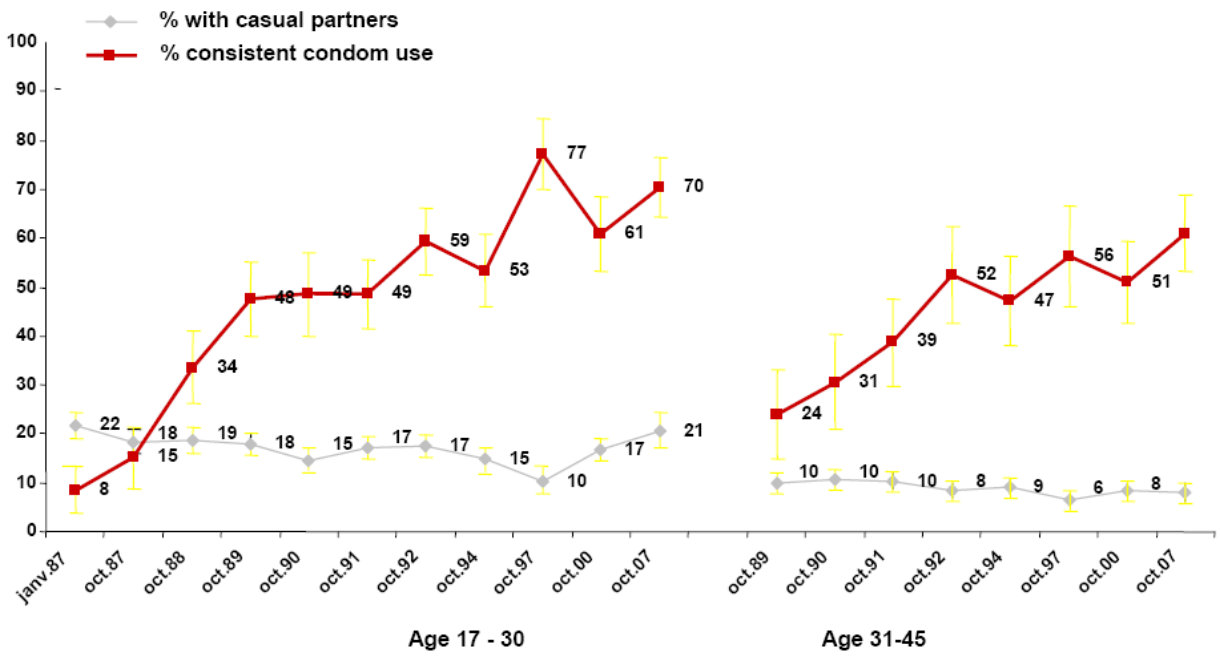
- General population (varieties of national phone surveys, monitoring of condom sales);
- Men having sex with men (national surveys among MSM recruited through gay newspapers, gay organisations, and, more recently, through internet – GaySurveys);
- Intravenous drug users (national surveys among injecting drug users recruited from all the low threshold facilities distributing syringes, expert panels);
- Migrants (secondary analysis of data from national phone surveys, expert panels, sentinel study on out-patients gynaecology/obstetric clinics);
- Sexworkers (secondary analysis of data from national phone surveys, expert panels).
- People living with HIV (secondary analysis of data from Swiss HIV Cohort Study, and from GaySurvey).

2.2.1 General Population

One of the main indicators of sexual behaviour that was monitored in the general population with respect to HIV is condom use with casual partners (Jeannin et al. 2009). Ten waves of telephone surveys were conducted since 1987, and figure 8 shows the evolution of these indicators in for the age groups of 17 to 30 years old (to the left) and 31 to 45 years old (to the right). The proportion of respondents reporting sex with casual partners in the six months prior to interview remained quite stable over time, although at different levels (roughly 20% of those aged 17 to 30, and around 10% of those aged 31 to 45). It can be easily seen that the proportion of those who reported consistent condom use in contacts with casual sexual partners steadily increased in the same period: from 8% to 70% in 2007 among those aged 17 to

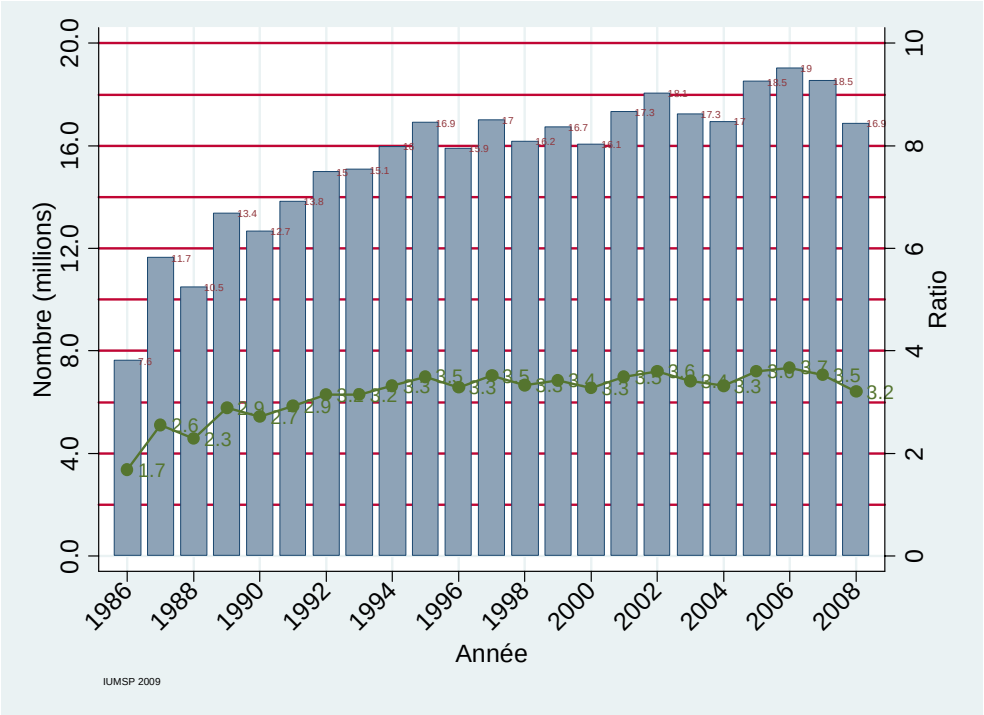
30 and from 24% in 1989 to 61% in 2007 among those aged 31 to 45. Hence, it can be said that sexual risk taking in the general population has steadily decreased in the last decade.

Figure 8: Proportions of people with casual sexual partners in the last six months and of consistent condom use with these partners (1987-2007) (Source: Dubois-Arber et al. 2008)



This trend is echoed by the results of the monitoring of condom sales since 1986. The ratio of condom to the general population aged 15 to 65 years also steadily increased between 1986 and 2007, from 1.5 condoms per person per year to more than 3.5 (see figure 9).

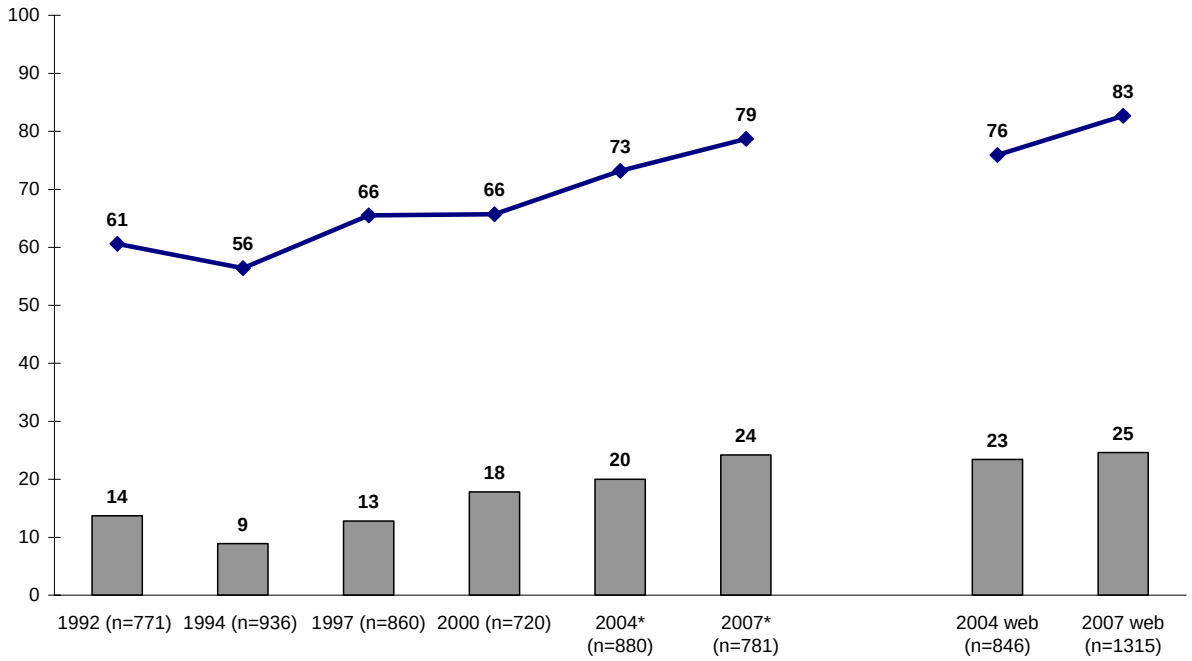
Figure 9: Condom sales: number of condoms (left axis) sold and ratio to general population aged 15 to 65 (right axis) (1986-2008) (Source: Jeannin et al. 2009)



2.2.2 Men Having Sex with Men

Behavioural surveillance data in MSM stem from eight surveys conducted between 1992 and 2007. Respondents were recruited among readers of gay newspapers, members of gay organisations and visitors of gay websites. These surveys show that, while the majority of MSM in Switzerland protect themselves efficiently against HIV, risk behaviour in this group continues to increase since the mid 1990s. This is seen, most particularly, with respect to anal intercourse with casual partners. From 1992 to 1994, there is a decline in the proportion of people practicing anal intercourse with casual partners as well as a decrease in inconsistent condom use in this situation. Since 1997, however, unprotected anal intercourse with occasional partners has clearly increased: from 8.9% in 1994 to 24.2% in 2007.

Figure 10: Percentage of MSM who practiced anal intercourse with casual partners in the 12 months prior to interview (line), and percentage without consistent use of condoms in anal intercourse with casual partners (bars) (1992-2007) (Jeannin et al. 2009)



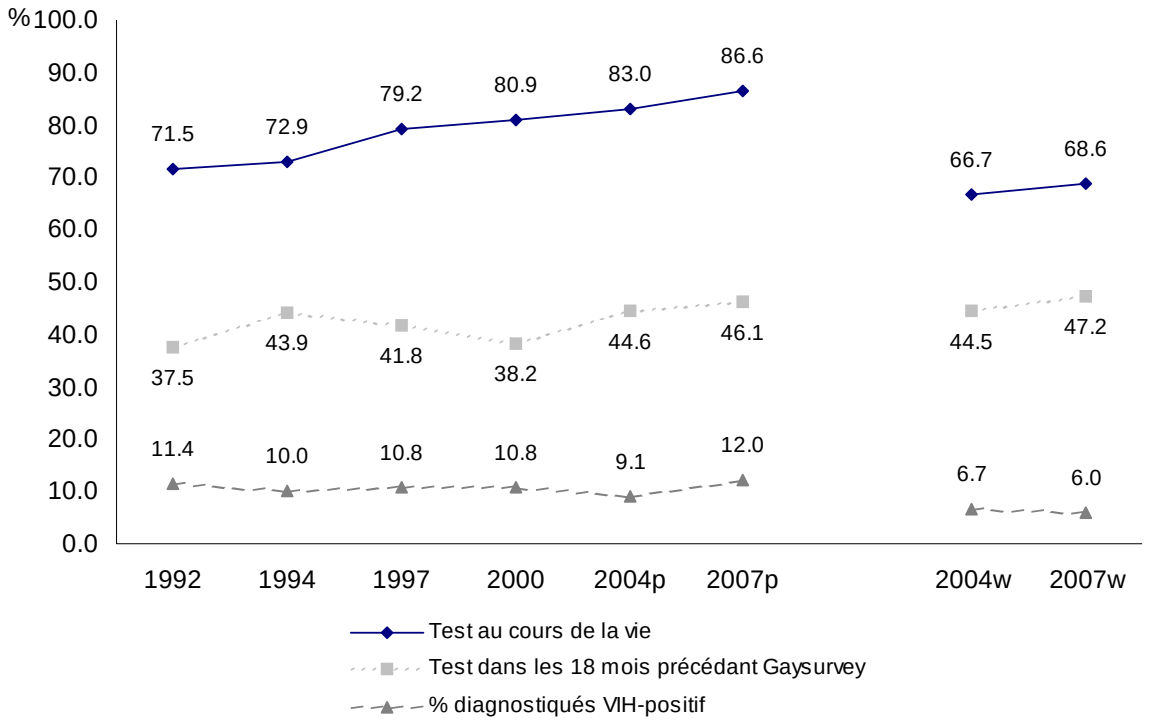
In a most interesting multivariate analysis, Jeannin et al. (2009) show that the factors associated with not using condoms in anal intercourse with casual partners are the following: being HIV positive (!), the location in which the sexual contact took place, knowing one's partner, being in love, not having had sexual contacts in the last twelve months. In contrast, factors associated with *use* of condoms with casual partners are: not knowing the HIV status of the partner, as well as having talked about HIV with one's partner.

In order to analyse sexual risk behaviour among MSM in more detail, questions on the use of so-called risk reduction strategies were included in the most recent GaySurvey (Balthasar et al. 2008c): withdrawal before ejaculation, serosorting and strategic positioning. Among the 416 respondents who reported unprotected anal intercourse with casual partners in the 12 months prior to interview, 70.2 % reported having applied at least one such risk reduction strategies. Withdrawal before ejaculation was the most frequently reported strategy (46.9% of respondents), followed by serosorting (37.7%) and strategic positioning (22.8%). HIV-positive and non-tested participants were less likely to report the use of risk reduction strategies than HIV-negative participants. The study by Balthasar et al. (2008c) concludes that the majority of MSM who reported unprotected anal intercourse in the last 12 months tried to reduce risk of HIV transmission by using specific strategies. It remains unknown, however, to what extent the use of these strategies was systematic. According to the study authors, it is necessary to provide MSM with balanced information on these strategies and their respective level of effectiveness.

The GaySurvey data permit to compute a so-called *global indicator of risk exposure* defined as the proportion of those MSM who have had unprotected intercourse with a partner of unknown or different serostatus in the twelve months prior to interview (Jeannin et al. 2009). This proportion has increased from 10.7% in 1994 to 16.1% in 2007. Multivariate analysis has allowed to identify factors associated with global risk exposure. On the one hand, it showed that being HIV positive, as well as being a non Swiss national increases global risk exposure. On the other hand, a high education level, membership in a gay organisation, as well as having had a stable partner in the twelve months prior to interview decreases risk exposure.

With respect to HIV testing (figure 11), the data from the gaysurveys show that testing has slightly increased over the years. Indeed, the proportion of those having been tested in the 18 months prior to interview has increased from 37.5% in 1994 to 46.1% in 2007. The proportion of those being diagnosed with HIV at the last testing has, however, remained stable.

Figure 11: Proportion of MSM having made an HIV test in life, in the last 18 months, and proportion of those being diagnosed HIV positive (1992-2007) (Source: Jeannin et al. 2009)



The prevalence of other sexually transmitted diseases in MSM, while higher than in the general population, has remained stable at roughly 10% in 2007.

Based on a secondary analysis of national phone survey data on the general population, Jeannin et al. (2009) have explored mental health problems in MSM. They concluded that there do not seem to be significant differences in the state of mental health between heterosexual men and MSM, but suggest that more research is needed to assess this question.

2.2.3 Migrants from High Prevalence Countries

Dubois-Arber et al (2008) explain the efforts that were made to obtain data on sexual behaviour of migrants from Sub-Saharan Africa in Switzerland. On the one hand, expert panels with key informants were conducted. However, it had to be acknowledged that the level of information obtained from these experts was insufficient to provide useful insight into sexual behaviour and risk taking in this population.

As a consequence, a sentinel behavioural survey was recently conducted in a University obstetrics and gynaecology outpatient clinic in Lausanne. Results from this study (Jeannin et al. 2009: 37) suggest that migrant women from Sub-Saharan Africa as well as from Latin America have a higher number of casual sexual partners than Swiss nationals. Exposure to risk of infection with HIV or other STIs is globally high (64.1% of those with casual sexual partners report unsystematic condom use). However, there is no significant difference with respect to geographic origin. In terms of feasibility, Jeannin et al. (2009) conclude that the experience made so far suggests this to be a promising way to recruit migrant women and obtain data on their sexual behaviour.

Combined with secondary analysis of data from national phone surveys, Jeannin et al. (2009: 42 ff.) formulate a number of conclusions regarding migrants' risk exposure to HIV and STIs. First, evidence from different sources suggests that risk exposure is higher in Sub-Saharan migrants: they have a higher number of sexual partners but less frequently use condoms at the beginning of a new relationship. Women from Sub-Saharan Africa are also more likely to be sex workers. Second, migrants from the Balkan are little affected by the HIV epidemic, but use condoms less than Swiss nationals. Third, there are migrants with an irregular status, mostly young persons of Latin American origin, who have more sexual partners and use condoms less often.

2.2.4 Sex Workers and Clients

In Switzerland, sex work is mainly performed by women. The gender ratio is estimated at 50 female for 1 male, and 25 female to 1 transgender sex workers. Information on male or transgender sex worker is scarce. Female sex workers are mainly non-Swiss nationals, coming manly from Latin America, Eastern Europe, Russia, Northern Africa or Thailand (Bugnon et al. 2009b: 28). Most sex workers do have temporary resident permits and therefore a legal status. The number of sex workers without a legal residence status is estimated to be rather low.

There are no official national statistics about the numbers of sex workers or establishments. In general, the total number of sex workers (bar maids and striptease dancers not included) is estimated to range between 14'000 to 28'000 (Jeannin et al. 2009: 44). More than two third of the sex workers perform their activities in massages salons (64%). Outdoor, champagne bars and cabarets cover one third of the sex workers population. Escorts services cover only in

minor proportion of the sex workers (2%). In total, there are1405 massages salons, 271 cabarets and 152 champagne bars exist in Switzerland (Bugnon et al. 2009b: 19).

Overall HIV prevalence among sex workers in Europe is generally low, with the exception of three groups, where HIV prevalence is higher: sex workers who use drugs intravenously, transgendered sex workers, as well as migrant sex workers from Sub-Saharan Africa (Jeannin et al. 2009: 45). In their survey of 200 sex worker organisations in Switzerland, Bugnon et al (2009b) report that HIV and other STIs is the most urgent concern of sexual health, mentioned by 80% of respondents.

Analysis of data from the EPSS general population telephone surveys (Jeannin et al. 2009) found that proportions of men having ever had sexual contacts with sex workers have remained stable: roughly 10% of those aged 17 to 30, and roughly 20% of those aged 31 to 45. Regarding recent sexual contacts with sex workers, the proportion of respondents reporting such contacts six months prior to interview oscillate between 1% and 3%. Condom use in these sexual contacts is high since the beginning of the 1990s (80% 1989) and has steadily increased.

A recent study on clients of female sex workers, recruited in outpatient clinics in Lausanne, was able to survey 174 men who had had sexual intercourse with a paid partner in the 12 months prior to interview (Meystre-Augustoni et al. 2008b). More than half of those (54%) had sexual intercourse with several partners in the same period (paid or unpaid). 25.9% reported that they had unprotected intercourse with paid partners in the last 12 months. 6% reported not having used condoms on the last occasion of intercourse with a sex worker. Regarding prevention knowledge, the respondents feel quite well informed about HIV (92.3% of respondents), but less so on other STIs (40.5%). The study concludes that, due to the reported high number of concurrent sexual partners, current male clients of sex workers represent an increased potential risk of STI transmission. However, the study authors also consider that the level of protected intercourse with sex workers to be rather high.

2.2.5 Intravenous Drug Users

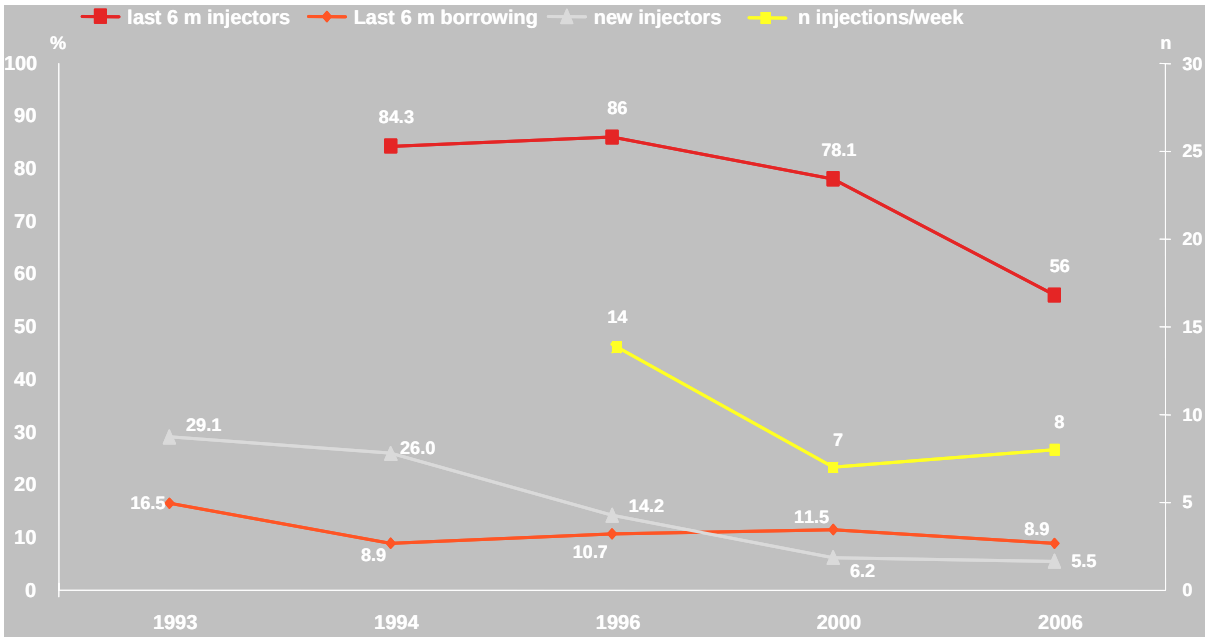
In Switzerland, the use of heroin and cocaine – the two main drugs that are consumed way of injection – is forbidden by law. It is therefore a difficult topic to investigate. Studies conducted in the 1990s estimated that there were roughly 30’000 users dependent on heroin and/or cocaine. Recent estimates of the SFOPH based on police and treatment data, as well as an analysis of drug-related deaths conclude that, in the year 2002, there were between 18’500 and 25’000 users of heroin in Switzerland. Most of those follow some form of maintenance treatment, i.e. substitution by methadone or buprenorphine (17’000 in the year 2005) or heroin maintenance treatment (1308 in the year 2006). According to the epidemiological analyses conducted by Zobel et al. (2003: 35 ff.), the prevalence of heroin use is decreasing since the mid-nineties, while the contrary is the case for cocaine use which is on the increase. Surveys of drug users recruited in various setting show that drug use by injection is also decreasing

since the mid 1990s. Injecting drug users are mainly users of heroin or of heroin and cocaine, while cocaine only users are less likely to inject.

As we have seen above, among individuals tested positively for HIV, the number of injecting drug users has been declining since the early 1990s. The health status of drug users has been monitored in the framework of drug use surveillance (Zobel et al. 2003) and HIV surveillance (Zobel/Dubois-Arber 2006; Dubois-Arber et al. 2008). In general, IDUs are a highly tested population: over 90% have been tested for HIV, 66% within the last two years (Zobel/Dubois-Arber 2006). Data from various sources consistently show that HIV prevalence among IDUs is clearly higher than in the general population. However, HIV prevalence among IDUs is more or less stable since the mid-nineties. For the year 2003, HIV prevalence varies between 5% (respondents recruited in treatment settings) and 10% (respondents recruited in low threshold services). Since the end of the 1990s, the number of IDUs newly infected with HIV was reported stable at about 90 individuals per year. Compared to other countries in Western Europe, Zobel and Dubois-Arber (2006: 15-16) conclude that prevalence of HIV and Hepatitis among IDUs in Switzerland is neither particularly high nor particularly low. As in Switzerland, prevalence of HIV is declining everywhere. However, while HIV prevalence among IDUs can be considered as rather low, prevalence and incidence of Hepatitis B and C is high. In the year 2000, 40% of IDUs surveyed in low threshold services reported having been tested positive for Hepatitis B, 59% for Hepatitis C. The situation for Hepatitis B is however less alarming than for Hepatitis C. Indeed, the number of IDUs with acute Hepatitis B in Switzerland has dropped from 229 in 1990 to less than ten cases per year in 2004. This is probably a consequence of increased vaccination. The opposite is the case, however, for Hepatitis C. The number of IDUs with acute Hepatitis C has increased from 37 in 1990 to 101 in 2002, before dropping to 57 in 2004. More than half of all cases of acute Hepatitis C detected in Switzerland concern IDUs.

Sharing of needles and syringes, as well as preparatory material (e.g. spoons, filters, cotton, water) is a behaviour associated with high risk of infection with HIV or Hepatitis. As shown in figure 12, available data suggests that injection with material already used by someone else has increased slightly from 9% in 1994 to 12% in 2000. Sharing of preparatory material is more frequent, but has decreased from 68% in 1996 to 51% in 2000. In Western European comparison, the rate of IDUs injecting with used material in Switzerland is one of the lowest in Europe. This rate was as high as 39% in Germany, 15 to 29% in Italy, and 50% in the United Kingdom (Zobel/Dubois-Arber 2006: 18). However, sharing of preparatory material remains high, thereby contributing to the propagation of Hepatitis C in the population of IDUs. To a focus group of professionals interviewed by Zobel and Dubois-Arber (2006), issues relating to prevention and treatment of Hepatitis C in IDUs are currently of greatest concern.

Figure 12: IDUs, evolution of injection practices, low threshold facilities (1993-2006) (Source: Zobel/Dubois-Arber 2006)



3 Primary Prevention

The National HIV/AIDS Programme (NHAP) 2004-2008/11 concentrates on HIV and does not include an explicit strategy how to deal systematically with other STIs or an approach to sexual health promotion. Thus, HIV prevention is not systematically embedded in an integrated approach towards sexual health promotion in Switzerland. We can observe some efforts aiming such a direction: The "Vision on sexual and reproductive health 2010" (SFOPH 2006) proposes a comprehensive approach that differentiates between the five core issues of psycho-sexual development ("Psychosexuelle Entwicklung"), reproduction, sexual well-being, STIs and sexual violence. This issue was also discussed at the hearings held in May 2009. Interviewed persons working in the field of prevention emphasized the lack of a systematic STI-strategy in Switzerland and acknowledged the challenges to embedded HIV prevention in an integrated approach towards sexual health promotion. Some of the interview partners pointed out, that institutional and structural barriers of the Swiss federal system have hampered the introduction of such an approach. The SFOPH has the competences to intervene in the case of an epidemic but the competence for health promotion in general is given to the cantons.

The NHAP differentiates between three levels of communication in prevention: General population, target groups and individual prevention and counselling (SFOPH 2003: 19). In the following sections, we will outline the goals and prevention activities for the general population and the target groups. Individual prevention and counselling, that was renamed after the extension of the programme until 2010 to "preventing HIV transmission serodiscordant couples (www.bag.admin.ch, August 2009), is discussed in chapter 4.

3.1 General Population: Prevention Campaigns

The 'STOP AIDS' campaigns and since 2005 the 'LOVE LIFE STOP AIDS' campaigns are the most visible element of Switzerland's prevention strategy. The campaigns have been conducted and evaluated at regular intervals since 1987. The SFOPH and the AHS are jointly running the campaign to keep the general population informed on HIV and protective behaviour.

A) Aims

The evaluation of the former NHAP 1999-2003 recommended continuing the campaign for the general population (Dubois-Arber et al. 2003: 64, 66). The reason for this recommendation was not only the campaign's most obvious function – the transmission of information and dissemination of the preventive message to the population – but also its underlying function to serve as a reminder of the permanence and seriousness of HIV to those involved in the pre-

vention work, the political decision-makers, and the general public. The evaluators emphasized that the campaign is necessary to support the implementation of the national programme as whole. The campaign is recognized as an essential component in the leadership role of the SFOPH. The leadership of the SFOPH – in laying down guidelines for the prevention strategy and reminding people of the importance and continuing relevance of HIV as a public health priority – is important in giving regional players legitimacy in terms of public-health policy in their relationships and negotiations with the regional authorities and institutions which fund them (ibid.: 62).

The NHAP 2004-2008 explicitly mentions these different functions of the campaign (SFOPH 2003: 20):

- It keeps the general public informed and motivates to adopt protective behaviour.
- It makes a visible political statement that HIV is a problem of national significance that has to be taken seriously.
- It creates a common brand for HIV prevention activities, motivates the SFOPH's partners in their prevention activities and supports them in their efforts on the local level.

The NHAP 2004-2008 formulated the following goal 3 with respect to the prevention in the general population: "All people living in Switzerland are informed about HIV transmission modes in a form appropriate to their needs. They are aware of the risk situations and take suitable protective measures. The prevention massages aimed at the general public take account of social diversity." (SFOPH 2003: 62).

B) Strategy

To prevent the spread of HIV in the general population, the campaign is not only addressed to the general population but also to vulnerable groups such as sex workers and their clients. Therefore, the campaign's messages are also adapted to the specific situation of vulnerable groups. The media strategy of the campaign includes the major media: TV, cinema and posters as well as the internet.

In 2005, the STOP AIDS campaign was redirected and launched with a new brand LOVE LIFE STOP AIDS to gain again more credibility as HIV can not be stopped. LOVE LIFE shall reflect a symbol for positive sexual experience. It focuses on the sexual health of the population as part of an overall public health effort. Since then, its striking logo is the two-finger victory salute which reminds people of the two most important things to bear in mind to avoid infection: "No intercourse without a condom" and "Semen or blood – never in the mouth". However, the logo LOVE LIFE STOP AIDS is still featuring a condom like the former well know logo of STOP AIDS. In 2007, the SFOPH introduce a new Voluntary Testing and Counselling strategy (VCT) and the campaign for the general population actively promoted HIV testing for the first time in Switzerland. The following table provides an overview of the campaigns topics 2004-08.

Table 2: Topics of the campaigns 2004-08

2004:	The STOP AIDS campaign 2004 consisted of pictograms illustrating love games with a condom.
2005:	The new campaign was kicked off with the boost from two Hollywood personalities with a Swiss background: producer Marc Forster and actress Renée Zellweger agreed to put their fingers up to publicize LOVE LIFE free of charge. Further a new website www.lovelife.ch provides answers to frequently asked questions about HIV and sexuality.
2006:	The campaign 2006 featured individuals participating in sports such as fencing, ice hockey or motor-cycling completely naked. The nudity conveys the vulnerability of the body, while the slogan "No action without protection" expresses how self-evident it is that the players have to protect themselves.
2007:	The campaign focused on the actual HIV test and thus on people's sexual past. It showed different couples in intimate situation in the bedroom or bathroom. But, far from being alone they are surrounded by earlier partners, demonstrating that the past is very much present in any current relationship. Further, the campaign promoted to visit the internet site "check-your-lovelife.ch" to check whether and when a test should be conducted based on a questionnaire allowing to evaluate one's risk behaviour.
2008:	Based on the CH.A.T. study on AIDS Transmission (Daneel et al. 2008) the campaign's slogan reminded the public that the rules of safer sex apply without exception even in exceptional circumstances: "always use one even on the moon". The CH.A.T. study showed that new HIV infections of Swiss persons occurred on business trips or during holidays. The campaign has been derived from statements made by those who had developed a reliable protection strategy for themselves, but were not able to apply it at the decisive moment. This failure may have been due to the effects of alcohol or drug, intense sexual excitement, being in love or misplaced trust. Posters showed holidays, business trips, night life or boozy celebrations at the 2008 European football championships or at open-air festival.

C) Resources

The budget for the campaigns 2004-2008 was on average CHF 2.375 million (~ 1.6 million Euros) per year.[5] The total budget of the SFOPH for HIV prevention in this period was on average CHF 9 million (~ 6 million Euros) per year, thus the SFOPH spent 28 % of its budget for the campaigns.

A study about the normalization of the HIV epidemic in Switzerland investigated the resource allocation until 2003 and showed that the resources for the campaign have decreased considerably from CHF 5 million in 1993 to CHF 2.75 million in 2003. The campaign manager of that period emphasized that CHF 2.5 million is the minimum budget for an effective mass media campaign in Switzerland (Neuenschwander, Frey and Kübler 2005b: 23). The most

[5] 2004: CHF 2 million, 2005: CHF 3 million, 2006: CHF 2.5 million, 2007: CHF 2.5 million, 2008: CHF 2 million (www.bag.admin.ch)

recent evaluation of the campaigns 2005-08 supports this statement (KEK-CDC Consultants 2009).

D) Effects

The campaigns of the NHAP 2004-2008 have been evaluated in 2005 (Frech 2006) and most recently in 2008/09 covering the campaigns 2005-2008 (KEK-CDC Consultants 2009). The most recent evaluation included a quantitative internet survey, qualitative document analysis and expert interviews as well as focus groups. The evaluation provides detailed information about the campaign's effectiveness in reaching the population (awareness, knowledge, behaviour), its relevance and the coherence of concept implementation as well as up to 29 recommendations. In the following, we present the main results of the most recent evaluation by KEK-CDC Consultants (2009) concerning the effects of the campaign within the general population.[6]

In general, the evaluators conclude that the campaigns LOVE LIFE STOP AIDS are to a large extent successful and efficient, especially with respect to decreasing budgets. The findings show a high level of acceptance but also some loss of visibility and recognitions. For instance, the quantitative aim concerning visibility (recall) of 85% was not reached. The values were lower than the values of the campaigns in the nineties and, except for 2006, below 50% (assisted recall). The decreasing values of visibility and of recognition are explained by the containment of the spread of the infection, the success of treatment and by the "familiarization" with the existence of HIV. The evaluation emphasizes that decreasing recall values do not necessarily lead to a lower level of knowledge about HIV and to an increase of risk behaviour. Nevertheless, the evaluators emphasize that lower recognition values are disturbing and bear the risk of new infections and should therefore be considered in the planning of future preventive efforts (ibid. 11-14). Based on these findings the evaluators recommend conducting the campaigns more intensively.

With respect to messages of the campaigns, the evaluation showed that the redirection of the campaign, the new brand "LOVE LIFE" is not yet fully perceived by the population. The participants of the focus groups first remembered the old brand STOP AIDS (unassisted recall). This finding confirms that thanks to their continuity, the campaigns do have a lasting influence. Furthermore, the positive disposition of "LOVE LIFE" was not transported by all campaigns and not all of the respondents did accept the combination of love of live and STOP AIDS (ibid. 19, 23).

Following the evaluation, the first key message "No intercourse without a condom" was stuck in peoples mind, thanks however not only to the campaigns 2005-08 but also as result of the

---

[6] Further, the evaluation provides information about the organisation and planning of the campaigns as well as the cooperation between the partners, the SFOPH and the AHS. The analysis of the effects within the general population differentiates between different so called "sinus"-milieus.

continuous prevention activity of the SFOPH and the AHS. The second key message "Semen or blood – never in the mouth" was only passively known. The internet site www.check-your-love-life.ch was hardly visited in spite of the invitation articulated by the posters (ibid. 12-13). The evaluation shows that the messages of the campaigns were not too complex, but rather their graphical design was too complex and obstructed a rapid comprehension (ibid. 24).

Based on these findings, the evaluation recommends continuing the strategic orientation of the campaign until 2010 in taking into account communicational aspects such as less complex designs and less varying subjects.

With respect to a long-term perspective, the evaluation recommends to reconsider and reanalyze the proportion of preventive efforts for the general populations and those for specific target groups. This recommendation draws on interview statements of professionals working in the field of HIV who raised the question if the preventive effort for the general population should be reduced in favour of more intensive information of specific target groups (ibid. 29). Second, the evaluation recommends to carefully analyzing the potential of an integration of other STIs, for instance in taking into account the risk to compete with the HIV prevention.

The evaluation by KEK-CDC Consultants (2009) does not give any information about how the campaign's messages were adopted to specific situation of vulnerable groups such as sex workers, and how effective these prevention activities have been.

Further, the evaluation provides no quantitative findings concerning the migrant population in Switzerland. Qualitative findings from expert interviews indicate that the campaign might not have reached the migrant population and therefore, information should be tailored to migrants. Additionally, qualitative findings show that there might be a risk of stigmatisation of people coming from regions with a high HIV prevalence. Therefore, the evaluation recommends that the SFOPH should analyze if a camping against stigmatisation and discrimination of these migrants would be appropriate. A similar recommendation was put forward by Meystre-Agustoni et al. (2006: 16). Based on their investigation of the behaviour of migrants concerning HIV, Meystre-Agustoni et al. recommend to represent people coming from Sub-Sahara Africa in the campaign, posters should beside Europeans also members of their communities. In this way, migrants coming from Sub-Sahara Africa could better identify with the general population and do not regard themselves as (stigmatized) specific group.

3.2 Prevention in Schools

A) Aims

The NHAP 2004-2008 states that HIV prevention is still poorly covered in a large number of schools (SFOPH 2003: 64; see also Dubois-Arber et al. 2003: 30-31; Spencer et al. 2001). Therefore, the programme's goal 4 is dedicated to the prevention in schools: "HIV prevention

is incorporated into the curricula of primary, secondary and vocational schools on a mandatory basis and in a form appropriate to educational level."

The role of the SFOPH in this field is predominantly one of coordination and support. The environment in which this activity takes place is complex and extremely divers due to the federal organisation of the Swiss educational system. For instance, there are differences regarding the ways in which responsibilities for delivering HIV prevention and sexual health education are allocated, and the profile of the people charged with teaching these subjects.

The cantonal policies and practices have been systematically collected and analyzed in 2001 by Spencer et al. (2001). This investigation showed that HIV prevention is usually included in sexual health education and organised either as "external" or "internal" model. In the "external" model sex-related topics are dealt with as part of dedicated courses, generally delivered by specially trained visiting teachers. Within the "internal" model the teaching is entrusted to school staff members, who include the different aspects of sexual health education in existing school disciplines. The "external" model is dominant in the French-speaking part of Switzerland, while the "internal" model is more common in the German speaking area. Potentially, the two models provide an adequate framework for transmitting information regarding HIV prevention. In practice, however, the "internal" model seems to be less effective overall in achieving good coverage (Dubois-Arber et al. 2003). The "internal" model depends on the teacher's (their training, their motivation), but offers the advantages to profit from favourable opportunities to raise the issue of HIV and sex-related topics and is less dependent on special resources being allocated since the teaching is done by regular members of staff.

The investigation by Spencer et al. (2001) showed that the coverage of sexual health education at primary level (6 to 11 years of age) was good in at least one third of the cantons. At secondary level I (attendance compulsory from 11 to 15 years of age), most pupils participated in lessons which deal with the issue of both sex education and HIV prevention. At secondary level II (post-mandatory) coverage was very mixed. The schools themselves are responsible for the content of their programmes.

Furthermore, the Spencer et al. observed shortcomings in the teacher's training, only one third of the institutions responsible for the teacher's training include the topic of sexual health education in their training and further training are seldom attended.

Note, the investigation of Spencer et al. dates back to 2001, newer analysis although covering only single cantons or some aspects of the situation still observe these deficits (Kunz/Brügisser 2007).

B) Strategy

Goal 4 of the NHAP 2004-2008 is integrated in the SFOPH's programme „Education & Health – Swiss Network". In 2003, „Amorix" a national centre of excellence for education and sexual health was set up by the AHS and PLANeS, the Swiss Foundation for Sexual and

Reproductive Health, to support and coordinate prevention activities in schools. In November 2006, the centre was reorganised and integrated into the education system. The centre of excellence is now operated by the Teacher Training University of Central Switzerland. The aim of the new centre of excellence is to work towards countrywide incorporation of HIV prevention into school curricula, to introduce comprehensive basic and further training on HIV and sexual health education for teaching staff, and to provide these staff with high-quality teaching materials. The centre's activities are the following (PHZ 2009):

- Conceptual work: Situation analysis, national White Paper ("Grundlagenpapier"), recommendations for curricula, concept for teacher basic and further training (proposal for curricula);
- Networking and lobbying regarding the incorporation of HIV prevention respectively sexual health education into school curricula;
- Documentation: Evaluation and recommendations for teaching materials, information platform www.amorix.ch;
- Organisation of the first national conference on "sexual health education in Swiss schools" in November 2008

C) Resources

In 2008, the centre received CHF 100'000 from the SFOPH to realize the aim of the incorporation of HIV prevention in schools.

D) Effects

So far, the effects of the activities of the centre of excellence addressed towards teachers and schools have not been evaluated.

The report about the behavioural surveillance fort he period 2004-2008 (Jeannin et al. 2009: 89) points out that the coverage of sex education and HIV prevention in school is practically total. Nevertheless, some topics, among these figures homosexuality, are not dealt with systematically enough. These findings are based on survey data obtained form young people between 17 and 20 years in 2007 (ibid. 74).

3.3 Prevention in Specific Targets Groups

The NAPH 2004-2008 emphasizes that prevention activities in specific targets groups offer the greatest potential for effective prevention. Its goal 5 is devoted to prevention in specific target groups: "People at increased risk of HIV infection or with an increased need of prevention activities are addressed by means of prevention messages specific to their situation and they adopt appropriate protective behaviour. Behavioural prevention activities are supported by structural prevention measures. A monitoring system is in place to identify new subgroups

at increased risk of HIV infection." (SFOPH 2003: 66).

The following targets groups are considered as most important due to their risk situation or their increased need of prevention activities:

- Gay and other men (and young people) who engage in unprotected anal intercourse;
- Migrants from countries with high prevalence of HIV and their sexual partners (Sub-Saharan Africa);
- Injecting drug users;
- Sex workers;
- Sex workers' clients, and travellers to endemic regions who do not protect themselves;
- Arrested people (prisoners) have been added as target group most recently.

3.3.1 Men having Sex with Men (MSM)

The evaluation of the NHAP 1999-2003 concluded that the prevention in the case of MSM was relatively good but could be improved, particularly where young people are concerned and in places where MSM meet to have sex. The evaluators recommended that prevention work with MSM needs to bee much strengthened by establishing cooperative relationships with the circles concerned (associations, managers of commercial establishments, educational workers) (Dubois-Arber et al. 2003: 69).

The latest Gaysurveys (2004, 2007) monitoring the preventive behaviour adopted by MSM do strongly shows the continuous relevance of this recommendation. As outlined in chapter 2, the surveys show that the level of protection decreased since the mid nineties and the decrease could not be stopped till now (Balthasar et al. 2008b: 10, Jeannin et al. 2009: 9-24, 87). Balthasar et al. (2008b: 10) emphasize that there is no difference in the decrease of preventive behaviour with respect to the age of the respondents: the same tendency can be observed for respondents younger than 30 years as well as for respondents older than 30 years and the percentages is quite similar.[7] The researchers interpret the risk behaviour of the young MSM as negative sign. Based on survey data an amelioration of preventive behaviour adopted by MSM can not be expected. Moreover, Balthasar et al. (2008b: 10) emphasize that this situation could reflect gaps in the primary prevention for young MSM.

---

[7] In 2004, the data collected by the internet gay survey showed that the increase of risk behaviour was more noticeable among men younger than 30 years: 41% of respondents younger than 20 years practiced anal penetration with casual partner and did not always take protective measures, compared with 24% in the age group 21-29 years (Balthasar et al. 2005: 9). Balthasar et al. (2005: 9) conclude that so far it is not clear if these results indicate a generation or age effect. Based on the survey results, the researchers recommend the continuation of strong efforts in primary prevention. Thereby especial attention should be given to the prevention activities for young men having sexual relations with other men.

In 2003, the SFOPH commissioned a literature review on the epidemiology and prevention activity for homosexual and bisexual men younger than 25 (Balthasar 2004). Epidemiological data show that in most European countries, the prevalence of HIV for MSM younger than 30 years is below the average of all MSM. However, the increase of risk behaviour with casual partners can be observed among all MSM, there is no significant difference between the age groups. The literature review shows that in 2003, so far only few prevention activities for the specific target group of young MSM have been implemented in Europe. Based on the literature review, Balthasar concludes that young MSM are hard to reach because they might contact specialized community services only after the period of indetermination or due to psychological distress. Based on the literature review, Balthasar recommended to take preventive actions that involve the community, hotlines, the internet, the school as well as parents and actors from the medical sector (ibid.: 6).

The prevention activities of the NHAP 2004-2008 for MSM include structural prevention measures, information campaigns (Mission Possible, www.drgay.ch), outreach works as well as the promotions of HIV testing (VCT 'checkpoints'). Besides these prevention activities, gay organisations are also active in the field of HIV prevention. For instance, Pink Cross and Vogay have established a telephone hotline. In the following sections, we describe the core interventions of the national MSM programme run by the AHS in more details however, the list is not exhaustive and activities introduced in 2009 are not taken into account.

These activities, mainly implemented by the AHS respectively its local units, seemed not to be embedded in an overall strategy concentrating on prevention for gay men and other MSM. A strategic document was not available for the period 2004-2008. Most recent, in June 2009, the AHS formulated a strategy on MSM/MSW (AHS 2009). However, the strategy is not comprehensive and focuses mainly on the division of labour between the AHS and its member organizations (local units). The document does not define core concepts of the preventive work, its direction and scope. Nevertheless, the document raises some important questions with respect to a future strategy on MSM. One of the core issues seems to be the clarification of the role of the so called Checkpoints (see below).

At the hearings held in May 2009, actors working in this field emphasized that there are some new and innovative approaches mainly developed and pushed forwards by the Checkpoints but often a fast implementation is constrained by the AHS or by a lack of resources. Some interviewees pointed out that the AHS is not oriented enough towards HIV prevention for gay men and other MSM. As a strong symbol, they emphasized that the strategy of the AHS 2009-2014 does neither explicitly mention the most affected target group nor formulate clearly the aim to prevent HIV infections among gay men and other MSM. Further, interview statements indicate that some local units of the AHS are more involved in sexual health education in schools than engaged in preventive activities for gay men or other MSM. This problematic was labelled by one of the interview partners, a representative of the AHS, as "shifting away"

from the core issues of the AHS.

Structural Prevention: Minimal Standards for HIV Prevention in Gay Establishments

A) Aims

In 2006, the SFOPH has elaborated in collaborations with the AHS, gay associations (Dialogai, Pink Cross) and the managers of gay establishments minimal standards for HIV prevention in gay establishments. The minimal standards are integrated in a charter by the association of gay establishments (Verein Gaybetriebe Schweiz VEGAS).

B) Strategy

The charter includes the provision of information material about HIV as well as condoms and lubricant free of charge. Posters with preventive messages have to be displayed visible. Open access for HIV prevention professionals has to be assured. The charter contains further provisions concerning darkrooms (not completely dark everywhere) and bareback-films (ban with some exception). If the establishments provide more than the minimal standards they are awarded by VEGAS.

The charter is signed by almost all establishments like saunas, bars etc. VEGAS supported by the AHS controls each establishment once a year, to see whether the charter is respected or not.

C) Resources

In 2008, VEGAS received CHF 45'000 from the SFOPH to operate the control of the establishments.

D) Effects

The control activities include a survey of the establishments (self audit) and a sample of establishments is visited by an auditor of VEGAS together with an outreach worker of the local unit of the AHS. VEGAS reports the results of the audits to the SFOPH. The final report by VEGAS for 2008 states that the establishments carry out the minimal standards in general (VEGAS 2008). However, if an establishment struggles for its existence, is considers prevention activities not as a priority and thus, prevention is less performed than by well functioning establishments. Following the final report of 2008, the numbers of establishments who did not respect the charter could be reduced.

Information Campaign: Mission Possible

A) Aims

The Mission Possible campaign was launched by the AHS and commissioned by the SFOPH. The strategic goal of this campaign was to stop the spread of HIV infection among MSM. The campaign was based on the hypothesis that individuals with primary HIV infection are driving

the epidemic among MSM (Staub et al. 2008). In 2003, more than 40% of new HIV diagnoses for gay men were recent infections acquired within less than 6 month before testing. Primary HIV infection, which obviously cannot be detected in time, is transmitted within networks of men having unprotected anal intercourse and being, for some, unaware of their primary HIV infection. Unprotected anal intercourse is frequent in more or less stable relationships that get tested regularly. Therefore, the number of highly infectious people with a primary HIV infection in the gay community has to be reduced to stop the epidemic. To reach this aim, the campaign promoted 'three months of absolute safer sex' during the same period of time to avoid new primary HIV infection. The campaign concentrated on information about primary HIV infection. More precisely, the AHS formulated the following aims for the campaign (Balthasar et al. 2008a: 13).

- MSM are informed about primary HIV infection and its role in the spread of HIV
- The chain of infection by primary HIV infection is interrupted by three months of absolute safer sex during the same period of time.
- MSM develop and practice optimal protective strategies taking into account their personal situation (steady partnerships and/or casual partners)
- MSM recognize and utilize the service offered by VCT facilities.

B) Strategy

The campaign included the mobilization of all actors of the Swiss Gay community and comprised brochures, posters, condoms, websites, (gay) press (magazine, TV, radio) etc. The campaign was implemented in three phases: The first phase started in November 2007 and included an information campaign. The seconded phase 'three months of absolute safer sex' was promoted from 1st of February till 1st of May 2008 and the third phase consisted of the promotion of HIV tests with distributed vouchers for free HIV test executed by one of the thirteen VCT facilities.

C) Resources

The AHS received CHF 263'000 from the SFOPH to realize the Mission Possible campaign.

D) Effects

The SFOPH mandated the institute of social and preventive medicine in Lausanne with the evaluation of the campaign Mission Possible. The evaluation conducted by Balthasar et al. (2008a) concentrates on the effects on the awareness and behaviour of the target group, epidemiological effects could not be taken into account because of the time frame of the evaluation. Due to time constraints[8] and the complexity of the evaluation subject, the evaluation design did not include a genuine control group. The effects on the individual behaviour were

[8] The mandate for the evaluation was defined shortly after the start of the campaign.

measured by the comparison of the behaviour of the respondents during the three months of the campaign Mission Possible with their behaviour in 2007. The periods of references did not have the same length and could therefore reduce to validity of the survey results (ibid.: 6).

The survey shows that the awareness was high: two thirds of the respondents had recognized the campaign and no difference was observed between age groups or between regions. However, the awareness was smaller among MSM who did not practice safer sex (ibid.: 6). The campaigns' message – its specific aim and logic – was not very well understood. Furthermore, the campaign did encounter resistance among MSM who do not practice safer sex.

After the campaign was terminated, in total 446 HIV test have been conducted with the free voucher, 7 have been positive (ibid. 8). Most of these tests (60%) were conducted by the Checkpoint Zürich because in Zürich the free vouchers were distributed more systematically than in other cantons that would not have been able to meet a high demand of tests.

Balthasar et al. conclude that the degree of changes in protective behaviour was rather modest: The percentage of respondents who practice systematically safer sex increased only from 69 % to 75%. This change can partially be explained by the shorter reference period and partially by the effects of the campaign. Further, the authors emphasize that the observed changes are most presumably to small to influence the epidemic among MSM significantly (ibid.: 7). New notification data on positive HIV tests confirm this conclusion: In 2008, the number of new infections among MSM increased to a total number of 327. Based on this data, the SFOPH stated that the Mission Possible campaign had so far no effect (SFOPH 2009: 92).

In their concluding remarks, Balthasar et al. state that the results of the Mission Possible are difficult to assess definitively due to the fact that safer sex – despite the current tendency – remains the norm among MSM and an improvement of the protective behaviour is confronted with increasing relative costs (Balthasar et al. 2008a: 7). Nevertheless, the authors recommend to continue the dissemination of information about primary HIV infection among MSM but the massages should be simplified (ibid.: 8, 37).

The campaign "mission possible" was also discussed at the Hearings held in May 2009 with involved actors in the field of HIV prevention. The opinions about the campaign, especially about its basic idea and its effects, were divers ranging from better than nothing towards a positive assessment that more gay have more information and are more aware of the risk of a HIV infection. In general, it was acknowledge that at least there was a national campaign at same time delivering messages on HIV prevention respectively primary HIV infection among MSM.

Website: www.drgay.ch[9]

The website www.drgay.ch is part of the national MSM programme and run by the AHS since 1999. The website provides interactive anonymously, place independent counselling targeted to gay men in German, French and Italian. The concept of the website consists of two areas: a public and private sphere. In the public sphere users can read questions and answers without any contact to the counsellor. In the private sphere, the questions are answered by a team of gay professionals (health care professional, social workers, etc.).

In 2007, 3556 persons did use the online counselling; compared with 2003 (1313 counsellings), the demand tripled. Further the website seems to meet especially the need of young MSM: 15% of the users were younger than 16 years, 37% were between 16 and 25 years old and 29% between 25 and 35 years old (SFOPH 2008a: 2). The monthly average of hits of the website increased also slightly to 15'648 in 2007 (Bucher 2007).

The last external evaluation dates back to 2003 (Willen/Spreyermann 2003). In general, this evaluation showed positive results (see also Balthasar et al. 2004: 138). These reports are fairly old, produced in the framework of the evaluation of the former NHAP 1999-2003.

Some insights obtained at the hearing in May 2009, indicate that this website is considered as good and very well accepted by the gay community. Some interviewees emphasized the shift towards internet gay scenes and the contacts established by virtual communications. These interviewees acknowledged the challenges of this development and shared the opinion that the potential of the internet for preventive work is not used enough up to now.

Outreach Work

The regional agencies of the AHS perform outreach work mainly in urban setting. Intensity of the performed outreach work is varying from canton to canton. The AHS is responsible for the coordination and (further) training of the outreach workers. Outreach workers are gay professionals of the regional units of the AHS. They perform prevention activities in location where gays meet. Prevention activities include anonymous individual counselling and supply of prevention material. Outreach work is targeting specific communities and scenes, for instance by the supporting the "Schwestern der perpetuellen Indulgenz" (www.derorden.ch).

Insights from the hearings held in May 2009 suggest that not enough outreach work is performed with respect to the different gay communities, groups etc. Interviewees involved in this preventive work emphasized the importance of being present and informing on site but also mentioned the difficulties to find gay volunteers to engage in this work.

---

[9] Besides the website www.drgay.ch, the AHS runs a website with preventive information for MSM www.bist-du-sicher.ch and is present on Gayromeo, a popular dating platform for MSM.

Voluntary Counselling and Testing Facilities (VCT 'Checkpoints') for MSM

A) Aims

HIV/STI low-threshold testing facilities for MSM have been established in two cities: in 2005 in Geneva and in 2006 in Zurich. These testing facilities are organised according to the VCT (Voluntary Counselling and Testing) principle and tests can be obtained anonymously. The facility in Zurich is run by the local unit of the Aids Federation jointly together with a private organisation specialized in the care of drug addicts (ARUD), the facility in Geneva is run by a gay association (Dialogai).

There are no statistics about the exact number of performed HIV tests in Switzerland and thus, no exact data how many MSM have been tested in a certain period of time. Following to GaySurvey 2007, the proportion of respondents being tested once in the course of their lives has increased from 71.5% in 1992 to 86.6% in 2007. In 2007, one third of the respondents had been tested in the twelve months prior to the survey (Balthasar et al. 2008b: 4).

B) Strategy

In the following, we describe the concept of 'Checkpoint Zurich' providing a more comprehensive health service than Geneva. Checkpoint Zurich is an outpatient clinic managed by physicians. It provides the opportunity to obtain comprehensive care at one location by gay health care professionals and with a high level of personal continuity (Schwappach/Bruggmann 2008). Further, in 2007 Checkpoint Zurich started additional "Checkpoint mobile" with on-site testing at sex parties, in dark rooms, saunas, cruising areas like motorway rest stops.

The services of Checkpoint Zurich include post-exposure prophylaxis (PEP), HIV and STI treatment, psychological support and counselling and general medical care. Checkpoint Zurich thus follows a holistic approach to health in the MSM community with particular aim to serve as a 'door opener' between the established system of care and those men that have no access to, or for any reasons hesitate to utilize traditional health care. The background for this aim, are concerns about the general health status of MSM in Switzerland (ibid.). A recent study conducted in the French part of Switzerland shows that gay men reported significantly more and particularly severe physical symptoms, short-term disability, mental disorders, and a higher prevalence of risk factors for chronic disease, even after adjustment for differences in socio-demographic characteristics (Wang et al. 2007a, Wang et al. 2007b).

C) Resources

All tests and treatments are reimbursed by the Swiss basic health insurance but if clients prefer anonymous testing they have to pay on their own. Services provided to male sex workers are being paid for by the local government (Schwappach/Bruggmann 2008).

D) Effects

The first six months of Checkpoint Zurich (12.6.2006 – 31.12.2006) have been evaluated. Schwappach and Bruggmann (2008) present in their article details and outcomes of the provided services and client's self-reported sexual behaviour, previous risk behaviour and rationales for seeking testing. The authors report a high demand of the services of the Checkpoint Zurich: 623 consultations took place and 247 patients were seen at least once by the physician in the evaluation period. Preliminary results for 2007 indicate that the number of HIV test performed increased by 50% with the mobile testing while the prevalence of positive results nearly doubled. In 2007, 101 new HIV infections in MSM were recorded in Zurich (303 in entire Switzerland). Of these 101 new infections, 57 (56%) were detected at Checkpoint Zurich and 70% of MSM in Zurich newly diagnosed with HIV were treated by the Checkpoint.[10]

Insights obtained at the hearings held in May 2009 indicate that these Checkpoints can be considered as the innovative and driving force of the Swiss HIV prevention for self-identified gay men and other MSM. These Checkpoints have taken up a broader approach towards health promotion for gay men and promote "medical" prevention. Thus, behavioural prevention, community-based approaches are combined with prevention provided by the 'medical' system (counselling, testing and treatment). Interviewees emphasized that more checkpoints are needed and existing ones would need more money to reach more self-identified gay men and other MSM. Furthermore, the idea to differentiate more clearly between self-identified gay men and other MSM was put forward in this discussion. However, representatives of the checkpoints raised the problematic that in their view, the work provided by the checkpoints does not receive enough or no timely support from the AHS, in contrast some initiative were delayed.

Prevention for Male Sex Worker (MSW)

The number of male sex workers is estimated about 250 for the canton of Zurich, for Geneva and Vaud between 30 and 60, for the cantons of Jura, Luzern and St. Gallen between 15 and 20, in all other cantons the estimated number of male sex workers is below 5. The estimations of transgender sex workers are a little bit higher (Bugnon et al. 2009b).

At the national level, the AHS coordinates MSW prevention activities that are implemented at the local levels (mainly outreach work) and runs a website www.safeboy.ch providing information about HIV, drogues, laws and regulation, professionalism and quitting sex work in six languages.

---

[10] The article by Schwappach and Bruggmann (2008) includes also information about the sexual behaviour and health of the patients.

3.3.2 Migrants

HIV prevention for the migrant population in Switzerland is, on the one hand, embedded in the national strategy "migration and health" providing for all the health concerns associated with the phenomenon of migration. On the other hand, specific activities are directed to this target population within the NHAP 2004-2008. In the following, we focus on HIV specific activities.

The NHAP 2004-2008 states that efforts to prevent the spread of the infection among migrants must be strengthened in Switzerland, especially concerning migrants originating from countries with a high prevalence of HIV (SFOPH 2003: 36). The evaluation of the former NHAP 1999-20003 did not very much focus on the migrants. No quantitative surveillance data and hardly any project evaluation have been conducted during this period. Based on the overview of existing activities, epidemiological data and surveillance data about the protective behaviour of the general population (including foreigners), the evaluators recommended to strengthen the prevention activities in the various migrant communities, particularly those of African origin (Dubois-Arber et al. 2003: 69). Further, they emphasized that the prevention was diluted by a wide-spectrum approach to health issues (strategy "migration and health"). It should be ensured that migrants have equal access to prevention services, taking into account their social and cultural characteristics and offering appropriate assistance.

Information Material: Film "LOVE LIFE – STOP AIDS"

On the national level, the LOVE LIFE – STOP AIDS campaign targeted the migrations population. The SFOPH produced an information film entitle "LOVE LIFE – STOP AIDS" about HIV targeting the migrant community and aims to raise awareness of HIV. The film is available in 16 languages and in different version for men and women. The information is illustrated by means of pictograms and each language version begins with an introduction to the subject by members of the corresponding cultural community (SFOPH 2005a: 21, SFOPH 2005b: 4).

Project for the Migrant Population (Peer-education Approach)

On the local level, the SFOPH mandated the AHS to implement HIV prevention activities geared to the specific needs of the migrant population. The AHS runs a project for the migration population and a specific project for the migrations population coming from Sub-Saharan Africa with the highest HIV prevalence among the migration population in Switzerland.

The AHS respectively its local units operate a peer-education approach to reach the migration population. Local units of the AHS employed mediators coming from East Europe, Latin America or from Arab countries. The mediators organise prevention information events for small groups as well as in institutions for asylum seekers. The AHS coordinates the local projects and organises introduction and further education for the mediators.

Project for Migrants Coming from Sub-Saharan Africa: AFRIMEDIA

A) Aims

The prevention project for the migrants coming from Sub-Saharan Africa "AFRIMEDIA" is coordinated by the AHS and implemented by its local units since 2006.[11] The project AFRIMEDIA is based on a rapid assessment (Zuppinger, Koop and Wicker 2000) that recommended a participatory, gender specific approach and emphasized that HIV prevention within this target group is confronted with stigmatization and secrecy surrounding HIV. AFRIMEDIA aims to improve the access of migrants coming from Sub-Saharan African to HIV prevention materials and services. Further, the stigma surrounding HIV within the target population should be reduced. Additionally, the target group should be empowered by a participatory approach (Hammer et al. 2006: 241).

B) Strategy

AFRIMEDIA operates with a peer-education approach including the involvement of key personalities of the migration communities such as leaders of their religious communities (Tshibangu 2007; Bischofberger Lerch 2007). The mediators organise prevention activities within the migration communities; for instance in being present at their formal and informal meeting points or at cultural events. The mediators are also involved in prevention activities for asylum seekers coming from Sub-Saharan Africa. In the last two years, the project was intensified and is now implemented in six Cantons (Fribourg, Geneva, Neuchâtel, St. Gallen, Vaud and Zurich).

C) Resources

Beside the coordination of AFRIMEDIA at the national level, about 30 mediators are working in six cantons approximately 12 two 25 hours a month according the representative from AFRIMEDIA heard in May 2009. The hearing in May 2009 further revealed that AFRIMDIA has not enough resources. The mediators do not work enough, to reach a considerable group of migrants.

D) Effects

AFRIMEDIA was evaluated as part of the strategy "Migration and Health 2002-2006" (Hammer et al. 2006). In general, the evaluation did asses the project a good or even very good performance in taking in to account the scarce resources of the project. The project effectively reached its target population and its services are known by the target population: First, the target population was better informed about HIV. Second, the work by the mediators did lift the secrecy ("taboo") surrounding HIV within this target group to a certain degree.

---

[11] For the first pilot-project phase 2002-2006, the SFOPH has mandated the Swiss Tropical Institute and the Swiss Red Cross to implement the project.

Third, the target population contacted the mediators and the demand for condoms and female condoms was high. However, the evaluation did not generate empirical information about the protective behaviour of the target population.

The evaluation identified also some weak points concerning the concept: First, the concept failed do formulate measurable goals and had not planned to implement instruments to measure systematically the effects of the project. Second, the project did not have enough resource to generate an impact on the target population and to document it (ibid.: 243).

The hearings held in May 2009 revealed that stigmatization is still the core issue that HIV prevention is confronted with in this population group. Furthermore, this population group, migrants coming from Sub-Saharan Africa, consists of several subgroups coming from various countries that do not always have community structures and are organized in different churches. Additional, insights from the hearings suggest that HIV might not be their main problem and thus, a more comprehensive approach could facilitate also HIV prevention.

Voluntary Counselling and Testing for Migrants (Asylum Seekers and Illegal Migrants)

In 2003/04, media reports on calls of compulsory HIV testing of asylum seekers triggered a lively debate. A member of the Federal Parliament from the Swiss People's Party did request a revision of the HIV test policy after the publication of the increase of HIV infection of 25% in 2002 (Interpellation 03.3317). Instead of VCT, the politician claimed compulsory testing for several target population. The media debate focused on the compulsory respectively systematic HIV testing for asylum seekers in correspondence with the increase of positive HIV test results among migrants coming from Sub-Sahara Africa.

In response to this debate, the SFOPH and the Federal Offices for Refugees set up a task group. This task group discussed the possibility of a systematic VCT program in the reception centres for asylum seekers at the Swiss boarder. The working group decided not to introduce such a program: The preventive effects of such a program were doubted (see Bischofberger Lerch 2007). Nevertheless, the task group started new prevention activities: An information film for asylum seekers in 15 languages was produced and two VCT test centres for the migrant population have been established in Geneva and Zurich (SFOPH 2005c). Both VCT facilities are integrated in centres providing comprehensive medical service targeted especially to asylum seekers and Sans-Papiers (illegal immigrants) who have no health insurance. The centre in Zurich is run by Médecins Sans Frontières and the regional unit of the AHS (Zürcher Aids-Hilfe). The centre in Geneva is attached to the hospital of the University of Geneva. The services are provided in several languages and the specific vulnerable situation of the target population is taken into account.

3.3.3 Intravenous Drug Users

A) Aims

In the mid 1980s, harm reduction measures were introduced by Swiss towns and cantons to counter the acute problems associated with an increase in the intravenous use of heroin and the spread of HIV. Only recently, the drug policy consisting of the so called four pillars prevention, treatment (including prescription of heroin and methadone), harm reduction and law enforcement was supported by 68% of the electorate in a popular vote in November 2008 about the revision of the federal law on narcotics. The revision provides a legal base for the existing practice. Prescription of heroin and harm reduction measures is now an integral part of the federal legislation.

As shown in chapter 2, epidemiological and surveillance data document the success of the harm reduction strategy: HIV infection and risk behaviour decreased considerably. In 2008, the new HIV infections among IDUs decreased to 28 cases, whereas in 2006 and 2007 around 60 new diagnosed HIV infections occurred. The SFOPH interpreted this reduction as success of the continuation of the harm reduction programme (SFOPH 2009: 92).

B) Strategy

Today, all the Swiss cantons are implementing harm reduction measures (Zobel/Dubois-Arber 2004). Harm reduction comprises both health measures (distribution and exchange of syringes, supervised drug consumption facilities, information on the dangers associated with substances and the different ways of using them) and social measures (contact and counselling, assistance in finding employment and accommodation).

C) Resources

The measures are financed by the cantons and either run directly by public authorities or NGOs. The SFOPH coordinates and supports these activities.

D) Effects

The Swiss drug policies, especially the harm reduction measures and heroin and methadone programmes have been accompanied by scientific research and evaluation (see for instance Zobel and Dubois-Arber 2004, 2006). The evaluation of the previous NHAP 1999-2003 stated that the coverage of prevention targeting drug users is good, albeit varying from canton to canton. The evaluators recommended to encourage the cantons to improve access to injection equipment in structures of all kinds (low-threshold and treatment facilities, pharmacies) (Dubois-Arber et al. 2003: 69).

The most recent study on the harm reduction measures emphasize that the incidences of HIV infections have decreased considerably and could be stabilized on a low level (Zobel/Dubois-Arber 2006). However, risk behaviour can still be observed. The majority of the IDUs have been HIV tested, but it is possible that the tests are older date. Therefore, Zobel and Dubois-

Arber recommend to ameliorate the counselling for a repeated testing. Further, the authors emphasize the necessity to intensify counselling, testing and treatment of hepatitis C because the infection rate is still high and did not decrease. The study included also focus groups with professionals working in low-threshold facilities, ambulatory treatment centres and persons engaged in risk reduction activities in nightlife locations. These professionals proposed the following measures to improve the situation (Zobel/Dubois-Arber 2006: 8):

- Maintenance of the existing network of risk reduction facilities; the professionals feared that these facilities are threatened by budget reductions.
- Enforcement of risk prevention of STIs in all fields but especially regarding sexual behaviour of men and sex workers; training and support for professionals.
- Enhance the awareness of drug users about the transmission risk of hepatitis C and enforced prevention of transmission risk by sharing inhalations material and material used to prepare an injections.
- Promotion of counselling and testing (HIV and hepatitis) as well as enhancing the access to treatment.
- Monitoring new types of consumption
- Extension of the offered social reintegration possibilities for older drug users with a long consumption background.

With respect to prevention of HIV transmission by the sexual route, already the authors of the evaluation of the NHAP 1999-20003 stated that such activities seem to be insufficient (Dubois-Arber et al. 2003). They recommended to strengthen prevention programmes targeting sex workers among drug users.

3.3.4 Female Sex Workers and Sex Worker's Clients

A) Situation "Sex Market in Switzerland"

The situation of sex workers in Switzerland and their sexual behaviour have been investigated most recently by two research teams (Meystre-Agustoni et al. 2008a; Bugnon et al. 2009a, 2009b; Bugnon/Chimienti 2009). Thus, fairly comprehensive and current information is available about the sex market in Switzerland, the problems related to prostitution and the services provided by governmental and non-governmental organisations.

In Switzerland, sex work is tolerated and legal as long as the sex worker acts independently (not employed, no procuration) and is not forced or coerced to sell sexual services. However, the federal law only provides guidelines and gives important leeway to the cantons. The cantons can regulate the sex market in greater details in defining modalities, hours and locations. A recent study commissioned by the SFOPH analyzed the legal situation in Switzerland and collected the cantonal regulations and political debates about this issue (Bugnon et al. 2009a). With respect to prevention and health promotion, the authors state that cantonal regulations

can support organisations and measures promoting the interests of sex workers. However, the absence of a legal framework did not affect the number of organisations in German-speaking cantons. In contrast, the urbanity and the size of the sex market did support the introduction of measures (Bugnon et al. 2009b).

There are no official national statistics about the numbers of sex workers or establishments. In general, the total number of sex workers (bar maids and striptease dancers not included) is estimated to range between 13'000 to 20'000 (ibid.: 14). More than two third of the sex workers perform their activities in massages salons (64%). Outdoor, champagne bars and cabarets cover together one third of the sex workers population. Escorts services cover only a minor proportion of the sex workers (2%). In total, 1405 massages salons, 271 cabarets and 152 champagne bars exist in Switzerland (ibid: 19). These establishments are not equally present in all cantons.

In Switzerland, sex work is mainly performed by women coming from Eastern Europe, Russia, Latin America, Northern Africa or Thailand (Bugnon et al. 2009b: 28). Although, the residence status of some sex workers is uncertain and/or temporary, the number of sex workers without a legal residence status is estimated to be much lower.

B) Aims

The NHAP 2004-2008 states that an HIV epidemic among female sex workers did not yet occur: "Sex workers are not more HIV-prone than the average population." (SFOPH 2003: 36). To maintain this situation the activities focussing on sex workers and their clients as a target groups must be continued (ibid.) The evaluation of the former NHAP 1999-2003 showed that a proportion of prostitutes were not reached by prevention initiatives, for instance those working in "salons". The evaluators emphasized that HIV prevention is not necessarily a priority concern of sex workers and therefore, HIV prevention is best conducted and most readily accepted as part of the wider framework of services intended to tackle also legal, social and health problems. Furthermore, the effectiveness of these activities depends on long-term commitment, which is incompatible with short-term funding methods (Dubois-Arber et al. 2003: 42).

The SFOPH targeted its activity mainly to the female sex work population by supporting a project for female migrant sex workers called APiS and a project targeting sex worker's client called Don Juan. Both projects are coordinated and run by the AHS and its local agencies or other specialized local organisations. Additionally, the SFOPH tried to strengthen structural prevention.

Structural Prevention "Minimal HIV Prevention Standards for Establishments"

The NHAP 2004-2008 emphasizes that grater importance should be attached to structural prevention. In the context of sex work, targeting clients, pimps and sex establishments should be increased and stronger cooperation for instance with the police and public authorities

should be explored (SFOPH 2003: 21). One of the central ideas was that the cantons should introduce a directive with mandatory minimal standards of prevention for establishments of the sex industry. The directive included mainly the following provisions (Balthasar/Dubois-Arber 2007):

- Provision of preventive information material and condoms free of charge as well as the visible and numerous displays of posters with preventive messages in the establishments;
- Open access for the staff of HIV prevention associations (local agencies of the AHS and its partner organisations);
- Obligation for mangers of establishments to follow a training about HIV and other STIs organised by the SFOPH.

The implementation of the directive should have been controlled by the cantonal authorities either directly or indirectly by a third party. However, the SFOPH could not find any pilot canton willing to introduce such a directive. Following Balthasar and Dubois-Arber, the unwillingness of the cantons can be explained by the difficulties and costs associated with the control of the compliance (Balthasar and Dubois-Arber 2007: 45). Nevertheless, the authors emphasized, to continue the strategy of structural prevention but to consider a bottom up, more participative approach and to lower the standards.

In spite of the failure of the directive, some cantons have implemented provisions that guarantee the access to counselling and prevention. However, the coverage of these cantonal initiatives is restricted to sex worker with a specific, temporary residence status (L).

In Bern, the migration authority initiated in collaboration with the SFOPH a pilot project that provides information material to the cabaret dancers when they apply for residence and work permit L. Furthermore, the managers requiring such permits have to guarantee free access to the HIV mediators to their establishment. In Neuchâtel, cabarets dancer applying for a residence and work permit have to follow a half day training organised by the migration authority and the local AHS agency. In the course, the dancers are informed about their rights and health issue, especially about prevention of HIV and other STIs. The local AHS agency of Basel has organised, supported by the SFOPH, information courses for mangers of establishments to raise their awareness for HIV prevention (ibid.: 46). In Solothurn, the associations Lysistrada currently initiated a pilot project in close collaboration with managers of sex establishment to introduce voluntary minimal standards (Bugnon et al. 2009b).

APiS (Migrant Female Sex Workers)

The project APiS targets migrant female sex workers in using a peer education approach. The project is coordinated by the AHS. The AHS organises information exchange, (further) training for the mediators and provides national quality standards. The local units of the AHS or

other specialized NGOs run the project and employ the mediators.

In 2007, APiS was present in 17 regions with 43 mediators. The mediators had 19'400 contacts with sex workers and provided them with information and prevention material (including condoms) as wall as address lists with specialist for health, legal and psychological questions (Rusch 2008). Further, seven local APiS projects offer VCT (rapid HIV test).

Bugnon et al. (2009b: 68-79) analyzed the current offer of HIV prevention for sex worker in Switzerland and state that specialized associations or such associations with APiS/ Don Juan are confronted with institutional instability and lack of financial resources.

Don Juan (Sex Worker's Clients)

A) Aims

Don Juan is a project targeting sex worker's clients since 1997. The project is run by the AHS and commissioned by the SFOPH. The surveillance data show that between 1997 and 2000 approximately every sixth men in between 17 and 45 years has paid already once in his life for sex. Less than 5% paid for sex in the year before the survey. Thus, it is estimated that 44'000 to 74'000 men of this age group have paid in 2000 for sex services (Balthasar/Dubois-Arber 2007: 10). The survey data on the protective behaviour shows that up to 90% of the respondents did use a condom in their last paid sex contact. Epidemiological data are supporting this observation: Following the indications of medicines 5% to 6% of new HIV infections of men are attributed to sexual contact with a female or male sex worker (ibid.). The analysis of Balthasar and Dubois-Arber (2007) of the surveillance data shows that sex worker clients can not be distinguished from the male population with respect of socio-demographic characteristics.

B) Strategy

The project Don Juan mainly consists of outreach activities where sex work takes place. These activities comprise brief personal talks with sex worker's client. In 2007, ten regional units of the AHS implemented the project and performed outreach activities roughly five evenings per year (Balthasar/Dubois-Arber 2007: 9). Additionally, an internet site (www.don-juan.ch) provides information about STIs as well as tips for correct contacts with sex workers and internet outreach activities on a website visited by Swiss German sex worker's clients (www.sey-tipp.ch) are performed.

C) Effects

The evaluation by Balthasar and Dubois-Arber (2007: 6) shows that the project is well established and is well recognized not only by the sex workers but also in some establishments and by some clients. Further, the project gained some media's attention. The prevention material is estimated as satisfactory and its diffusion was enlarged by a pertinent public. The local organisations appreciate the project and are interested in the development in the future.

The evaluators identified also some weaknesses of the project. Due to its design – selective intervention and face to face education – the project did not reach a satisfactory coverage. Only few interviews with clients have taken place and indoor locations are not reached by the project so far (ibid.). The internet outreach activities were negatively assessed by the evaluators. These activities have been stopped after the evaluation. Furthermore, the synergies with the project APiS are not used sufficiently.

The evaluators recommend to continue the project, but to better use the synergy with APiS to provide information material for sex worker clients in indoor locations. Furthermore, the project should extend its activities to indoor location respectively the contact to managers of sex establishments (e.g. massage salons). The communication and media strategy should be clarified and the relationship between the project and the LOVE LIFE STOP AIDS campaign should be strengthened.

3.3.5 Prevention, Testing and Treatment in Prisons

A) Aims

Initially, the control of infectious diseases was not considered as priorities in the NAHP 2004-2008. Nevertheless, the programme emphasized that individuals at increased risk of HIV infection are represented in a greater numbers in prisons and that gaps in the dispending of needles exist in prisons (SFOPH 2003: 22, 66). The SFOPH stopped its involvement in prevention activity in prisons in the late 1990s. Although the pilot activities such as needle-exchange trials supported by the SFOPH were evaluated positively, they were not introduced uniformly throughout the Switzerland's penal systems.

Recent observations from other countries and new studies commissioned by the SFOPH showed that people in prisons have a higher infection risks and that some deficits with respect to prevention, testing and treatment in prisons exist in the prisons in Switzerland. New studies show that the proportion of people who use or are addicted to drugs is higher within the penal system than in the general population, and that intravenous drug use with shared injection material is still widespread in prisons. Recent estimates also indicated a higher prevalence of HIV (up to 2.4% compared with 0.2 to 0.3% in the general population) and hepatitis C infections (over 6.9% compared with 0.5% to 1 in the general population) (SFOPH 2007b: 3).

In 2006, therefore, the SFOPH initiated in collaboration with the Swiss Federal Office of Justice the project "Control of infectious diseases in prisons" (German acronym "BIG"). Two academic studies commissioned by he SFOPH serve as the basis for the BIG project. First, a legal expertise analyzed the competences of the federal government to enforce the health-related rights of prison inmates concerning protection against infectious diseases (Künzli/Achermann 2007). The expertise finds that the federal government has new competences to regulate health care questions within the penal system based on the revised Penal Code. The cantons, in turn, have an obligation to ensure uniform implementation. Second, a research

project investigated the health care provision related to infectious diseases and drugs in the penal system (Masia et al. 2007; Achermann/Hostettler 2007). The research project shows for instance that there are no systematic statistics about infection diseases, instruments of testing are not wide spread and vaccination practice depend on the size of the prisons (Masia et al. 2007: 3).[12] The following areas, where action is needed have been identified by the project (Achermann/Hostettler 2007: 8):

- Improvement of data basis;
- Raising awareness of the problem among facility managers and staff;
- Establishment of minimum standards for testing, prevention and treatment;
- Clarification of responsibility for costs incurred for inmates without health assurance or for drug prevention facilities;
- Improvement of collaboration between the different parts of the penal system
- Clarification of the obligation to medical secrecy.

B) Strategy

No uniform health concept has been implemented in Switzerland's penal system to date. In contrast, the cantons have implemented different health care models (structure and content) within their penal systems (SFOPH 2008b). In general, the cantons are responsible for the execution of sentences and measures and organise the institutional setting with respect to their needs. Although, the SFOPH has regulative competencies in this field, the implementation of its regulations (directives, standards, etc.) is highly dependent on the cantonal authorities. Therefore, the SFOPH established a partnership with the Swiss Federal Office of Justice and the Conference of Cantonal Justice and Police Directors to launch and implement the project BIG. The project BIG was officially started in summer 2008 and it has the following outcome goals (ibid.):

- Minimum risks of infectious diseases being transmitted within prisons;
- Minimum risks of infectious diseases being spread from prisons to the community and vice versa;
- Prison-based prevention, testing and treatment services for infectious diseases equivalent to those available in the community;
- Prison-based substance use treatment equivalent to that available in the community;
- Sustainability of the measures and instruments developed.

---

[12] Vaccinations of hepatitis A/B are performed by 80% of the institutions; other vaccinations are performed only by 25% of the institutions (Masia et al. 2007: 3).

Measures are developed and implemented by working groups including representatives of the SFOPH, the Swiss Federal Office of Justice as well as the cantonal administrations and the penal system. It is planed, that specific measures will be implemented in 2010 (SFOPH 2008b).

4 Treatment and Care

4.1 Financing Medical Care in Switzerland

Healthcare in Switzerland is regulated by the Federal Health Insurance Act[13]. Therefore, health insurance is compulsory for all persons resident in Switzerland (within three months of taking up residence or being born in the country). It covers a range of treatments which are set out in detail in the Federal Act. It is therefore the same throughout the country and avoids double standards in healthcare. It provides for treatment in case of illness or accident and pregnancy. However, the insured person pays part of the cost of treatment. This is done by means of an annual excess (called the franchise), which ranges from CHF 300 to a maximum of CHF 2'500 as chosen by the insured person, and by a charge of 10% of the costs above the excess. The compulsory insurance can be supplemented by private insurance policies which allow for coverage of some of the treatment categories not covered by the basic insurance or to improve the standard of room and service in case of hospitalisation.

The antiretroviral therapy (ART) is part of the catalogue of universal medical services that are covered by the compulsory health insurance. So in principle, every HIV-positive person in Switzerland therefore has a right to therapy. This applies even to migrants without a residence permit (Sans-Papiers). In general, Switzerland has no restrictions on entry, stay or residence of people living with HIV. There are no regulatory restrictions on access to health care, no mandatory testing and no deportation as a consequence of an HIV diagnosis. As a matter of principle, the legal status of the migrant is separated from treatment access. Furthermore, the insurance companies are not allowed to set any conditions relating to age, sex or state of health for coverage – as far as the compulsory health insurance is concerned. And they are bound to secrecy. But as HIV-positive persons are regarded as high risk patients, the insurance companies usually don't grant them complementary insurance. So for example, the costs for medical attendance in a care home are not covered by the insurance companies. The total costs of medical care for HIV-positive persons and AIDS patients amount to CHF 120 million per year (SFOPH 2005a: 10).

In 2006, there has been a far-reaching revision of the Federal Health Insurance Act saying that health insurance companies are allowed to suspend medical services to insolvent persons. This would also apply to medication for HIV-positive persons. As a result of this revision, three HIV patients in Geneva were denied their medicine because they did not pay the insurance premium. This disappointing situation caused a lot of media attention and led to a process of rethinking. The association of the Swiss health insurance companies and the conference of the cantonal health ministers came to an understanding concerning these insolvency cases.

[13] Bundesgesetz über die Krankenversicherung (KVG) vom 18. März 1994 (Stand am 1. Januar 2009).

They agreed that in the future, the Swiss cantons will generally compensate for 85% of the outstanding payments. At the moment, a proposal for a new revision of the Federal Health Insurance Act is being worked out, which comprehends this modification.

4.2 Access to HIV Testing and Diagnosis

4.2.1 Present Testing Strategies in Switzerland

As a matter of principle, informed consent is a necessary precondition for HIV testing in Switzerland. HIV tests are always carried out on a voluntary basis and routine tests without asking for consent or compulsory tests for specific target groups are not put into practice. HIV tests are only free of charge if embedded in a wider diagnostic procedure in a clinical setting. In this case, the costs are covered by the health insurance. In all other cases, the costs for testing have to be paid by the client.

In 2007, the SFOPH introduced a new Voluntary Counselling and Testing strategy (VCT) aimed at preventing infections as well as detecting HIV infections at an early stage. VCT is an internationally approved and standardized content and procedures for pre- and post-HIV test counselling for the purposes of preventive intervention. It consists of a risk-history assessment, a fast HIV test and post-test counselling. The VCT strategy in Switzerland addressed the general population. This was a major change in the campaign's orientation, before testing was not promoted actively by the campaign for the general population. In the larger Swiss cities, VCT centres for the target groups of MSM and migrants have been established. Previous to the launch of the VCT project in 2007, the SFOPH organised a broad consultation process among Swiss experts. In this process the Swiss experts have consolidated the existing consensus that informed consent must always be obtained in connection with HIV testing because a positive result represent a change that can have serious, far-reaching implications – including in psychosocial terms – for the persons concerned. Further, experts agreed that not more tests are needed, but better and more selective tests. Furthermore, counselling should focus on the group most at risk, people who engage in high-risk behaviour with partners from affected groups such as MSM, IDUs or migrants from Sub-Saharan Africa. The VCT project was supported and managed by the SFOPH, the Swiss National AIDS Commission, the AHS and the Swiss Medical Association.

In 2008, the SFOPH implemented a counselling and data transfer tool (BerDa Beratungsleitfaden und Datenverwaltungssystem) for centres offering voluntary HIV counselling and testing (SFOPH 2008a). This tool is designed to help the specialists working in the centres to provide consistently high-quality VCT consultations and to implement the recommendations of the SFOPH correctly. BerDa has three objectives:

- To offer individuals seeking HIV testing counselling that specifically focuses on their sexual risk behaviour

- To assure the quality of HIV counselling in the Swiss VCT centres
- To transfer data electronically to the SFOPH, where they can be used to monitor infection with HIV and to define new HIV prevention strategies.

BerDa works as follows: The costumer seeking testing first has to complete a questionnaire on his sexual and risk behaviour using the BerDa platform. The questionnaire is then evaluated automatically by BerDa to produce a risk profile for that customer. This provides the counsellor at the VCT centre with rapid and standardised information about the customer's risk situation. BerDa automatically displays recommendation modules tailored to the costumer's specific risk profile (SFOPH 2008a). BerDa coordinates the consultation through the stages of pre-test and post-test counselling. Additionally, the data is transferred to the SFOPH's reporting system anonymously. The VCT centres can also apply the data to their own quality management needs (automatic production statistics).

At the moment, BerDa is applied in approximately ten VCT centres including university and cantonal hospitals. The regional AIDS support centres are preparing to work with BerDa. Further, the SFOPH plans to develop a simplified version of BerDa to meet the needs of experienced HIV counsellors and doctors in private practices.

Certainly, HIV tests can also be carried out in every general practitioner's practice.

Besides the different forms of self-initiated voluntary testing as described above, there are recommendations for physicians concerning HIV tests in special cases. For instance, HIV testing is systematically offered and suggested to pregnant women and tuberculosis patients. Additionally, there are several other situations (for instance STIs, mononucleosis, mucocutanous lesions, exanthema, recent blood transfusions, needle-sharing in IDUs and current sexual risk taking) where the SFOPH advises physicians to strongly propose an HIV test. This advice is given in accordance with the newly implemented Provider Initiated Counselling and Testing concept (PICT) (SFOPH 2007c). The PICT concept also provides a checklist for the processing of a sexual history comprising sexual orientation, sexual risk taking, type of partnership, number of partners, drug consumption and sexual violence.

So, the SFOPH provides basic guidelines for physicians to systematically investigate possible exposure to HIV. However, the problem is presumably the implementation of these guidelines. The NHAP 2004-2008 states that preventive potential of the individual counselling before and after the HIV test or in people with HIV is not systematically exploited in all settings or situation (SFOPH 2003: 68).

There is no statistic of how many test are carried out in Switzerland. It is estimated that a total number of 300'000 tests are carried out in Switzerland every year (SFOPH 2008a: 70). Thus, there are no data about the number of tests conducted by VCT-Checkpoints or by primary care physicians. Swiss experts are convinced that enough tests are done, but rather the wrong

people are getting tested. One in every two HIV tests is still conducted without counselling (SFOPH 2007a).

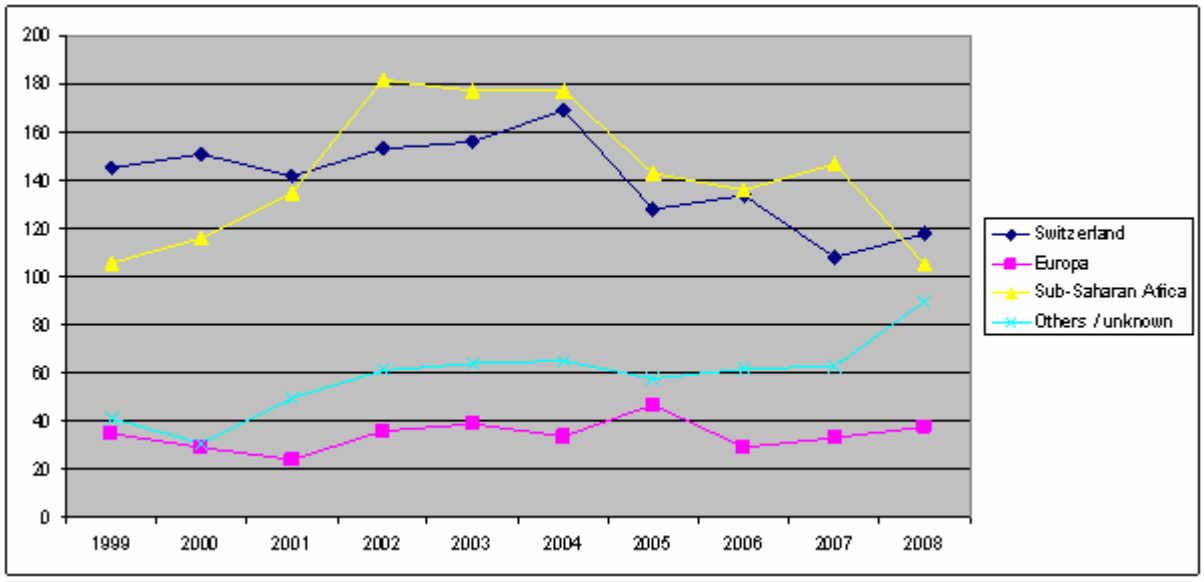
Furthermore, Dubois-Arber et al. (2003a) show that doctors' attitudes to investigating the risk of exposure to HIV tend to vary according to the type of patient or the patient's situation. Physicians are most likely to pay attention to patients whose situations involve an "obvious" risk of contact with HIV (e.g. drug users). Although not neglected, patients in more "neutral" situations (young adults or patients coming for a check-up) are less likely to experience this kind of history-taking. Finally, migrants are rarely investigated for their risk of exposure to HIV. Unfortunately, there is no recent data that could show that the findings of Dubois-Arber et al. (2003) are not valid anymore and that the implementation of the PICT has profoundly changed doctors' attitudes.

4.2.2 Barriers to Access to HIV Testing and Diagnosis for Migrants

Access to treatment in Switzerland is not influenced by risk group or geographic origin (Keiser et al. 2004; Staehelin et al. 2003). The crucial point is access to HIV testing and diagnosis. There is evidence that the main problems are the barriers to access at the level of presentation to the health service – particularly for migrants (Staehelin et al. 2003; Staehelin et al. 2004).

In general, the proportion of foreigners among the HIV-positive individuals is rising. The statistical data of the SFOPH show that while the percentage of foreigners among the newly infected persons was 28% in the mid 1990s, it rose to 52.5% in 2008 (www.bag.admin.ch, January 2009). However, the proportion of foreigners among the permanent population in Switzerland in 2007 was only 22.1% (www.bfs.admin.ch, January 2009). This overrepresentation concerns people from Asia, but most evidently the subpopulation originating in Sub-Saharan Africa. Of patients with AIDS diagnosed in the period 1998-2002, 11.8% were from this region, while the proportion of Africans in the resident population was only 0.3% (Staehelin et al. 2004). Sub-Saharan Africans contributed to 11.5% of the positive HIV tests in 1995 and 16% in 2008 (with a peak of 28% in 2002). Although, the proportion of Sub-Saharan Africans in the resident population only amounted to 0.5% in 2002. The following figure presents the trend over the last ten years indicating the region of origin.

Figure 13: Heterosexual transmission group: Number of new HIV diagnoses according to region of origin (1999-2008) (Source: SFOPH)



The run of the curve of the patients from Sub-Saharan Africa explains partly the shift to a situation of predominant heterosexual transmission in the beginning of the century. But the proportion of Sub-Saharan Africans among the HIV infections is currently declining and equals the amount of positive HIV tests in 1999. This leads to a nearly even number of cases of heterosexual and of homosexual transmission. On the other hand, the curve of HIV infections in people from other countries is continuously rising over the last ten years. This growth partly explains the high number of diagnoses in MSM. However, it is not clear where exactly these persons come from.

Irrespective of the declining number of positive HIV tests in patients from Sub-Saharan Africa, in this risk group the disease is usually more advanced at the moment of detection (Wolbers et al. 2008; Staehelin et al. 2004). According to a study of Staehelin et al. (2003), a substantive proportion of the registered Sub-Saharan African women (18%) is pregnant at entry into the SHCS, has given birth to a child or has experienced abortion before entering the study (compared with 6% of women of Northwest European Origin). Within men, 28% ob Sub-Saharan origin present with AIDS (compared with 18% of their European counterparts). The most frequent AIDS-defining event in the Sub-Saharan African group is tuberculosis. So, it seems that in this risk group the disease is often not detected until the persons concerned are obliged to consult a doctor. This assumption is reinforced by a finding of Boubaker and Gebhardt (2008) concerning the point in time of infection. They show that in 2007 40% of the HIV infections in homosexual persons are not older than six month while in heterosexual persons only around 15% of the infections are more recent than six month. This is particularly remarkable because in patients from Sub-Saharan Africa the main mode of HIV transmission is heterosexual (80% in 2008). The fact that Sub-Saharan African migrants present with more

advanced HIV disease shows that barriers to access at the level of presentation to the health services still (partly) exist. However, this situation also results from the fact that some migrants already had advanced HIV disease when they arrived in Switzerland. Staehelin et al. (2004) point out that 70% of the Sub-Saharan African migrants and 50% of the Southeast Asians appear to have been infected before entry to Switzerland "with great certainty", and 16.5% of the Sub-Saharan Africans respectively 1.1% of the Southeast Asians "presumably" before entry to Switzerland. The vast majority of all patients (94.3%) who migrated to Switzerland were not on ART in their home country.

4.2.3 Recent Responses to the Present Barriers for Migrants

Focussing now on the access to diagnosis and to health services, there are some low threshold institutions for migrants that have been established in the last years. As two thirds of the Sub-Saharan Africans come to Switzerland as asylum seekers (Staehelin et al. 2004), regular information events regarding HIV take place in the cantonal and communal asylum seeker accommodation centres. These information events are organised by local units of the Swiss Aids Federation (AHS) and coordinated by the AHS. In around one third of the Swiss cantons – especially in the larger and more urban regions – there are specific medical drop-in centres for asylum seekers and migrants without a residence permit. These centres are founded by the Swiss Red Cross, Médecins Sans Frontières or other aid organisations (www.sante-sans-papiers.ch, February 2009).

As an example, in the canton of Zurich, Médecins Sans Frontières established the medical drop-in centre Meditrina in January 2006 offering free consultation for migrants without a residence permit, asylum seekers and other people living in difficult financial conditions. Meditrina has four employees: two physicians, one nurse and a project coordinator. In the time span from January 2006 till January 2009, approximately 2400 persons made use of that medical service. Since May 2007, Meditrina is also promoting Voluntary Counselling and Testing (VCT) in cooperation with the Zurich unit of the AHS. The primary goal of this active promotion of free HIV tests is a systematic screening of the specific risk groups. In case of a positive test result, the test is being repeated in an external medical laboratory. If this second test confirms the diagnosis, the person is referred to a specialist from the larger Meditrina network. Meditrina is not in charge of conducting the medical treatment itself, but it helps people to get a health insurance and take the necessary steps towards a reduction of their insurance premium. The procedure of testing goes along with detailed information on HIV and an assessment of the patient's risk behaviour. Since the initiation of VCT in May 2007, approximately 1600 persons were medically treated in the drop-in centre Meditrina (until January 2009). 221 persons were tested on HIV, while 5 tests had a positive result. But according to a representative of Médecins Sans Frontières, the acceptance of VCT is not yet very high. Although the physicians recommended conducting an HIV test, only in half of the cases people followed this advice.

So, it seems that in the last years, the barriers to access at the level of presentation to the health service are becoming smaller. Several effective low threshold institutions for migrants have been established. But it is also obvious that the knowledge and the perception of the HIV epidemic are very diverse among this group. According to Dubois-Arber et al. (2003), the rapid assessment of the situation of the migrants (Zuppinger, Koop and Wicker 2000) revealed a range of beliefs regarding sickness in general and HIV in particular, and the difficulties inherent in communicating about sexuality and social relationships in relation to sex.

4.2.4 Barriers to Health Service for Sex Workers

The sex workers face similar problems with regard to access to testing and diagnosis like the larger group of the migrants. This is a result from a recent study about the sex market in Switzerland from the University of Geneva (Bugnon et al. 2009a, 2009b; Bugnon/Chimienti 2009). In 2008, they sent out 300 questionnaires to the cantonal authorities who often deal with sex workers and to private institutions that work and take sides with sex workers. The response rate was around 67%. With the collected information, Bugnon et al. (2009b) could for the first time describe the Swiss sex market in detail and draw a profile of the sex workers. It was found that 13'000-20'000 persons in Switzerland act as sex workers. They work either in the street or they are employed in a massage parlour, a cabaret or in a "champagne bar". In Switzerland, there are 1405 massage parlours, 271 cabarets and 152 champagne bars. To speak generally, there are around 50 times more women working in the sex market than men, and around 25 times more women than transsexuals.

The barriers to health service arise out of the fact that a large proportion of the sex workers is not Swiss. Additionally, the issue of discrimination is also very important in the context of sex work. Between 2000 and 3000 persons (approx. 15%) are migrants without a residence permit. Approximately, the same proportion has a Swiss passport. Although, it is assumed that the majority of these persons are from foreign origin and acquired the Swiss nationality by marriage. The largest proportion (around 70%) of the sex workers has a temporary or a permanent residence permit (permission L, B or C). The principal regions of origin are Latin America (mentioned in the first place in every canton), Eastern European countries that are not members of the EU (mentioned mainly in German-speaking Switzerland) and North Africa. Also named by the respondents – but not in the first place – were Asia as well as West Africa, South and East Africa. The barriers to access to testing and diagnosis differ between migrants and Swiss sex workers. For migrants, the most important barrier mentioned (77%) is the illegal residence status (applies only to migrants without a residence permit). Other crucial barriers are the lack of information (69%), the lack of health insurance (67%) und language problems (66%). Not so often mentioned are financial problems (56%) and the potential discrimination due to the occupation in the sex market (41%). Even though, every person living in Switzerland – also migrants without a residence permit – has a right to medicine and treatment, this access can not be guaranteed in every Swiss canton. As explained in the previous

chapter, in only around one third of the Swiss cantons – especially in the larger and more urban regions – there are specific medical drop-in centres for asylum seekers and migrants without a residence permit (www.sante-sans-papiers.ch, February 2009). Bugnon et al. (2009b) found in half of the cantons (12 cantons) a certain range of health care institutions that have been established for persons without health insurance. The barriers to access to diagnosis and treatment for Swiss sex workers are mainly up to the potential discrimination due to their occupation in the sex market (mentioned by 62% of the respondents), to their financial problems (50%) and to a lesser extent to a lack of information (37%). Other factors of vulnerability that apply to many sex workers are the dependence on the pander and on the environment (24%), the physical and psychological violence (30%), as well as the poverty in their countries of origin leading to a dependence regarding the financial assistance of their families living in their home countries (13%).

According to Bugnon et al. (2009b) the mainly mentioned health concerns of sex workers are HIV disease and STIs (named by 79% of the respondents). We know from other studies that among sex workers particularly migrants and IDUs are affected by HIV (Spina 1997; Barrasa et al 2004). As in Switzerland the proportion of sex workers of Swiss origin is very small, the entire group of sex workers can be regarded as at high risk. Unfortunately, there are no exact numbers about the HIV infections in sex workers and the proportion of IDUs in this group.

4.2.5 Access to HIV Testing and Treatment in Prisons

According to studies carried out in Switzerland and abroad, infectious diseases such as HIV, hepatitis and tuberculosis are often more prevalent in a prison setting than in the community (SFOPH 2008c). In Switzerland, the cantons are responsible for the enforcement of sentences and the organisation of the penitentiaries. The Swiss penal code provides the general principles of the penal system, but the implementation of these principles is dependent on the cantonal authorities. With regard to medical care, the penal code prescribes that human dignity must be respected (par. 74 1) and that physicians have free access to prisoners (par. 84 3). The cantonal regulations specify these principles, but not in the same manner. The cantons have implemented different health care model within their penal systems (SFOPH 2008c). However, every prisoner has the right to medicine and medical care. Usually, they can sign in for regular consultations by the physician of the penal institution. HIV tests are conducted by request of the inmate, upon the suggestion of a physician or in risk groups (e.g. IDUs). The treatment of HIV is normally organised in cooperation with competent specialists and centres from outside (Achermann/Hostettler 2007: 20, 22). If the state of health of a convicted person requires intensive care, the penal institution initiates the transfer to a hospital. Normally, the insurance companies compensate for the medical treatments. Otherwise, the penal institution is obligated to pay for the medical service.

The physicians in prisons are also bound to secrecy. However, with regard to health care in prisons, the physician confidentiality is a very delicate and emotional issue as the employees

in the penal system worry about their own health. So, the professional secrecy of the physicians is implemented and interpreted in very different ways. In some prisons, the names of HIV-positive inmates are marked on internal lists – in other prisons, the medicine is made anonymous to cut the link between the patient and the disease (Achermann/Hostettler 2007: 25-26).

4.2.6 Physicians in Private Practice

Focussing on the access to diagnosis, it is also important to learn how physicians in private practice deal with prevention issues. Several evaluations have been devoted to HIV prevention as practised by primary care physicians in private practice (in 1990, 1995 and 2002). They show that doctors are still practically unanimous in ascribing great importance to primary prevention as an aspect of their consultations with patients (Dubois-Arber et al. 2003). To investigate the doctor's behaviour, a hypothetical situation was being fabricated with a young adult presenting with a non-urgent health problem. The results are as follows (Dubois-Arber et al. 2003):

- Use of tobacco and alcohol, physical exercise and professional activity were investigated by more than nine doctors out of ten.
- Drug use and contraception were investigated by roughly two thirds of the doctors concerned (71% and 62% respectively).
- An investigation of the patient's sexual history / activity was undertaken by only half of the doctors (48%).

Since 1995, there has been very little change in the way doctors take their patients' sexual histories. There was, however, a slight slackening between 1995 and 2000 in the efforts made to evaluate risk-taking by homosexual patients. Doctors' attitudes to investigating the risk of exposure to HIV tend to vary according to the type of patient or the patient's situation. They are most likely to devote attention to patients whose situations involve an "obvious" risk of contact with HIV (drug users, for example). Although not neglected, patients in more 'neutral' situations (young adults, patients coming for a check-up, new patients) are less likely to experience this kind of history-taking. Finally, migrants are more rarely investigated for risk of exposure to HIV (Dubois-Arber et al. 2003).

Regarding the involvement of practitioners in the care of people living with HIV, 55% of the doctors were responsible for the care of at least one person (in 2002). They fall into the following categories (Dubois-Arber et al. 2003):

- 6% of the doctors in private practice had taken full responsibility for administering a HAART to one or more persons.
- 35% had jointly taken responsibility for at least one HAART.
- 14% were caring for people living with HIV only in their capacity of family doctor.

Despite the heavy involvement of doctors in providing such care, one practitioner in eight (12%) still thinks that it is "natural to refuse to care for a person with HIV in order to protect his personal safety and that of his colleagues" (Dubois-Arber et al. 2003).

4.3 Access to Treatment and the Swiss HIV Cohort Study

4.3.1 Access to Treatment

Comparative studies have shown that in Western Europe, where is wide access to ART, still inequities remain (Atun et al. 2008; Bollerup et al. 2008). In particular, injecting drug users (IDU), immigrants, prisoners and people with low income and education levels are less likely to have access to antiretrovirals (Atun et al. 2008: 186).

However, Swiss Studies show that access to therapy is not influenced by risk group or geographic origin of the participants (Keiser et al. 2004; Staehelin et al. 2003). The time span between enrolment in the Swiss HIV Cohort Study (SHCS) and start of ART does not differ much among the patient groups. As we have seen in the last chapter, it seems that the main problems lie in the access to HIV testing and diagnosis.

4.3.2 The Swiss HIV Cohort Study

In Switzerland, the only systematic information concerning the access to treatment stems from the Swiss HIV cohort study (SHCS). The SHCS is a prospective multi-centre cohort study established in 1988 with continuous enrolment of HIV-infected patients aged 16 years and older. It enrols patients seen at all five university clinics and two Cantonal hospitals in Switzerland – independently of the stage of disease or the degree of immuno-suppression. Information about demographics, HIV-associated diseases, medications and laboratory parameters is collected according to a standardized protocol at registration and follow-up visits every 6 months. Laboratory data are transferred electronically from the centre laboratories to the SHCS data centre at follow-up or routine visits. For this purpose, informed consent is obtained from all participants. Drawing on the comprehensive database of the SHCS, numerous studies and publications have been produced. The cohort study is financed by research grants from the Swiss National Science Foundation. The grants amount to CHF 3 million per year (SFOPH 2005a: 11). This financing is assured for the next years.

Since the inception of the SHCS (in 1988), a total of 15'118 persons have been enrolled. 4'850 (32.1%) of study participants died, and 3'819 (25.3%) were reported lost from follow-up (drop-outs), because they did not answer, left the country or did not want to participate any more in the study. Among the patients who dropped out, 567 were eventually reported to have died. The number of patients currently followed in the SHCS is 7'084. They are either followed in a clinic (in one of the seven SHCS clinics or in another outpatients clinic) or under the care of a private physician. According to the director of the SHCS, 75-80% of the enrolled

persons are under ART. This percentage is the same across all different risk groups. The number of patients followed up by other outpatient's clinics and by private practitioners increased the last few years (www.shcs.ch, January 2009). This numbers are illustrated in the following two figures.

Figure 14: Annual number of patients seen at least once in the SHCS, 1984-2007 (www.shcs.ch)

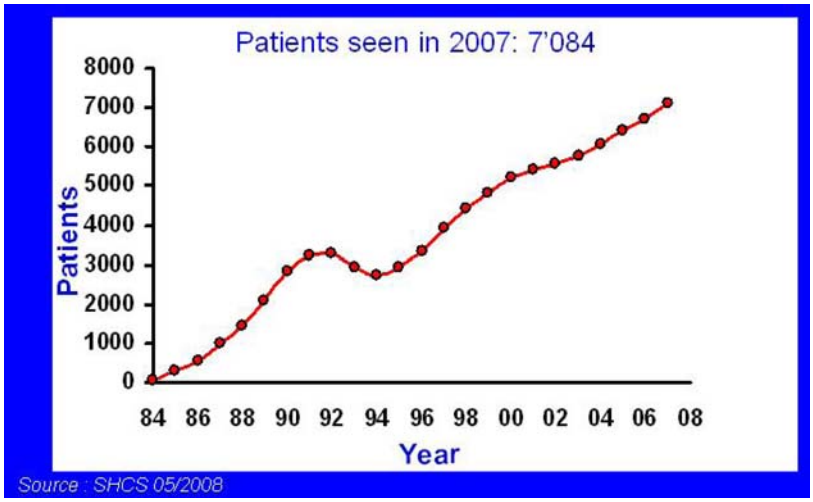
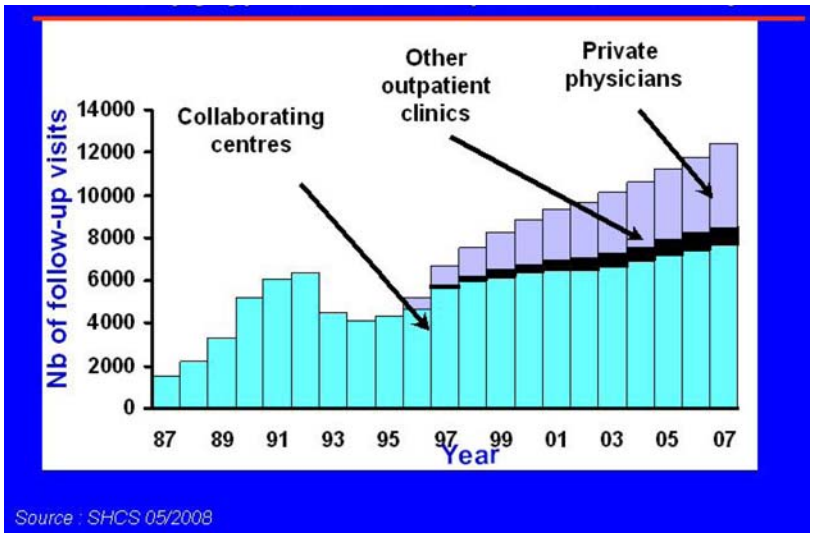


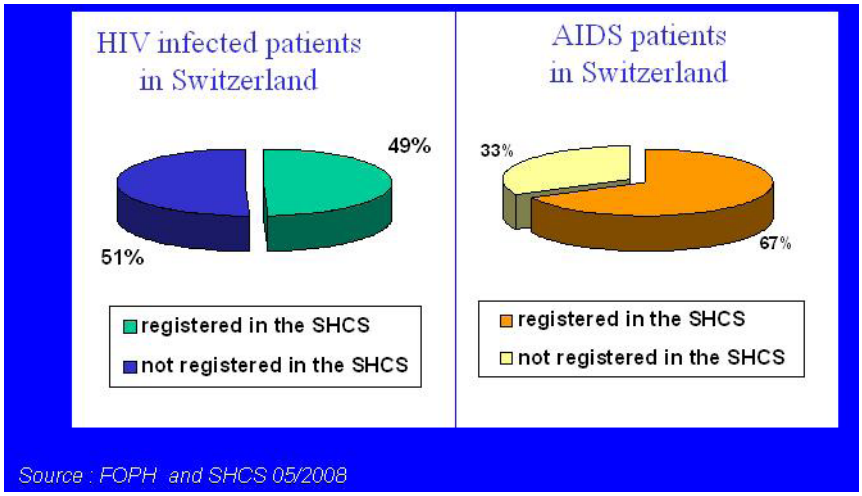
Figure 15: Annual number of patients visits, SHCS, 1987-2007 (by type of health care provider since 1996) (www.shcs.ch)



The next graph shows the representativeness of the SHCS for HIV infected patients in Switzerland. For this purpose, the number of patients ever registered in the SHCS was compared with the number of confirmed positive HIV-tests reported by the Federal Office of Public Health (SFOPH). Similarly, the number of patients with an AIDS diagnosis documented in the SHCS was compared with the number of AIDS cases reported by the physicians to the SFOPH. The results show that 49% of the HIV-infected patients and 67% of the AIDS patients are enrolled in the cohort study (in December 2006). The representatives of the SHCS

assume that these percentages are currently rising since the actual yearly entry rate is approximately 600 persons (while the number of new infections added up to 776 in 2008). According to the SHCS, the main transmission groups are well represented in the study. The demographical characteristics (sex, risk group and age at diagnosis of AIDS) of the SHCS participants are similar to those of the overall HIV-positive population in Switzerland (Keiser et al. 2004: 1836).

Figure 16: Proportions of HIV infections and AIDS patients registered in the SHCS, December 2006 (www.shcs.ch)



4.4 Adherence to Therapy

Antiretroviral therapy (ART) has led to a substantial reduction in HIV-associated morbidity and mortality. Lasting suppression of viral replication is the goal of ART and one of the most important factors influencing long-term prognosis of HIV infection (Glass et al. 2006: 385). However, discontinued treatments and poor adherence involves a high risk of the development of resistant virus populations. Non-adherence increases the risk of viral mutations, which can result in cross-resistance to other medications or transmission of multiresistant virus strains, and thus the risk for initial therapy failure in subsequently infected individuals. Although preliminary evidence indicates that even high and sometimes complete adherence does not prevent accumulation of HIV drug resistance mutations, suboptimal adherence remains a critical issue in the development of resistance. Adherence is imperative to guarantee the effectiveness of ART (Glass et al. 2006: 385).

4.4.1 Adherence in the Context of the Swiss HIV Cohort Study

There is no standard definition of adherence to therapy relating to HIV. The World Health Organisation (WHO) adopted the following definition of adherence to long-term therapy: "Adherence is the extent to which a person's behaviour – taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a health

care provider" (WHO 2003: 4). To measure adherence, it is however necessary to state this term more precisely. So, according to Glass et al. (2006: 386) four dimensions of adherence merit consideration when focusing on the behavioural dimension of adherence to ART: taking adherence (the extent to which a patient is taking a prescribed drug regimen), timing adherence (the extent a patient is adhering to the prescribed schedule for the drug intake), drug holidays (the extent a patient is missing several doses in a row), and food restrictions (the extent a patient is adhering to drug intake in relation to food restrictions).

Adherence can be measured with the medication event monitoring system, which is the most reliable and sensitive method. But in a large population such as the SHCS, this approach is not practicable. In this context, self-reported adherence is measured by an adherence questionnaire. Patient self-report has the advantage of low cost, simplicity and feasibility, but it can overestimate adherence rates due to recall bias and social desirability. Due to feasibility constraints, the SHCS adherence questionnaire includes only two questions: taking adherence ("How often did you miss a dose in the last 4 weeks: daily, more than once a week, once a week, once every second week, once a month, never?") and drug holidays ("Did you have a period of no drug intake for >24 hours in the last 4 weeks? Yes, no").

In the context of the SHCS, an important issue are the study participants that were reported lost from follow-up. Since the inception of the SHCS (in 1988), a total of 15'118 persons have been enrolled. 4'850 (32.1%) of study participants died, and 3'819 (25.3%) were reported lost from follow-up (drop-outs), because they did not answer, left the country or did not want to participate any more in the study. Among the patients who dropped out, 567 were eventually reported to have died. Keiser et al. (2004: 1836) defined SHCS participants as drop-outs in the following situations: withdrawal of consent, moving out of Switzerland or missing all appointments for at least 14 months. If a patient returned after 14 months, he or she was again included into the cohort and was no longer considered a drop-out. This study shows that women were more likely to drop out than men, with dropout rates of 25% and 19%, respectively. A similar difference was observed between IDUs and non-IDUs, with drop-out rates of 26% and 18%, respectively. These results stem from a study period between 1990 and 2001. So, the question about the reasons of the drop-outs still remains. Keiser et al. (2004) analysed the CD4 cell counts in three groups: the drop-out group, the break group (patients who have not participated in the study for at least 14 months, but later returned) and patients who have died. They found that the median CD4 cell counts before the disappearance for the drop-out group were more similar to the values of the break group than those of the deceased. So, the hypothesis which assumes that all drop-outs have died shortly after their last follow-up visit seems not to be realistic. Presumably, most of the drop-outs just don't want to participate any more in the study. However, the values in the drop-out group were generally lower than the values in the break group. This result is consistent with the fact that some of these drop-out patients had died. CD4 values were comparable for IDUs and non-IDUs for all groups except the group of deaths during HAART. For this group the CD4 values before

death seem to be higher for IDUs: this result confirms the fact that IDUs die more often from non-AIDS related deaths.

According to representatives of the SHCS, the general adherence rate has increased over the last five years.

4.4.2 Adherence in Specific Risk Groups

Glass et al. (2006) analysed the data collected with the adherence questionnaire within the SHCS. Self-reported non-adherence over the previous four weeks was as follows: 31.1% of patients reported missing ≥1 dose, 14.9% reported missing ≥2 doses and 7.1% of patients took <95% of prescribed ART doses. Almost 6% reported having taken a drug holiday (no drug intake in >24 hours) in the previous four weeks. This compliance rate is rather high compared with other developed countries where only around 50% of the patients achieve adherence rates of ≥95% (WHO 2003). The data show that the more non-adherent individuals become, the worse the HIV infection profile. In the SHCS study, more than 78% of all patients had optimal viral suppression during the previous six months; this percentage dropped to 72.1% in those who had missed ≥1 dose of medication, 64.0% in those who had missed ≥2 doses, and 58.4% in those with <95% adherence. Of those who reported taking a drug holiday, only 52.8% had optimal viral suppression compared with 80.4% of those who did not report taking a drug holiday. A strong linear relationship was found between the number of missed doses and optimal viral suppression and the test for linear trend was highly significant (Glass et al. 2006: 387).

International studies on therapy behaviour have shown that adherence to therapy is particularly problematic for injecting drug users (IDU), immigrants, prisoners and people with low income and education levels, because of communication problems, as well as lacking social support (Atun et al. 2008). Swiss research studies reveal that non-adherence to therapy correlates with a younger age, living alone, having a higher number of previous ART regimens and being on a boosted PI regimen. Other socio-economic factors do not have a constant relation with adherence (Deschamps et al. 2004; Glass et al. 2006: 387). So, it shows that immigration has no influence on compliance behaviour. This result is reinforced by a finding of Staehelin et al. (2004: 673) proving that Sub-Saharan Africans show a high rate of compliance regarding regular follow-ups in the context of the SHCS. However, this may be partly because of the fact that their history of HIV is shorter, leaving less time for treatment fatigue to occur.

In univariate statistical models the variable of using intravenous drugs also has an influence on compliance behaviour (Glass et al. 2006). In Switzerland, more than 50% of IDUs had a history of interrupted antiretroviral therapy at the time of AIDS diagnosis (Nielsen/Lazarus 2006: 270). This could be related to the fact that IDUs have higher drop-out rates (of 26% compared with 18% of non-IDUs).

4.4.3 Other Determinants of Adherence

Institutional factors are also an important set of determinants of compliance. The adherence study by Glass et al. (2006) found that compliance rates differed between SHCS centres even after controlling for a range of other factors. This is an important finding as these centres differences might be a proxy of differences in clinical and behavioural management of patients among centres, such as continuous compliance assessment, support provided in patients' self-management, and quality of relationship between patient and health care provider.

Physicians in private practice are usually interested in the adherence behaviour of their patients, but they do not show much concern about the emotional life of the patients. The vast majority of the practitioners keep themselves informed of side effects (94%), the problems posed by the complexity of the treatment (84%), and patient compliance (88%). On the other hand, only two thirds take an interest in the impact of the treatment on the patient's family life and work (61% and 66% respectively) (Dubois-Arber et al. 2003: 53). However, doctors who were caring for patients with HIV in one capacity or another did not devote equal attention to the different aspects of their daily lives (Dubois-Arber et al. 2003):

- Between two thirds and three quarters kept themselves regularly informed of the social, professional, emotional and sexual lives of their patients who were living with HIV, and of their habits where protection was concerned.
- Just under half showed concern lest their patients were suffering financial problems.
- A third of the doctors enquired into the sex lives of their patients, and a quarter into their emotional lives and issues relating to protection, only when they first took responsibility for their care. Consequently, they failed to gather information regarding the development of a health problem which is long term, and some repercussions of which do not appear immediately.
- 12% and 7% respectively of the doctors never sought information about the emotional and sex lives of their patients, and 22% were not concerned about the financial problems their patients might encounter.

In general, it is a known weakness of the Swiss health care system that chronically ill persons are not optimally supported due to adverse incentives in the federal health insurance act. Because of the tariff system of the health insurance agencies, it is not worth for doctors to have many HIV patients.

Experiences with ART suggest that adherence is arguably the most important issue in successfully managing HIV (WHO 2003). To achieve high adherence rates it is crucial to pursue a multidimensional approach and to focus on the professional care of the health personnel and the social support of people that the person concerned is closely attached (Bigler et al. 2007).

4.5 Sexual Behaviour and Sexually Transmitted Infections in the Context of the SHCS

4.5.1 Surveying Sexual Behaviour in the Swiss HIV Cohort Study

In April 2000, a new questionnaire on sexual behaviour was introduced into the SHCS, with questions on protected or unprotected sexual intercourse, type of partnership (stable partnership or occasional partners), and known or unknown serostatus of a stable partner. Patients were also asked whether they live alone, with relatives or partners, or in institutions. Answers to these questions were voluntary and were recorded on an anonymous form. 95% of the SHCS participants responded to the sexual behaviour questionnaire, which is a very high response rate. Information about sexual behaviour is self-reported and patients were interviewed by their physician or study nurse. A data collection bias might appear with regard to underreporting unsafe sexual behaviour because the patients are expected to practise safer sex.

Of those, who responded to the questionnaire, 55% had a stable partnership and 19% had occasional partners during the preceding six months, and 6% had both types of partners. Of those individuals with stable partners, 82% reported sexual intercourse, and of those reporting sexual intercourse, 76% said that they always used condoms. Of those individuals with occasional partners, 87% reported sexual intercourse, and of those reporting sexual intercourse, 86% said that they always used condoms. Overall, 12% of the individuals reported unsafe sex, 81% denied unsafe sex, and the remaining 7% neither reported nor denied unsafe sex (Wolf et al. 2003: 495). This study shows that unsafe sexual behaviour is relatively uncommon in individuals of the SHCS compared with other studies of HIV-positive or HIV-negative individuals.

Wolf et al. (2003) tested the hypothesis that unsafe sex behaviour is correlated with optimal viral suppression. They assumed that self-reported unsafe sexual behaviour would be more prevalent among individuals with optimal viral suppression, because they would perceive themselves as unlikely to infect a sexual partner. However, the results showed that reported unsafe sex was not associated with optimal viral suppression, antiretroviral therapy, diagnosis of an AIDS-defining disease, or education. Associated with unsafe sexual behaviour was gender, age, ethnicity, HIV transmission group, HIV status of the stable partner, having occasional partners, and living alone.

Unsafe sex was more likely to be reported by individuals aged 15-30 years, individuals from ethnic groups other than white, intravenous drug users, individuals with HIV-positive partners and those with occasional partners. Individuals living alone were less likely to report unsafe sex. With regard to gender, women are more likely to report unsafe sexual behaviour, but this variable has a strong connection with the factor of using intravenous drugs. As a replacement for gender in the multivariate analysis, female drug users were more likely to report unsafe sex. With this interaction included, gender was then not associated with unsafe sex any more. It could be that female drug users have difficulty negotiating condom use or sell unsafe sex

for drugs (Wolf et al. 2003: 497). Men having sex with men were no more likely to report unsafe sex but were more likely to not deny unsafe sex. This reporting bias suggests that MSM are less comfortable than heterosexuals in admitting to unsafe sex (Glass et al. 2004: 1713).

Glass et al. (2004) analysed the data on sexual behaviour with the SHCS questionnaire over time from April 2000 until March 2003. They found no evidence of an increase in reported unsafe sexual behaviour. They did however find a significant decrease in not denying unsafe sex, corresponding to a decrease in possible unsafe sex behaviour. This finding implies that individuals are becoming less likely to leave questions as to their sexual behaviour unanswered or ambiguous (Glass et al. 2004: 1712-1713).

4.5.2 Connection between HIV and Sexually Transmitted Infections

The link between HIV and other sexually transmitted infections (STI) is crucial because HIV and STIs are mutually increasing their infectivity. On the one hand, some STIs facilitate HIV transmission, and on the other hand, untreated HIV-positive persons who are co-infected with another STI have a higher viral load and are therefore more infectious.

In several European countries, co-infections with HIV and STIs are especially common in MSM and have resulted in outbreaks of gonorrhoea, syphilis, and hepatitis C (Low 2007). In Switzerland, there is a lack of data about co-infections with HIV and STIs. In the context of the SHCS, there is only information accessible about infections with hepatitis C. According to Keiser et al. (2004: 1841) co-infection with hepatitis C in the SHCS is especially high for IDUs (92%) compared with non-IDUs (7%). Rauch et al. (2005) reinforced this finding. They found that 90% of the co-infected patients had a history of intravenous drug use. More general information on the epidemiological situation of STIs is available in chapter 2.

Because of the strong connection between HIV and STIs, it makes sense to incorporate them both into the broader frame of sexual health. This has been done in many European countries and in Switzerland it is on the way as well. In 2005, the STOP AIDS campaign was redirected and launched with a new brand “LOVE LIFE STOP AIDS” (see chapter 3). This campaign focuses on the sexual health of the population as part of an overall public health effort. However, prevention activities in the domain of other STIs than HIV are not part of the campaign.

5 Governance

5.1 Governance at the National Level

5.1.1 State Actors in the HIV Policy System

In the Swiss HIV policy system, there are three important state actors: the Swiss Federal Office of Public Health (SFOPH), the Swiss National AIDS Commission (EKAF) and the cantonal authorities.

In Swiss federalism, the cantons - the subnational entities - are normally in charge of policies in the field of public health. However, due to federal competencies in the fight against infectious diseases (see Law on epidemics SR 818.101), the Confederation, i.e. the SFOPH, has played a leading role in the field of HIV since the very beginning of the epidemic in Switzerland. In 2007, the SFOPH disposed over an HIV prevention budget of CHF 7.9 million. It is part of the Federal Department of Home Affairs and is composed of four directorates, several divisions and even more sections. The AIDS section is affiliated to the Communicable Diseases division and to the Public Health directorate. Representing the SFOPH, the AIDS section has the following responsibilities (SFOPH 2003: 43):

- Leadership in directing, managing and implementing the National HIV/AIDS Programme
- Information of the general and the specialized public through the STOP AIDS campaign, brochures and other information material
- Monitoring of the epidemic with regular updates on HIV/AIDS statistics in the SFOPH Bulletin and support of epidemiological studies
- Drawing up guidelines and recommendations on counselling, treatment, diagnostics that support treatment decisions, and nursing care of people with HIV
- Responsibility for authorizing laboratories to conduct HIV tests (together with the Swiss Agency for Therapeutic Products, Swissmedic)
- Coordination and cooperation with other Swiss federal agencies (preventing double-tracking and encouraging the efficient use of resources), with cantonal authorities (ensuring the exchange of information on the implementation of the National HIV/AIDS Programme) and with the umbrella organisations of NGOs and other non-profit organisations (developing appropriate measures together and offering help in implementing them)
- Promoting political understanding of the problems associated with HIV, preparing the relevant topics for significant political decisions at the national level and ensuring that

the necessary scope for action is created and corresponding resources are made available

- Knowledge management with systematic securing of the relevant data and knowledge as well as regular communications of important findings
- International cooperation and promoting the implementation of UN directives on prevention, diagnostics, treatment, support and nursing care and on equality of people living with HIV

The Swiss National AIDS Commission (EKAF) is an extra-parliamentary commission appointed by the Swiss Federal Council. The commission works in close coordination with the SFOPH and is supported by the two special commissions "HIV/AIDS Clinical and Treatment" and "HIV/AIDS Laboratory and Diagnostics". Its detailed responsibilities are as follows (SFOPH 2003: 43-44):

- Providing strategic and specialist support for the SFOPH in implementing the National HIV/AIDS Programme
- Reviewing and evaluating the planning and the milestones of the HIV system players as well as advising these players on specific HIV-related questions
- Working out guidelines and recommendations on counselling, treatment, diagnostics that support treatment decisions and care of people living with HIV
- Staying in constant touch with experts in the field, thereby ensuring its sensitivity to current topics and developments

The third important state actor is the cantonal authorities. They have the following responsibilities in the HIV policy field (SFOPH 2003: 44-45):

- Implementing and coordinating measures within the territory of the respective canton
- Assuring the provision of HIV-related services of appropriate quality in the fields of prevention, counselling and treatment by financing and auditing local institutions
- Integrating the subject of HIV into non-HIV-specific counselling services (e.g. family planning centres) and including it in the teaching syllabus in schools
- Promoting inter- and supracantonal coordination and cooperation

5.1.2 HIV-related National NGOs

As in other countries, all HIV prevention activities are not provided directly by government agencies only, but by NGOs funded by the government for that purpose. In Switzerland, there is one major NGO at the national level – the Swiss Aids Federation (Aids-Hilfe Schweiz, AHS) (Neuenschwander et al. 2007: 4). The AHS was founded by gay men in 1985 – three years after the documentation of the first AIDS patient in Switzerland. It is now an umbrella organisation of 21 cantonal and regional agencies as well as of 36 other organisations working

in the HIV field (www.ahs.ch, February 2009). The AHS was the first HIV-related NGO and it could build up a great knowledge and expertise over the years. Today, the AHS has an extraordinary power and is by far the most important partner of the SFOPH (Neuenschwander et al. 2004). It is responsible for the coordination and development of projects and programmes that are implemented by its agencies at the cantonal or regional level. The cooperation with the SFOPH is based on a performance related mandate. This mandate covers structural and behavioural prevention in specific target groups (young people, MSM, migrants, Sub-Saharan African migrants, female and male sex workers as well as sex worker's clients). Furthermore, the SFOPH and the AHS are jointly running the LOVE LIFE STOP AIDS campaign to keep the general population informed (for more information on primary prevention see chapter 3). Besides the prevention activities, the AHS provides advocacy and counselling for people living with HIV, offers advanced training for experts and issues publications in the HIV domain. The annual accounts of the AHS for 2008 showed total revenues of CHF 7'196'224. The public contributions (mainly from the SFOPH) added up to CHF 4'250'788 (59%). The remaining amount of CHF 2'945'436 was composed of donations, membership fees and earnings from provided services. In the main office in Zurich, there are 28 staff members employed (www.ahs.ch, February 2009).

According to the SFOPH (2003: 44) the exact responsibilities of the AHS are the following:

- Implementation of the National HIV/AIDS Programme (prevention-related activities) in accordance with its mission and service-level agreements with the SFOPH
- Acting as a national umbrella organisation for its members which means representing their interests, engaging in communication and public relations, supporting the member organisations in the provision of their services, coordinating joint tasks, assuring the flow of information and knowledge transfer as well as the consistency of the prevention and counselling messages, organising joint fund-raising, ensuring the uniformity of image presentation in campaigns and providing training and education programmes for its members
- Providing information and advice for the general public and especially for people living with HIV trough its public relations work and its involvement in the STOP AIDS campaign
- Promotion of political understanding of the problems associated with HIV at the national level as well as cultivating contacts with politicians to build up a lobby for HIV questions
- Coordination and cooperation with other NGOs with similar interests at the national and the international level
- Contributing to monitoring with specialized suggestions

Besides the major NGO, AHS, there are two other national NGOs working in the HIV policy

field: LHIVE and AIDS Information Switzerland (AIDS-Aufklärung Schweiz, AAS).

LHIVE is an association that was founded in 2007 with the intention of supporting people living with HIV. It campaigns against prejudices, discrimination and stigmatisation of HIV-positive people. In cooperation with AHS Zurich, LHIVE trains interested individuals as mentors to advise and accompany newly infected people. Furthermore, LHIVE organises regular meetings and activities for HIV-positive individuals and helps in re-integrating these people in the labour market. LHIVE has only a small budget, financed through donations and membership fees, and few employees (www.lhive.ch, February 2009).

AAS was founded in 1989 by Swiss physicians. According to its constitution, the object of the AAS is to provide information and promote action against the spread of HIV infection and to support persons infected with HIV (www.aids-info.ch, February 2009). Until today, more than 600 people, predominantly doctors, dentists and pharmacists, have joined the AAS. Its main activity is to publish articles for specialists in the HIV domain and various booklets and leaflets for the more general public. The association is financed almost exclusively through donations. The total revenues in 2007 amounted to CHF 505'777. According to Kübler et al. (2002: 52-53), the AAS does not agree on the Swiss HIV policy. It criticises the missing moral message und promotes instead fidelity in marriage, careful mate selection and voluntary testing. Furthermore, it is known that the AAS cultivated close ties with the conservative and sectarian "association for psychological knowledge of human nature" (VPM). Officially, the VPM was abolished in 2002.

5.1.3 Non-HIV-specific National NGOs

Further relevant, but not HIV-specific, national NGOs are PLANeS, PINK CROSS, Caritas Switzerland, the Swiss Red Cross and the Swiss Tropical Institute. These institutions do not primarily focus on HIV, but they are all in some way connected with the topic and they would presumably not be averse to taking over more responsibilities in this domain.

PLANeS is a foundation for sexual and reproductive health founded in 2000. It is the umbrella association of the counselling centres for family planning, pregnancy, sexuality and sex education. The annual accounts for 2007 showed total revenues of CHF 306'000. Approximately CHF 200'000 (65%) are public funds (www.plan-s.ch, February 2009). PLANeS promotes competent information and counselling in the field of sexual and reproductive health. Its activities are related to a high quality of sex education, the autonomy of women in reproduction issues and the prevention of STIs (including HIV). On behalf of the SFOPH, PLANeS is maintaining an information platform about the counselling centres for sexual and reproductive health. In 2003, PLANeS set up „Amorix", a national centre of excellence for education and sexual health, in cooperation with the AHS. Amorix serves to support and coordinate prevention activities in schools. In 2006, the centre was reorganised and integrated into the education system. It is now operated by the Teacher Training University of Central Switzerland.

PINK CROSS is the umbrella association of gay organisations in Switzerland. PINK CROSS

was founded in 1993, it is now represented by two offices in Berne and in Geneva. It has 53 local associations, 34 shops and 2200 individual members. Overall, PINK CROSS represents approximately 8'000 homosexuals from the four linguistic regions of the country. PINK CROSS defends their interests in relation to the political authorities and the public space, and assumes the role of the national focal point for all matters relating to male homosexuality. In this regard, it offers counselling and advisory services free of charge. PINK CROSS is funded almost solely by contributions of its members as well as from donations (www.pinkcross.ch, February 2009). Its annual turnover is approximately CHF 340'000. There is no permanent cooperation established with the SFOPH because PINK CROSS is not pursuing an active prevention policy. However, in 2007 PINK CROSS was involved in working out minimal standards for HIV prevention in gay establishments together with the SFOPH, the AHS and other gay associations (for more information see chapter 3). Furthermore, PINK CROSS received CHF 50'000 from the SFOPH in 2008 for different small-sized prevention projects in the MSM domain.

Caritas Switzerland is a Catholic relief organisation and was founded in 1901. It runs humanitarian projects and engages in development cooperation in over 50 countries. Within Switzerland, the organisation cooperates closely with regional Caritas offices to reduce poverty. Caritas Switzerland also calls attention to social problems and proposes solutions to these problems in studies and position papers. Its main focus lies on fighting poverty, helping families and individuals in emergency situations, supporting critically ill and dying persons and providing assistance to asylum seekers and recognised refugees. The annual accounts for 2007 showed total revenues of CHF 120.67 million. This includes CHF 24.92 million (20.7%) of direct donations, CHF 21.10 million (17.5%) of public funding, and third-party contributions (contributions from Swiss solidarity campaigns and other relief organisations) totalling CHF 62.61 million (51.9%) Approximately half of these revenues were spent for international cooperation. CHF 6.58 million (5.5%) were used to advance integration of recognised refugees in Switzerland and CHF 9 million from the public purse (7.5%) were spent to provide assistance for asylum seekers in Switzerland (www.caritas.ch, February 2009). Until now, Caritas Switzerland was not involved with specific activities in the field of HIV – there has not been cooperation with the SFOPH in this regard. However, Caritas has a consolidated knowledge in working with migrants and asylum seekers. According to Kübler et al. (2002: 60-61) Caritas Switzerland would be interested in conducting HIV prevention projects for migrants if it is integrated in the more general frame of improving the state of health of migrants.

The *Swiss Red Cross* was founded in 1866 and is the oldest and largest relief organisation in Switzerland. It is a private organisation that also carries out public tasks on a mandate from the Swiss government or the cantonal authorities. The Swiss Red Cross is structured in 24 cantonal associations, 5 corporate members and 5 organisations under private law. The purpose of its activities is to protect the lives, health and dignity of human beings. The revenues in 2007 amount to CHF 750 million. 22% of these monies result from private sponsorship,

51% were earned with the provision of services and 8% with public mandates (www.redcross.ch, February 2009). The Red Cross has no knowledge in the domain of HIV, but its department of health and integration provides support for asylum seekers and migrants and offers courses in trans-cultural competence in healthcare. In cooperation with the SFOPH and Caritas Switzerland, the Swiss Red Cross published a health directory in 19 different languages (Kübler et al. 2002: 61).

The *Swiss Tropical Institute* was founded in 1943 as a public organisation. It is supported by the Swiss Federal Government and the Canton of Basel-Stadt (total 21%). The greater part of the funding is from competitively acquired project funds and the earnings of the Service Departments (www.sti.ch, February 2009). In 2002, the total budget amounted to approximately CHF 25 million (Kübler et al. 2002: 63). The mandate of the Tropical Institute is related to the improvement of the health of populations internationally and nationally. In international cooperation projects, it is addressing the field of HIV and integrates this topic into the broader frame of sexual and reproductive health. According to Kübler et al. (2000: 64) the Tropical Institute is also very interested in transferring its expertise and knowledge to the Swiss context.

5.1.4 Instruments of Governance

The HIV policy sector is steered by the SFOPH by means of performance related mandates and funding of projects and institutions. Within the SFOPH, the AIDS section plays the leading role in this policy field. Another important player is the Drug section, which particularly has responsibilities concerning the risk group of the IDUs. Both sections are affiliated to the Public Health directorate.

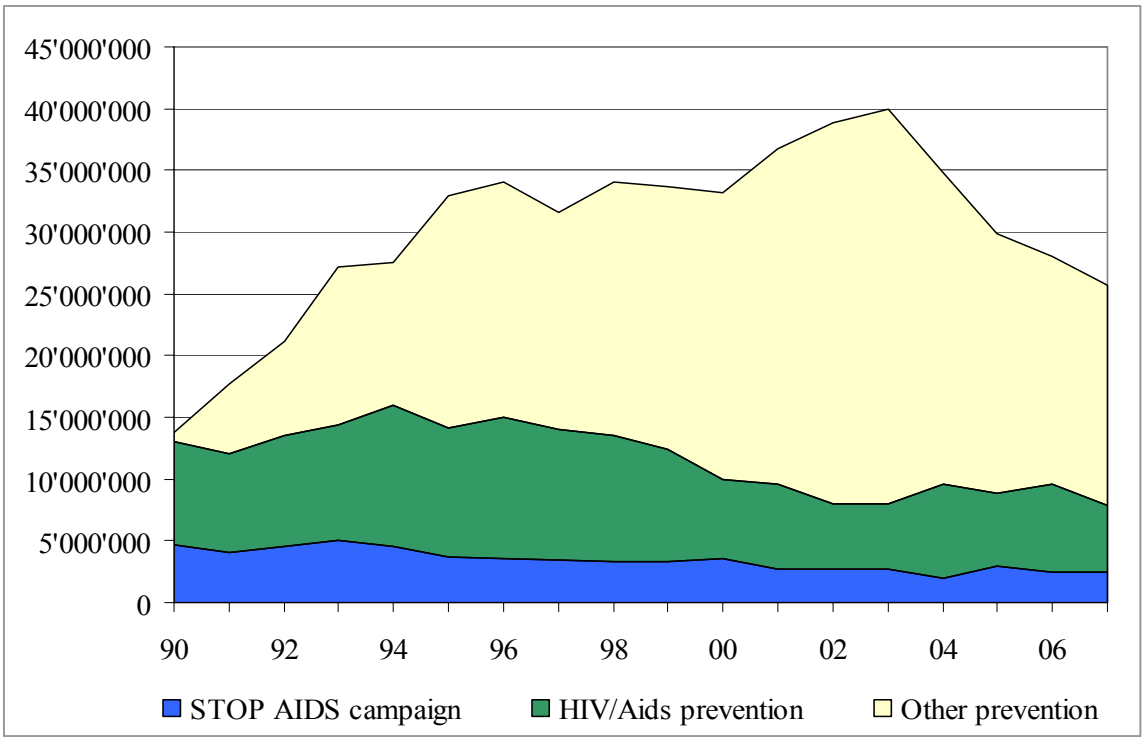
The following table shows the expenditures for prevention of the SFOPH in 2007 according to the most important fields of prevention (www.bag.admin.ch, January 2009).

Table 3: Expenditures for prevention of the SFOPH in 2007

Field of Prevention	***Expenditures in CHF***	***in % of the Total***
STOP AIDS campaign	2'500'000	10%
HIV prevention (without STOP AIDS campaign)	5'400'774	21%
Total HIV prevention	*7'900'774*	*31%*
Drug prevention	5'595'400	22%
Tobacco and alcohol prevention	3'301'600	13%
General prevention / Prevention "Health and Environment" (e.g. bird flu)	8'858'864	35%
Total expenditures for prevention in 2007	*25'656'638*	*100%*

The next figure shows the development of the expenditures of the SFOPH over the last 17 years for HIV prevention and for the other fields of prevention (www.bag.admin.ch, January 2009).

Figure 17: Expenditures of the SFOPH (1990-2007)



This figure shows an overall decrease of expenditures for HIV prevention over time. The resources spent by the SFOPH declined since 1996 from CHF 15 million to CHF 7.9 million in 2007 including the expenditures for the STOP AIDS campaign. In the early nineties, the amount of the HIV prevention was by far the largest proportion of the overall expenditures. In 2007, it only adds up to 31% of the total prevention budget of the SFOPH. The cuts in HIV prevention expenditures above all concerned the STOP AIDS campaign, whose budget was nearly cut by half (from CHF 4.7 million in 1990 to CHF 2.5 million in 2006). In the last five year, the SFOPH spent on average CHF 2.5 million yearly for the national STOP AIDS campaign. The budget for HIV prevention contained CHF 7.4 million for 2008 and CHF 7.8 million for 2009.

Over the years, expenditures for HIV prevention increasingly compete with other fields of prevention: an increase of expenditures in these areas was paralleled by a decrease in the field of HIV, and vice-versa. This means that there is an issue of distribution between sectors of the SFOPH that concentrate on prevention of various diseases. Interestingly, the budget for HIV increased again in 2003 – a direct effect of the rising incidence of new HIV infections. This provides evidence that epidemiology is important in budgetary negotiations within the SFOPH (Neuenschwander et al. 2007: 4).

Within the AIDS section, the workload is managed with eight fulltime equivalents.

The SFOPH governs the prevention activities in the field of HIV on the basis of performance related mandates with so called contracts on prevention. The following table shows the current contracts on prevention of the AIDS section.

Table 4: Contracts on prevention of the AIDS section in 2008

Contracts on Prevention	***Expenditures in CHF***
General contract on prevention with the AHS	1'875'000
Project Mission Possible with the AHS	263'000
Total prevention budget for the AHS	*2'138'000*
Centre of excellence for education and sexual health, Teacher Training University of Central Switzerland	100'000
Consolidation centre VCT for migrants, Geneva	75'000
Project fund Pink Cross, different small-sized projects in the MSM domain	50'000
Audit of gay establishments (VEGAS)	45'000
HIV guide for physicians	42'000
Prevention on www.safetravel.ch (information for travellers)	26'000

It is obvious that the largest proportion of the prevention-related funding goes to the AHS. The two listed contracts add up to CHF 2'138'000, which is around 40% of the total budget for HIV prevention (without the STOP AIDS campaign). In general, the target achievement of these prevention contracts is controlled with contractually agreed upon milestones and project goals.

Besides this project- and prevention-related money, the SFOPH also supports NGOs in their responsibility as umbrella organisations. In 2007, PLANeS, the foundation for sexual and reproductive health, received CHF 120'000 as subsidies from the SFOPH. This amount also contributes to the prevention activities of PLANeS, but is not regarded as directly prevention-related. The AHS as an umbrella organisation was supported in 2008 with CHF 1'157'000. Furthermore, the SFOPH funds the AHS to pursue knowledge management (securing documents and videos, issuing publications, organising annually conferences and conducting advanced trainings). In 2008, the contribution for knowledge management added up to CHF 731'000. The AHS receives additional funds from the Swiss Federal Social Insurance Office, which is mainly intended for providing advocacy and counselling for people living with HIV. These contributions make a total of CHF 4'250'788 of public funds for the AHS in 2008. So, the proportion of the direct funding for prevention activities in relation to the total public contributions accounts for 50.3%.

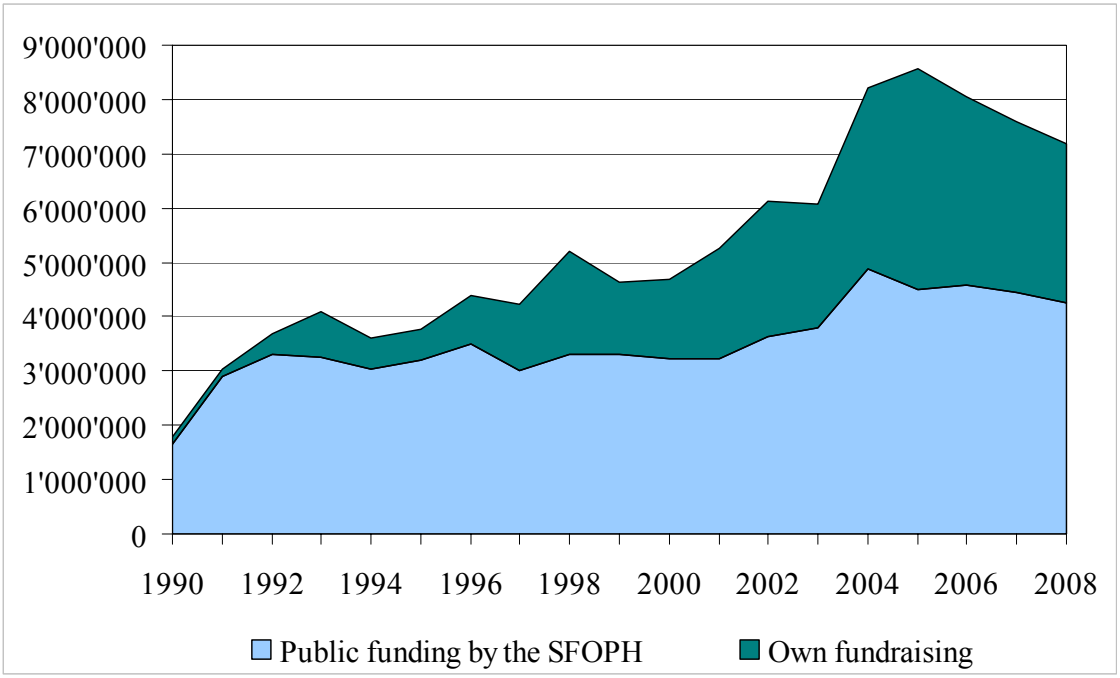
5.1.5 Resources of the AHS

The size of the annually prevention funds shows that – as in most other European countries (Steffen 1996; Steffen 2001) – close collaborations have been established between Swiss public agencies and NGOs to implement HIV prevention activities – particularly between the SFOPH and the AHS (Bütschi/Cattacin 1994). The AHS is clearly the most important partner of the SFOPH. Moreover, the role and influence of Swiss NGOs have been quite significant in international comparison (Panchaud 1995; Cattacin/Panchaud 1997). Being the oldest (founded in 1985) and the most experienced HIV-related NGO, the AHS has achieved an extraordinary power and a very strong, almost monopolistic position in this policy field.

According to Setbon (2000: 62), since 1996, HIV policy in Western developed countries is in the phase of normalization. This normalization phase is characterized by stabilizing infection rates and the appearance of an effective medical treatment. Presumably, this process also affects the dynamics of the HIV topic as a social and political problem. As AIDS is no longer seen as a major threat, this may not only have consequences on the individual risk behaviour, but also on the support for existing prevention measures (Neuenschwander et al. 2004: 11). It seems plausible that with this increasing routinisation, donations are steadily declining and NGOs become more and more dependent on state funding. Therefore, the position of the private actors is becoming weaker while the importance of public actors grows. Furthermore, the declining political support leads to shrinking financial resources which may cause allocation related conflicts among the key actors in this policy field (Neuenschwander et al. 2004: 13).

In Switzerland, we experience the implications of this normalisation process inasmuch as the financial resources for HIV prevention are indeed steadily shrinking. The expenditures of the SFOPH were reduced by half since the early nineties (see figure 17). However, the resources of the main NGO, the AHS, have not been declining over the years. On the contrary, public funding from the SFOPH has increased from CHF 1.7 million in 1990 to CHF 4.9 million in 2005. Since then, the public contributions have been slightly declining to CHF 4.25 million in 2008. This means that the cuts in governmental budget lines have not had a direct link to cuts in subsidies to the AHS. These cuts mainly concern the STOP AIDS campaign and the prevention in the risk group of the IDUs while both domains are not strongly related to the prevention activities of the AHS. The rising of the public funding to the AHS does also point to its high position of power. The development of these resources over the last 18 years is shown in the next figure.

Figure 18: Resources of the AHS (1990-2008)



The figure shows that not only public funding but overall resources available to the AHS have increased from CHF 1.8 million in 1990 to CHF 7.2 million in 2008. This is most notably due to own fundraising. It seems therefore that the HIV issue still benefits from a relatively "good press". However, the donations are partly going back since 2005.

So, the normalisation process had an influence on the resources of the public sector, but did not change the power and the position of the principal NGO, the AHS. The relationship between the SFOPH and the AHS can be described as long lasting and stable. The degree of institutionalization is very high, the rules of the game are clear and accepted by every actor involved (Neuenschwander et al. 2004: 16).

5.1.6 Adequacy of the Governance and the Allocation of Funds

Regarding the shrinking resources for HIV prevention and the changing nature of the epidemic, the question arises whether the means available are allocated in an effective and efficient manner – that is to maximize the number of averted infections. So, it is necessary to investigate if the funding strategy of the SFOPH as well as the prevention activities of the involved NGOs are still adequate regarding the measures taken and the target groups considered.

Cohen et al. (2005) calculated the cost effectiveness of different HIV prevention measures on the basis of four mathematical models. The analysis shows that scarce resources are optimally applied with a combination of two packages of measures: mass media campaigns for the general population and individual, participatory efforts in high prevalence groups. In Switzerland, there was only one study investigating the social costs caused by HIV. Zurn et al. (2001)

found that the costs for HIV prevention amounted to a total of CHF 55 million in 1998. Unfortunately, the study did not analyse in which specific fields these costs were incurred.

To analyse the cost effectiveness of the Swiss HIV policy, we focus on the funding strategy of the SFOPH and the prevention measures of the AHS.

The cuts in HIV prevention expenditures mainly concern the STOP AIDS campaign and the prevention in the risk group of the IDUs. The budget for the STOP AIDS campaign has decreased considerably from CHF 4.7 million in 1990 to CHF 2.5 million in 2006. A campaign manager supposed that CHF 2.5 million is the minimum budget for an effective mass media campaign in Switzerland (Neuenschwander et al. 2005b: 23). However, according to Cohen et al. (2005) budget reductions in mass media campaigns do not contribute to higher cost effectiveness in HIV prevention. On the other hand, the cuts in the prevention budget for the target group of the IDUs are connected with the HIV reality. The infections in this group are constantly declining and have reached a very low level of 3.7% in 2008.

It is very complex to track the development of the public resources to other target groups. Though, it is evident that public funding to the AHS has considerably increased from CHF 1.7 million in 1990 to CHF 4.25 million in 2008. As the AHS is the main NGO covering structural and behavioural prevention in specific target groups (young people, MSM, migrants, Sub-Saharan African migrants, female and male sex workers as well as sex worker's clients), the resources in these prevention fields have presumably increased. From 2006 onwards, we can assess the allocation mode in the general contract on prevention between the SFOPH and the AHS. However, before 2006, it is not possible to specify the resources according to the relevant target groups. The following table shows the proportion of the prevention budget for each target group in the current contract of 2008 as well as the split-up of the expenditures between the SFOPH and the AHS.

Table 5: Allocation of the prevention budget in the general contract on prevention in 2008

Field of Prevention	***Budget for 2008***	***in % of the Total***
Prevention for MSM / MSW (male sex workers)	1'000'000 80% SFOPH, 20% AHS	47.82%
Prevention for FSW (female sex workers)	357'000 91% SFOPH, 9% AHS	17.07%
Prevention for the Sub-Saharan African migrants / for migrants from high prevalence countries	300'000 94% SFOPH, 6% AHS	14.35%
Prevention for the migrant population	188'500 88% SFOPH, 12% AHS	9.01%
Administration of the prevention activities	245'500 80% SFOPH, 20% AHS	11.74%
Total prevention budget of the AHS	*2'091'000** *85% SFOPH, 15% AHS*	*100.00%*

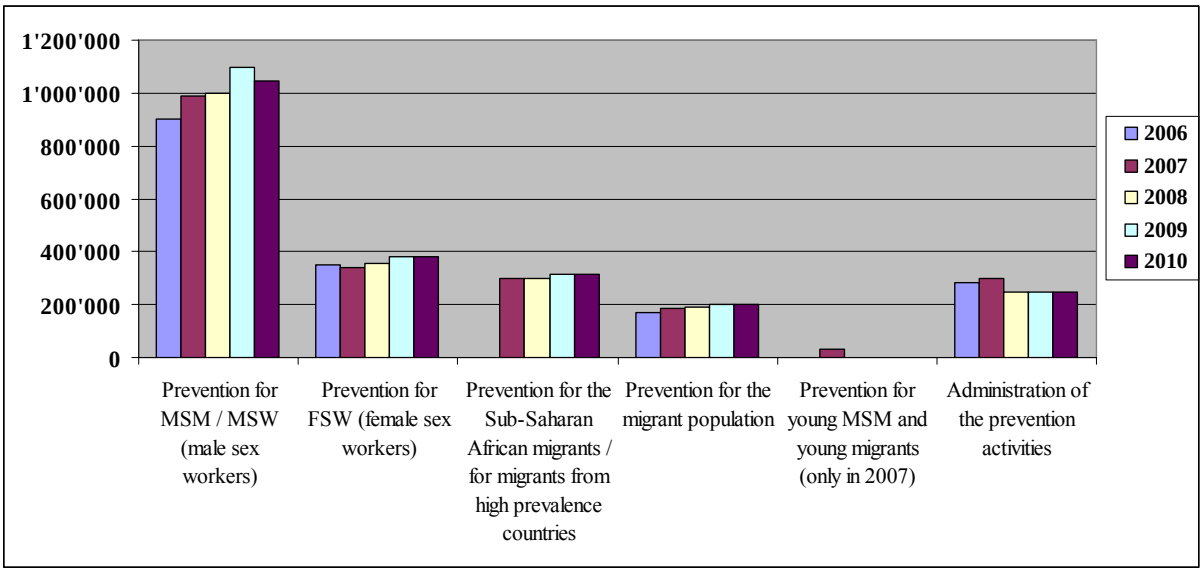
*: Exclusive of value-added tax.

Within the scope of the general contract on prevention, nearly half of the budget (47.82% in 2008) is spent for prevention for MSM and MSW (male sex workers). This proportion is closely linked to the real patterns of HIV infection. The amount of positive HIV tests in MSM has been extraordinarily rising from 159 infections in 2003 (21% of all infections) to 327 in 2008 (42.7%). So, the prevention budget reflects the current number of infections in MSM. Furthermore, CHF 263'000 was spent in 2008 for the "Mission Possible" project. Therefore, the expenditures of the AHS for MSM prevention activities add up to CHF 1'263'000 in 2008, which is around 25% of the total budget for HIV prevention (without the STOP AIDS campaign).

In the other important risk group, the Sub-Saharan African migrants, the number of infections is steadily declining from 220 (27.7%) in 2002 to 120 (15.7%) in 2008. This proportion is linked to the prevention budget for Sub-Saharan African migrants, which accounts for 14.35% of the total in 2008. Furthermore, 9.01% of the prevention budget is spent for prevention activities for the general migrant population. The recent decline in HIV infections in Sub-Saharan African migrants is potentially due to the implementation of the AFRIMEDIA project on the one hand (see chapter 3) and the establishment of several low threshold medical institutions on the other hand (see chapter 4). However, the majority of the Sub-Saharan African migrants (70%-86.5%) appear to have been infected before entry to Switzerland (Staehelin et al. 2004).

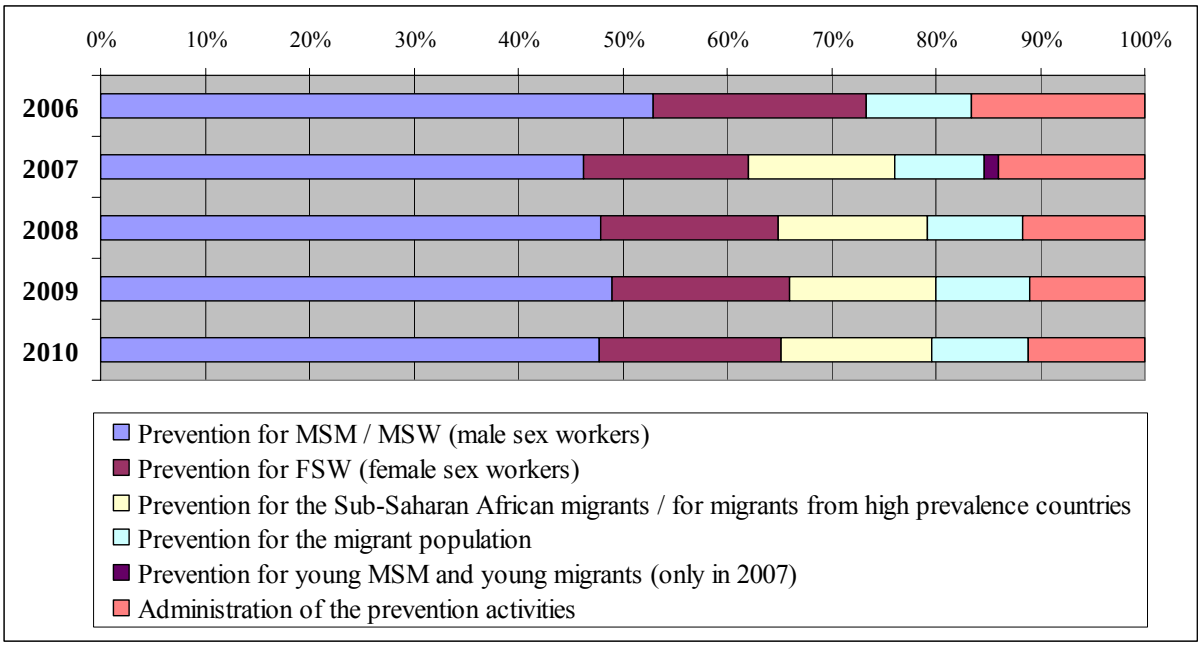
The development of the budget shares for the different risk groups from 2006 to 2010 is illustrated in the next two figures. First, we can see the prevention expenditures in absolute numbers (CHF). The second figure presents the contributions to the different target groups as percentage of the total annual budget.

Figure 19: Development of the prevention budget in the different fields in absolute numbers (2006-2010)



Note: The AFRIMEDIA project was first implemented in 2006, so there is no specific prevention budget for Sub-Saharan African migrants in 2006.

Figure 20: Development of the prevention budget in the different fields in % (2006-2010)



Although public funding to the AHS is slightly shrinking since 2004 (own fundraising is going back since 2005), the prevention expenditures are more or less stable. We can even see a small increase in the budget for MSM/MSW prevention in absolute numbers over the years. However, there is no clear development of the MSM resources regarding the proportional shares of the total budget. The abrupt reduction in 2007 was due to an explicit increase of the total prevention expenditures (of 26%) caused by the implementation of the AFRIMEDIA project for Sub-Saharan African migrants. Since 2007, the total prevention budget of the AHS stayed almost the same (around CHF 2'150'000).

It is obvious that the prevention activities of the AHS are connected to the HIV reality and to the number of infections in the different risk groups. The budget level for MSM also reflects the recent state of the epidemic. However, there is no adequate reaction – besides the "Mission Possible" project – to the rapid rising of the number of infections in MSM. The massive increase from 159 infections in 2003 (21% of all infections) to 327 in 2008 (42.7%) was not counteracted by appropriate prevention measures and financial resources. So, the question still remains in how far the funding strategy of the SFOPH and the prevention activities of the AHS are really linked to a systematic reflection on the nature and the evolution of the epidemic.

The conducted analysis of the allocation of funds must be followed by a discussion of the adequacy of the governance system as these two topics are closely connected. According to Neuenschwander (2007), the Swiss HIV-system is characterised by structural inertia. The basic characteristics of the governance of the Swiss HIV-system have not changed significantly over the years. Budget cuts in the normalisation phase have produced some consolida-

tions of the policy network on its margins, but has left its core – made up of the collaboration between SFOPH and AHS – more or less intact (Kübler et al. 2002; Neuenschwander et al. 2005a). On the one hand, this inertia has had beneficial effects, as it has rendered the system quite resilient to further attempts at cutting budgets. On the other hand, this structural inertia could have negative effects, as it lessens flexibility with respect to adapting the flow of funds according to new developments of the epidemic.

Admittedly, in spite of holding a strong position of power in this policy field, the AHS is not inactive or inadaptable. It offers a wide range of information material for several target groups and provides advanced training for experts. The central agency of the AHS manages the day-to-day business very well, but it has failed to come up with innovative ideas. Furthermore, it reacts only very slowly to the international tendency to increasingly integrate HIV prevention into the broader field of sexual health. The AHS has now introduced information on STIs into its prevention activities. Furthermore, it elaborated in cooperation with PLANeS, the foundation for sexual and reproductive health, the project „Amorix", a national centre of excellence for education and sexual health. This project was set up in 2003. Amorix serves to support and coordinate prevention activities in schools. According to the annual report 2007 of PLANeS, the AHS is interested in a constant exchange and a closer cooperation between the two NGOs further on (www.plan-s.ch, February 2009). The executive directors therefore met several times and discussed topics like STI prevention, VCT, sex education in schools and with young people. It is planned to develop close collaboration on a conceptual level.

Obviously, the AHS tries to broaden it focus and to build up new strategic partnerships to maintain its position and influence and not be put out of business. Thereby, the strategies of the different cantonal and regional agencies vary considerably (Neuenschwander et al. 2005a: 71). Most agencies still concentrate on HIV prevention as their core business. However, they integrate the prevention of STIs into their prevention activities. Only the cantonal agency of St. Gallen is broadening its activities and integrating the topics of sexual health and sex education. Since 2001, the AHS St. Gallen calls itself "specialist centre for AIDS- and sexuality-related questions". The reasons why most agencies stick to the HIV prevention are the fear of a further normalisation and trivialisation of this issue as well as the missing financial means (Neuenschwander et al. 2005a: 72).

According to the conducted interviews with important actors in the Swiss HIV policy sector, the central agency of the AHS is losing contact with the gay community. It seems that numerous local gay associations do not feel represented by the AHS as they do not see a strong prevention strategy regarding self-identified gay men and other MSM. This is problematic since the number of new HIV diagnoses in this group has steadily increased over the last few years – from 159 diagnoses in 2003 to 327 diagnoses in 2008. Apparently, there is a big necessity for change regarding governance – and especially the assignment of tasks and the allocation of resources – in the Swiss HIV policy field.

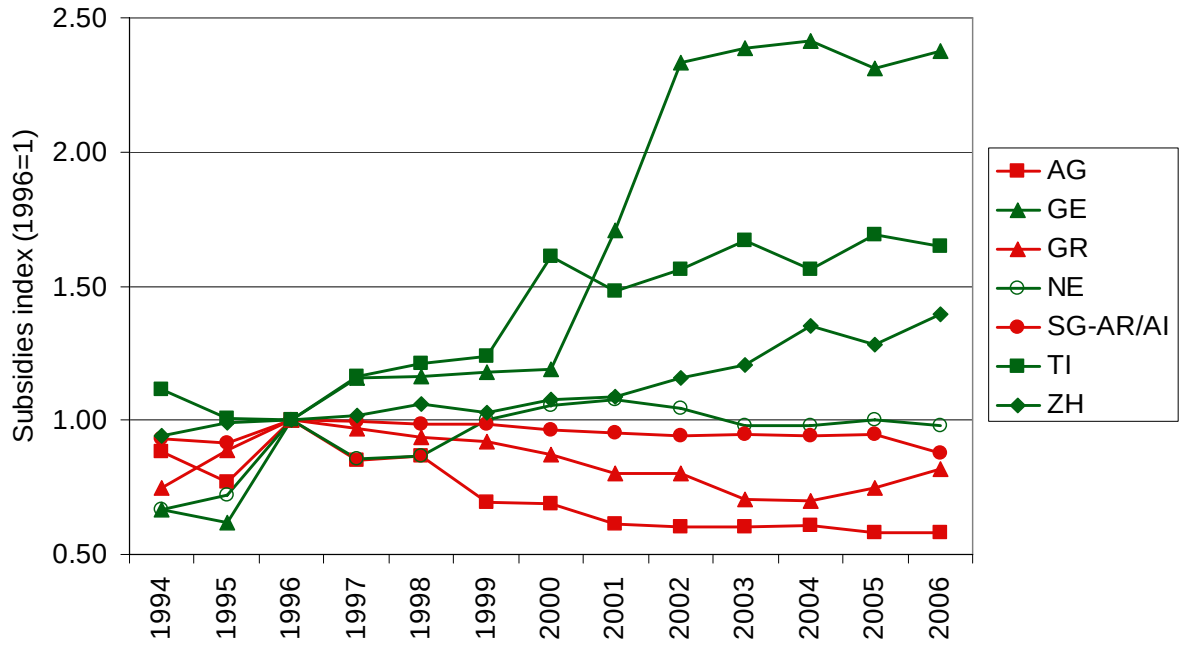
5.2 Governance at the Cantonal Level

5.2.1 Public Funds for Subnational NGOs

Since the AHS is an umbrella organisation that manages and coordinates the prevention activities, it is important to take a closer look at the cantonal and the regional level where the actual prevention work takes place.

Neuenschwander et al. (2007) analysed the resources of subnational NGOs (agencies of the AHS) in seven cantons since 1994. To make the data comparable, they have created an index with the index value for 1996 set to 1. The following figure shows the development of subnational government funding for HIV prevention in these seven cantons.

Figure 20: Public funds for subnational NGOs (1994-2006)



The figure shows no uniform trend. In three out of seven cantons, public funding for targeted HIV prevention has declined (red lines). The reasons for this decline are general cuts in state expenditures in these cantons since the mid-nineties, as a response to the deterioration of the financial situation. Policy makers considered that health promotion was not a priority. As a result, this whole domain was affected by budget cuts – it was not a targeted cost-cutting exercise directed against HIV (Neuenschwander et al. 2007: 5). However, in four out of seven cantons, there was an increase in public funding for targeted HIV prevention (green lines). This is a surprising result in the light of the normalisation hypothesis. It is all the more astonishing as three of these four cantons (Geneva, Neuchâtel and Ticino) also had severe fiscal problems during this period. On the one hand, this increase is due to a "catching up" effect. The prevention activities provided in these cantons were thought to be incomplete with re-

spect to the "usual" palette and in need of development. On the other hand, HIV incidence and prevalence in these cantons is comparatively high and strategic alliances in these cantons were quite successful in stressing the need for continued HIV prevention as a response to the epidemiological situation (Neuenschwander et al. 2007: 5).

The analysis of the financial means of the subnational agencies also shows that the own fund-raising does not make a large contribution to the overall resources. The resource situation is very much determined by the development of subnational government funding. In a context of decreasing government funding, NGOs were not able to complement these losses by raising their own funds. However, the inflow of donations remains stable over the years in most cantons (Neuenschwander et al. 2007: 5).

In the present study, it does not seem feasible to gather data on actors and resources in every canton. Therefore, we concentrate on two differing cantons to provide a sound overview of two representative financial and political systems. On the one hand, we analyse the Canton of Zurich – a large urban centre with comparatively high HIV prevalence. On the other hand, there is the Canton of Neuchâtel – a strongly decentralised canton with rather low HIV prevalence. Furthermore, these two cantons are located in different linguistic regions (in German-speaking and in French-speaking Switzerland).

5.2.2 Canton of Zurich

Besides the Canton of Geneva, the Canton of Zurich is one of the most affected by the HIV epidemic. Since 1985, there have been 8894 positive HIV tests in the Canton of Zurich, which is 28.8% of the total. In 2008, Zurich recorded 222 positive tests (27.6% of the total) and 17 newly infected persons per 100'000 inhabitants (the average is 10.6 cases). This is a comparatively high HIV prevalence, as in 2007 the inhabitants of the Canton of Zurich only accounted for 17.4% of the total population in Switzerland.

Therefore, it is no surprise that several NGOs are dealing with preventive activities. The two most important NGOs are the local agencies of the AHS in the cities of Zurich and Winterthur. In the Canton of Zurich, multi-level relationships play a fundamental role since all private actors receive funding not only from cantonal but also from communal authorities. For several NGOs, communal funding is even much more important that funding from the canton (Neuenschwander et al. 2004: 20). However, the tasks of the cantonal authorities differ from the ones at the communal level. The Cantonal Department of Public Health is the main responsible for the implementation of the National HIV/AIDS Programme and coordinates the various activities in this policy domain. Thus, the cantonal Department of Public Health can be considered the leading public actor in the Zurich AIDS prevention network (Neuenschwander et al. 2004: 20).

The cantonal Department of Public Health funds three institutions working in HIV prevention with a total of annual subsidies of CHF 890'000. It spends CHF 350'000 for prevention ac-

tivities of the Aids Help Zurich, the local agency of the AHS, effective from 2009. Until 2008, the cantonal funding only amounted to CHF 290'000. The present contributions are granted until 2016. The cantonal Department of Public Health spends further CHF 90'000 per year for the local agency of the AHS in the city of Winterthur, the second largest city in the Canton of Zurich. This amount is also granted until 2016. Additionally, approximately CHF 450'000 are cantonal funds subsidising the distribution of syringes. This measure is operated since 1987 by the city of Zurich. The cantonal contributions for this measure are annually allotted. However, there are other cantonal departments as well, that are directly or indirectly funding HIV prevention measures. The Department of Education is for instance funding prevention activities in schools. Prevention measures in prisons are financially supported by the Department of Justice.

The most important private actor in the city of Zurich is the local Aids organisation, the 'Aids Help Zurich' (Zürcher Aids-Hilfe, ZAH). The ZAH was founded in 1985. It offers HIV-related information, counselling and support for people living with the disease. Furthermore, the ZAH established HIV/STI low-threshold testing facilities for MSM in 2006 – the so called 'Checkpoint Zurich'. Checkpoint Zurich is an outpatient clinic managed by physicians. It is operated in cooperation with 'ARUD Zurich', an association founded by doctors and drug addiction specialists for risk reduction in the use of drugs. Checkpoint Zurich provides the opportunity to obtain comprehensive care at one location by gay health care professionals and with a high level of personal continuity (Schwappach/Bruggmann 2008). For the target group of the migrants, the ZAH implemented the project AFRIMEDIA which aims to improve the access of migrants coming from Sub-Saharan African to HIV prevention materials and services. Coordinated with the school health service of the City of Zurich, the ZAH additionally operates 'lust and frustration' (Lust und Frust), a competence centre for sex education. The annual accounts of the ZAH showed total revenues of CHF 1'478'634 in 2007. 54.2% of this amount (CHF 801'152) are communal and cantonal contributions. The Canton of Zurich compensated for CHF 290'000 and the City of Zurich for 300'000. The remaining amount of money was contributed by other municipalities. In 2009, the public funds were raised to CHF 350'000 (Canton of Zurich) and CHF 330'000 (City of Zurich) respectively.

The other important NGO in the Canton of Zurich is the local Aids organisation in Winterthur, the 'Aids Info Winterthur' (Aids-Infostelle Winterthur). It was founded in 1992 and offers a documentation centre, information material, counselling and advanced training courses. Unlike the ZAH, the Aids Info Winterthur broadened its focus in the last years and integrated topics like STI prevention, sex education in schools and general health promotion in its prevention work. The main prevention activities of the Aids Info comprise sex education and HIV/STI prevention courses in schools – assuming thereby a public responsibility. With this approach, the Aids Info Winterthur is able to achieve a high level of self-financing of approximately 50%. Its budget in 2008 accounted for CHF 353'295. The public contributions from the cantonal Department of Public Health amounted to CHF 90'000, while the City of

Winterthur supported the Aids Info with CHF 80'000. The communal funding increased in the last years from CHF 70'000 in 1992 to CHF 80'000 in 1995 and further to CHF 90'000 in 2004. In the years 2005-2007, the communal contributions were temporarily reduced to CHF 60'000 as a part of the saving measures of the City of Winterthur.

Further important private actors in the field of HIV prevention in Zurich are the 'homosexual work group Zurich', an organisation campaigning for the interests of homosexual people, 'ARUD Zurich', an association founded by doctors and drug addiction specialists for risk reduction in the use of drugs, the 'priest's office for AIDS-related questions' as well as two drop-in centres in Zurich and Winterthur that distribute syringes and offer counselling.

According to Neuenschwander et al. (2004: 20-21), the degree of coordination within the AIDS prevention network in the Canton of Zurich has to be described as rather low. This assessment is based on different reasons. First, Zurich NGOs have to deal with cantonal as well as communal authorities to a great extent. As the relationship between the canton and the city of Zurich is in an ongoing state of tension, it is clear that this multi-level coordination arrangement is a rather complicated one. Second, the cantonal NGOs are not concentrated in only one city as in other cantons, but are present in the two biggest cities of the canton, Zurich and Winterthur. However, these considerations do not mean that no coordination at all takes place in Zurich. In Zurich as well, there exist regular meetings where all relevant actors meet. But compared with other cantons, the cohesion of the private organisations in Zurich is only weak and each is more or less looking for its own.

5.2.3 Canton of Neuchâtel

The Canton of Neuchâtel is a strongly decentralised canton with rather low HIV prevalence. Since 1985, there have been 413 positive HIV tests, which is 1.3% of the total. In 2008, Neuchâtel recorded 13 positive tests (1.6% of the total) and 7.7 HIV cases per 100'000 inhabitants (the average is 10.6 cases). This is a comparatively low HIV prevalence, as in 2007 the inhabitants of the Canton of Neuchâtel accounted for 2.2% of the total population in Switzerland.

The cantonal Aids organisation in Neuchâtel is the 'Aids group Neuchâtel' (Groupe Sida Neuchâtel, GSN). Its resources mainly come from the cantonal level, the communal authorities are not as important as in the Canton of Zurich. In 2007, the total revenues accounted for CHF 320'312. The cantonal Department of Public Health and Social Affairs compensated for 80.4% of the total amount. The prevention activities of the GSN comprise the provision of information and counselling as well as support for HIV infected persons. In 2007, the GSN introduced the project AFRIMEDIA supported by the AHS. Furthermore, two VCT test centres were introduced in the same year. During the first year, 859 tests have been carried out – 205 in the City of La Chaux-de-Fonds and 654 in Peseux, a municipality close to the City of Neuchâtel (www.info-sida.ch, March 2009). In the target group of the female sex workers, the GSN operates the project Cabaret, which offers HIV prevention for lap dancers. There has not

been a change in the general strategy of the GSN in the last years. It still concentrates on HIV prevention as its core business. This is basically due to the fact that the broader topic of sexual health lies within the scope of the 'Group for Sex Information and Health Education' (Groupe Information sexuelle et éducation à la Santé, GIS).

The GIS is the other important NGO in the field of HIV in the Canton of Neuchâtel. It provides sex education in schools and addresses especially sexual violence, contraception and HIV/STI prevention.

The degree of cooperation within the AIDS prevention network in the Canton of Neuchâtel is rather high. This is due to the small size of the canton and to the small number of involved actors. The GSN and the GIS established a close and unproblematic cooperation. Additionally, all relevant public and private actors meet regularly as members of the cantonal commission on prevention.

6 References

Aids-Hilfe Schweiz (AHS) (2009). *Strategie MSM/MSW*. Geschäftsstelle AHS. Arbeitsgruppe: Brigitte Ruckstuhl, Thomas Bucher, Daniel Bruttin.

Achermann, Christin and Ueli Hostettler (2007): *Infektionskrankheiten und Drogenfragen im Freiheitsentzug. Rapid Assessment der Gesundheitsversorgung*. Freiburg and Lausanne: Universität Freiburg, Departement Sozialarbeit und Sozialpolitik and Swiss Forum for Migration and Population Studies.

Atun, Rifat A., Martin McKee, Richard Coker and Ipek Gurol-Uganci (2008). "Health systems' response to 25 years of HIV in Europe: Inequities persist and challenges remain", *Health policy* 86(2-3): 181-194.

Balthasar, Hugues, André Jeannin and Françoise Dubois-Arber (2008a). *Evaluation des effets de la Campagne de Prévention „MISSION: POSSIBLE" de l'Aide suisse contre le sida*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 142).

Balthasar, Hugues, André Jeannin and Françoise Dubois-Arber (2008b). *Les comportements face au VIH/SIDA des hommes qui ont des relations sexuelles avec des hommes. Résultats de Gaysurvey 2007*. Lausanne: Institut universitaire de médecine sociale et préventive.

Balthasar H., A. Jeannin, S. Derendinger and F. Dubois-Arber (2008c). *Withdrawal, serosorting and strategic positioning: the use of risk reduction strategies in men who have sex with men (MSM) in Switzerland, 2007*, Poster presented at the XVIIth International AIDS Conference, Mexico, August 3-8.

Balthasar, Hugues and Françoise Dubois-Arber (2007). *Evaluation des activités de prévention du VIH/SIDA auprès des clients de la prostitution en Suisse*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 128).

Balthasar, Hugues, André Jeannin and Françoise Dubois-Arber (2005). *Zunahme des HIV-Ansteckungsrisiko bei den Männern, die Sex mit Männern haben: Erste Ergebnisse des GaySurvey 04*. Lausanne: Institut universitaire de médecine sociale et préventive.

Balthasar, Hugues (2004). *Populations particulières pour la prévention du VIH/SIDA, les jeunes homosexuels et bisexuels: revue de littérature*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 99).

Balthasar, Hugues, Barbara So-Barazetti and André Jeannin avec la participation de Ralph Thomas (2004). *Evaluation de al mise en œuvre du programme VIH/SIDA de 1999 a 2003: L'utilisation des offres de prévention et du matériel*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 96).

Barrasa, Alicia, J. Del Romero, I. Pueyo, C. de Armas, JM. Ureña, FJ. Bru, MV. Aguanell,

JR. Ordoñana, J. Balaguer, LM. Sáez de Vicuña, J. Castilla and Grupo EPI-VIH (2004). "Prevalence of the HIV infection in patients seen at specialized diagnosis centres in nine cities in Spain from 1992 to 2001" *Aten Primaria* 33(9): 483-8.

Bigler, Sabine, Dunja Nicca and Rebecca Spirig (2007). "Welche Interventionen bewirken eine Verbesserung der Adhärenz von HIV-Patienten unter ART?", *Pflege – Die wissenschaftliche Zeitschrift für Pflegeberufe* 20(5): 268-277.

Bischofberger Lerch, Iren (2007). *„When people get open about HIV, it's easier to save others". Herausforderungen und Lösungswege in der HIV-Primärprävention und AIDS-Versorgung bei Sub-Sahara Migrationsgemeinschaften in der Schweiz*. Inaugural Dissertation. Basel: Universität Basel.

Bollerup, Annemarie R., Martin C. Donoghoe, Jeffrey V. Lazarus, Stine Nielsen and Srdan Matic (2008). "Access to highly active antiretroviral therapy (HAART) in the WHO European Regiona 2003-2005", *Scandinavian journal of public health* 36(2): 183-189.

Boubaker, Karim and Martin Gebhardt (2008). *HIV und AIDS in der Schweiz. Epidemiologische Situation Ende 2007*. Präsentation an der EKAF-Sitzung vom 12. März 2008.

Bucher, Thomas (2007). *MSM/MSW Jahresbericht 2007 der AHS*. Zürich: AHS.

Bugnon, Géraldine and Milena Chimienti (2009). *Der Sexmarkt in der Schweiz. Kenntnisstand, Best Practices und Empfehlungen. Teil 1 – Literaturübersicht*. Genève: Université de Genève.

Bugnon, Géraldine, Milena Chimienti and Laure Chiquet (2009a). *Marché du sexe en Suisse. Etat des connaissances, best practices et recommandations. Volet 2 – Cadre légal*. Genève: Université de Genève.

Bugnon, Géraldine, Milena Chimienti and Laure Chiquet (2009b). *Marché du sexe en Suisse. Etat des connaissances, best practices et recommandations. Volet 3 – Mapping, contrôle et promotion de la santé dans le marché du sexe ne Suisse*. Genève: Université de Genève.

Bütschi, Danielle and Sandro Cattacin (1994). *Le modèle suisse du bien-être*. Lausanne: Réalités sociales.

Cattacin, Sandro and Christine Panchaud (1997). *Les politiques de lutte contre le VIH/Sida en Europe de l'Ouest. Du risque à la normalisation*. Paris: L'Harmattan.

Ciesla, Jeffrey A. and John E. Roberts (2001). "Meta-Analysis of the Relationship Between HIV Infection and Risk for Depressive Disorders", *The American Journal of Psychiatry* 158(5): 725-730.

Cohen, Deborah A., Shin-Yi Wu und Thomas A. Farley (2005). "Cost-Effective Allocation of Government Funds to Prevent HIV Infection", *Health Affairs* 24(4): 915-926.

Daneel, S., K. Schüpbach, M. Gebhardt, M. Werner, R. Staub and P. Vernazza (2008). „A prospective evaluation of the feasibility and utility of additional tools to obtain information from recently diagnosed HIV infection patients", *Swiss Medical Weekly* 138 (31-32): 453-458.

Deschamps, Ann E., Veerle De Graeve, Eric van Wijngaerden, Veerle De Saar, Anne-Mieke Vandamme, Kristien van Vaerenbergh, Helga Ceunen, Herman Bobbaers, Willy E. Peetermans, Peter J. de Vleeschouwer and Sabina de Geest (2004). "Prevalence and correlates of nonadherence to antiretroviral therapy in a population of HIV patients using Medication Event Monitoring System", *AIDS Patient Care STDS* 18: 644–657.

Dubois-Arber, Françoise, André Jeannin, Hugues Balthasar, Brenda Spencer and Roger Staub (2008). *Swiss behaviour surveillance system 1986-2008*. Presentation at the XVIIth International AIDS Conference, Mexico, August 3-8.

Dubois-Arber, Françoise, André Jeannin, Giovanna Meystre-Agustoni, Brenda Spencer, Florence Moreau-Gruet, Hugues Balthasar, Fabienne Benninghoff, Karen Klaue and Fred Paccaud (2003). *Evaluationsstrategie der HIV/AIDS-Präventionsstrategie in der Schweiz. Siebter Synthesebericht 1999-2003*. Lausanne: Institut universitaire de médecine sociale et préventive.

Dubois-Arber, Françoise, André Jeannin, Brenda Spencer, Giovanna Meystre-Augustoni, Mary Haour-Knipe, F. Moreau-Gruet, Fabienne Benninghoff and Fred Paccaud (2001). „HIV/AIDS-Prävention in der Schweiz: Bilanz und Ausblick", *Schweiz Med Forum* (24): 621-625.

Dubois-Arber, Françoise, André Jeannin and Brenda Spencer (1999). "Long term global evaluation of a national AIDS prevention strategy: the case of Switzerland", *AIDS* 13: 2571-2582.

Frech, Mauro (2006). *Evaluation der nationalen STOP AIDS Kampagne 2005*. Zug: MCR.

Glass, Tracy R., Sabina de Geest, Rainer Weber, Pietro L. Vernazza, Martin Rickenbach, Hansjakob Furrer, Enos Bernasconi, Matthias Cavassini, Bernard Hirschel, Manuel Battegay, Heiner C. Bucher and the Swiss HIV Cohort Study (2006). "Correlates of Self-Reported Nonadherence to Antiretroviral Therapy in HIV-Infected Patients", *Journal of Acquired Immune Deficiency Syndromes* 41(3): 385-392.

Glass, Tracy R., Jim Young, Pietro L. Vernazza, Martin Rickenbach, Rainer Weber, Matthias Cavassini, Bernard Hirschel, Manuel Battegay, Heiner C. Bucher and the Swiss HIV Cohort Study (2004). "Is unsafe sexual behaviour increasing among HIV-infected individuals?", *AIDS* 18(12): 1707-1714.

Hammer, Stephane, Judith Trageser and Simone Ledermann (2006). *Evaluation der Strategie „Migration und Gesundheit 2002 – 2006". Beilagenband 3: Ergebnisse der Projekteva-*

luationen. Zürich: INFRAS.

Jeannin, André, Giovanna Meystre-Agustoni, Stéphanie Lociciro and Françoise Dubois-Arber (2009). *Système de suivi de la stratégie de la lutte contre le VIH/sida en Suisse. Rapport de synthèse 2004-2008*. Lausanne: Institut universitaire de médecine sociale et préventive Lausanne (Raisons de santé, 155). Forthcoming.

Keiser, Olivia, Patrick Taffé, Marcel Zwahlen, Manuel Battegay, Enos Bernasconi, Rainer Weber, Martin Rickenbach and the Swiss HIV Cohort Study (2004). "All cause mortality in the Swiss HIV cohort study from 1990 to 2001 in comparison with the Swiss population", *AIDS* 18(13): 1835-1843.

KEK-CDC Consultants (2009). *Evaluation der Kampagnen LOVE LIFE STOP AIDS 2005-2008. Schlussbericht im Auftrag des Bundesamtes für Gesundheit (BAG)*. Online unter: www.bag.admin.ch.

Knoepfel, Peter, Frédéric Varone, Werner Bussmann and Luzius Mader (1997). "Evaluationsgegenstände und Evaluationskriterien", in: Werner Bussmann, et al. (Hrsg.). *Einführung in die Politikevaluation*. Basel: Helbing und Lichtenhahn, S. 78-118.

Kübler, Daniel, Peter Neuenschwander, Yannis Papadopoulos, unter Mitarbeit von Christian Sartori und Sibylle Stamm (2002): *AIDS-Politik in der Schweiz: Welche Normalisierung? Normalisierungsszenarien und neue Partnerschaften in der HIV/AIDS-Prävention auf Bundesebene und in fünf Kantonen*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 78).

Kunz, Danile and Titus Brügisser (2007). *Sexualpädagogik und Schule – Eine Situationsanalyse*. Online unter: ww.bza.luzern.phz.ch/seiten/dokumente/Sexualpaedagogik.pdf.

Künzli, Jörg and Alberto Achermann (2007). *Gesundheitsrelevante Rechte inhaftierter Personen im Bereich des Schutzes vor Infektionskrankheiten und Kompetenzen des Bundes zu ihrer Durchsetzung*. Bern.

Low, Nicola (2007). *STIs aus Public-Health Sicht*. Vortrag an der Tagung der Aids-Hilfe Schweiz „Sexually Transmitted Infections" vom 30. August 2007.

Masia, Maurizia, Christin Achermann, Marina Richter and Ueli Hostettler (2007). *Auswertungsbericht zur Fragebogenerhebung: „Analyse von Präventionsmassnahmen und Behandlungsangeboten von Infektionskrankheiten und Drogenabhängigkeit in Schweizer Anstalten des Freiheitsentzugs"*. Freiburg: Universität Freiburg, Departement Sozialarbeit und Sozialpolitik. Online unter http://www.bag.admin.ch/hiv_aids.

Meystre-Agustoni G., R. Voellinger, F. Balthasar and F. Dubois-Arber (2008a). *Comportements par rapport au VIH/sida dans l'univers de la prostitution féminine*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 139).

Meystre-Augustoni G., A. Jeannin, B. Spencer, HK. de Heller, P. Bodenmann, A. Pécoud and

F. Dubois-Arber (2008b). *Sexual behaviour, exposure to HIV and prevention needs among men consulting in general medical outpatient clinics in Lausanne, 2005-2006: who are the clients of sex workers?* Presentation at the Conference "Social science and public health research in the field of HIV/AIDS in Switzerland", Thun, September 4-5.

Meystre-Agustoni G., A. Jeannin, F. Dubois-Arber, C. Kessler Bodiang, C. Blöchliger and B. Callensten (2006). *Système de suivi de la stratégie de lutte contre le VIH/sida en Suisse : comportements des migrants par rapport au VIH/sida en 2005*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 117).

Nielsen, Stine and Jeffrey V. Lazarus (2006). "HIV/AIDS country profiles for the WHO European Region", in: Matic, Srdan, Jeffrey V. Lazarus and Martin C. Donoghoe (Eds.). *HIV/AIDS in Europe. Moving from death sentence to chronic disease management*. Copenhagen: WHO: 243-273.

Neuenschwander, Peter (2007). *AIDS-Politik in der Schweiz: Stabilität oder Wandel? Eine Analyse der AIDS-Politik auf Bundesebene und in sieben Kantonen*. Zürich: Dissertation an der Universität Zürich.

Neuenschwander, Peter, Daniel Kübler and Kathrin Frey (2007): *Swiss HIV/AIDS policy in the phase of normalization*. Presentation at the 8th AIDS Impact Conference. Marseille, July 2007.

Neuenschwander, Peter, Kathrin Frey and Daniel Kübler (2005a). *Die Zukunft der HIV/AIDS-Prävention im Zeitalter der Normalisierung. Die Situation auf Bundesebene und in sieben Kantonen*. Zürcher Politik- & Evaluationsstudien Nr. 5. Zürich: Institut für Politikwissenschaft.

Neuenschwander, Peter, Kathrin Frey und Daniel Kübler (2005b). *Die Zukunft der HIV/AIDS-Prävention im Zeitalter der Normalisierung. Anhang zum Schlussbericht.* Zürcher Politik- & Evaluationsstudien Nr. 5 (Anhang). Zürich: Institut für Politikwissenschaft.

Neuenschwander, Peter, Daniel Kübler and Kathrin Frey (2004). *From loose networks to exceptionalist alliances. Power relations between the state and NGOs in Swiss HIV/AIDS prevention*. Paper presented at the ECPR Joint Sessions of Workshops. Uppsala, April 2004.

Pädagogische Hochschule Zentralschweiz (PHZ), Kompetenzzentrum für Sexualpädagogik und Schule (2009). *Schlussbericht Aufbauphase November 2006 bis Januar 2009*. Zuhanden des Bundesamtes für Gesundheit.

Pädagogische Hochschule Zentralschweiz (PHZ), Kompetenzzentrum für Sexualpädagogik und Schule (2008). *Grundlagenpapier Sexualpädagogik und Schule*.

Panchaud, Christine (1995). "Welfare states facing HIV/AIDS. Organisational responses in Western Europe (1981-1991)", *Swiss political science review* 1(4): 65-97.

Rauch Andri, Martin Rickenbach, Rainer Weber, Bernard Hirschel, Philip E. Tarr, Heiner C. Bucher, Pietro Vernazza, Enos Bernasconi, Annelies S. Zinkernagel, John Evison, Hansjakob Furrer and the Swiss HIV Cohort Study (2005). "Unsafe sex and increased incidence of hepatitis C virus infection among HIV-infected men who have sex with men: the Swiss HIV Cohort Study", *Clinical Infectious Diseases* 41(3): 395-402.

Rosenbrock, Rolf, Calle Almedal, Jonathan Elford, Daniel Kübler, France Lert and Srdan Matic in collaboration with Larissa Plüss, Kathrin Frey and Axel J. Schmidt (2009). *Review of the Swiss HIV Policy by a Panel of International Experts. Expert Report*. Study on behalf of the Swiss Federal Office of Public Health.

Rosenbrock, Rolf, Françoise Dubois-Arber, Martin Moers, Patrice Pinell, Doris Schaeffer and Michel Setbon (2000). "The normalization of AIDS in Western European countries", *Social Science and Medicine* 50: 1607-1629.

Rusch, Marlen (2007). *Prävention im Sexgewerbe. Verhaltens- und Verhältnisprävention. Jahresbericht 2007*. Zürich: Aids-Hilfe Schweiz. Online unter: www.aids.ch.

Schwappach, David and Philip Bruggmann (2008). *An integrated model of care to counter high incidence of HIV and sexually transmitted diseases in men who have sex with men – initial analysis of service utilizers in Zurich*. BMC Public Health, 8: 180.

Spina, Michele, S. Mancuso, A. Sinicco, E. Vaccher, C. Traina, N. Di Fabrizio, F. de Lalla and U. Tirelli (1997). "Increase of HIV seroprevalence among professional prostitutes in Italy" *AIDS* 11(4): 545-6.

Staehelin, Cornelia, Niklaus Egloff, Martin Rickenbach, Christine Kopp, Hansjakob Furrer and the Swiss HIV Cohort Study (2004). "Migrants from Sub-Saharan Africa in the Swiss HIV Cohort Study: A Single Center Study on Epidemiologic Migration-Specific and Clinical Features", *AIDS Patient Care and STDs* 18(11): 665-675.

Staehelin, Cornelia, Martin Rickenbach, Nicola Low, Martin Egger, Bruno Ledergerber, Bernard Hirschel, Valérie D'Acremont, Manuel Battegay, Thomas Wagels, Enos Bernasconi, Christine Kopp, Hansjakob Furrer and the Swiss HIV Cohort Study (2003). "Migrants from Sub-Saharan Africa in the Swiss HIV Cohort Study: Access to antiretroviral therapy, disease progression and survival", *AIDS* 17(15): 2237-2244.

Staub, Roger, S. Derendinger, T. Bucher and Martin Werner (2008): *„Three months of absolute safer sex" – maybe the answer to the new epidemic of HIV among gay men in Western countries*. Poster presented at the XVII International AIDS Conference 3.-8.8.2008 in Mexico City.

Steffen, Monika (1996). *The fight against AIDS. An international public policy comparison between four European countries: France, Great Britain, Germany, Italy*. Grenoble: Presses Universitaires de Grenoble.

Steffen, Monika (2001). *Les Etats face au Sida en Europe*. Grenoble: Presses universitaires de Grenoble.

Swiss Federal Office of Public Health (2009). *Bulletin 6* vom 2. Februar 2009: 92-95. Bern.

Swiss Federal Office of Public Health (2008a). *Spectra 70*. Bern.

Swiss Federal Office of Public Health (2008b). *Projektplanung Umsetzungsprojekt „Bekämpfung von Infektionskrankheiten im Gefängnis (BIG) 2008-2010" Projektgegenstand und Projektvoraussetzungen*. Online unter http://www.bag.admin.ch/hiv_aids/00826/01049/03796/index.html?lang=en.

Swiss Federal Office of Public Health (SFOPH) (2008c). *Sexuell übertragbare Infektionen (STI) in der Schweiz 1988 bis 2006: Aktueller Stand und Ausblick*. Bulletin Nr. 8 vom 18. Februar 2008. Bern.

Swiss Federal Office of Public Health (2007a). *Spectra 62*. Bern.

Swiss Federal Office of Public Health (2007b). *Spectra 63*. Bern.

Swiss Federal Office of Public Health (SFOPH) (2007c). „HIV-Test und Beratung auf Initiative des Arztes, der Ärztin", *Schweizerische Ärztezeitung* 88: 1207-1209.

Swiss Federal Office of Public Health (SFOPH) (2006). *Vision sexuelle und reproduktive Gesundheit 2010*. Bern: Sektion AIDS, Oktober 2006.

Swiss Federal Office of Public Health (SFOPH) (2005a). *Nationales HIV/AIDS-Programm 2004-2008. Bericht über aktuelle Entwicklungen und den Stand der Umsetzung des AIDS-Programmes des BAG nach 20 Monaten Laufzeit*. Bundesamt für Gesundheit, 30. September 2005.

Swiss Federal Office of Public Health (2005b). *Spectra 52*. Bern.

Swiss Federal Office of Public Health (2005c). *Spectra 49*. Bern.

Swiss Federal Office of Public Health (SFOPH) (2003). *National HIV/AIDS Programme 2004-2008*. Bern.

Tshibangu, Noël (2007). *AFRIMEDIA. Jahresbericht 2007*. Zürich: Schweizer Aids-Hilfe.

Tshibangu, Noël (2006). *AFRIMEDIA. Jahresbericht 2006*. Zürich: Schweizer Aids-Hilfe.

UNAIDS / WHO (2000) *Guidelines for second generation surveillance*. Geneva: UNAIDS / WHO.

VEGAS (2008). *Audits 2008*. Schlussbericht vom 25. November 2008 an das Bundesamt für Gesundheit, Sektion AIDS.

Wang, Jen, Michael Häusermann, Vladeta Ajdacic-Gross, Peter Aggleton and Mitchell G. Weiss (2007a). "High prevalence of mental disorders and comorbidity in the Geneva Gay Men's Health Study", *Social psychiatry and psychiatric epidemiology* 42(5): 414-

420.

Wang, Jen, Michael Häusermann, Penelope Vounatsou, Peter Aggleton and Mitchell G. Weiss (2007b). "Health status, behaviour, and care utilization in the Geneva Gay Men's Health Survey", *Preventive medicine* 44(1): 70-75.

Willen, Claudia and Christine Spreyermann (2003). *Evaluation www.drgay.ch – Internet Beratung der AIDS-Hilfe Schweiz Programm MSM*. Im Auftrag der Aids-Hilfe Schweiz. Bern.

World Health Organisation (2004). *What constitutes Sexual Health? Progress in Reproductive Health Research*. Geneva: WHO.

World Health Organisation (2003). *Adherence to long-term therapies. Evidence for action*. Geneva: WHO.

Wolbers, Marcel, Heiner C. Bucher, Hansjakob Furrer, Martin Rickenbach, Matthias Cavassini, Rainer Weber, Patrick Schmid, Enos Bernasconi, Bernard Hirschel, Manuel Battegay and the Swiss HIV Cohort Study (2008). "Delayed diagnosis of HIV infection and late initiation of antiretroviral therapy in the Swiss HIV cohort study", *HIV Medicine* 9: 397-405.

Wolf, Katja, James Young, Martin Rickenbach, Pietro Vernazza, Markus Flepp, Hansjakob Furrer, Enos Bernasconi, Bernard Hirschel, Amalio Telenti, Rainer Weber, Heiner C. Bucher and the Swiss HIV Cohort Study (2003). "Prevalence of Unsafe Sexual Behaviour Among HIV-Infected Individuals: The Swiss HIV Cohort Study", *Journal of Acquired Immune Deficiency Syndromes* 33(4): 494-499.

Zobel, Frank and Françoise Dubois-Arber (2006). *Pour un système du suivi de la stratégie de lutte contre le VIH/sida en Suisse: situation et evolution des comportements à risqué chez les consommateurs de drogue*. Lausanne: Institut universitaire de médecine sociale et préventive (Raisons de santé, 123).

Zobel, Frank and Françoise Dubois-Arber (2004). *Short appraisal of the role and usefulness of Drug consumption facilities (DFC) in the reduction of drug-related problems in Switzerland: appraisal produced at the request of the Swiss Federal Office of Public Health*. Lausanne: Institut universitaire de médecine sociale et préventive.

Zobel, Frank, Ralph Thomas, Sophie Arnaud, Elisabeth de Preux, Tatjana Ramstein, Brenda Spencer, André Jeannin and Françoise Dubois-Arber (2003). *Evaluation globale du programme de mesures de santé publique de la Confédération en vue de réduire les problèmes de drogue (ProMeDro)*. Quatrième rapport de synthèse 1999-2002. Lausanne: Institut universitaire de médecine sociale et préventive.

Zuppinger Brigitte, Christine Kopp and Hans-Rudolf Wicker (2000). *Rapid Assessment: Interventionsplan HIV/AIDS-Prävention bei Sub-Sahara MigrantInnen*. Bern: Institut für

Ethnologie Universität Bern.

Zurn, Pascal, Patrick Taffé, Martin Rickenbach und Jean-Pierre Danthine (2001). *Social cost of HIV infection in Switzerland*. Lausanne: Institut d'économie et de management de la santé.

7 Appendix: List of the Participants to the Hearings

Date: May 6-7, 2009

Location: Berne / Zurich

Epidemiology and Surveillance

Karim Boubaker, Head of the Infectious Diseases Section, SFOPH

Françoise Dubois-Arber, Unit for the Evaluation of Prevention Programmes (UEPP), University of Lausanne

Treatment and Care

Patrick Francioli, Chief Physician, Service for Infectious Diseases and Preventive Medicine, University Hospital Lausanne, Director of the Swiss HIV cohort study (SHCS)

Pietro Vernazza, Chief Physician, Department of Infectiology, Cantonal Hospital St. Gallen, President of the Swiss Commission on AIDS-related issues

Governance and Primary Prevention

Daniel Bruttin, Director of the Swiss Aids Federation (Aids-Hilfe Schweiz)

Roger Staub, Head of the AIDS Section, SFOPH

Elisabeth Zemp, President of the PLANeS foundation

Governance and Primary Prevention, Focus on MSM and VCT

Steven Derendinger, AIDS Section, SFOPH, President of the VoGay association, Lausanne

Michael Häusermann, Dialogai, Geneva

Reto Jeger, Director of Aids Help Zurich (Aids-Hilfe Zürich)

Benedikt Zahno, Head of the Division MSM and VCT (Checkpoint), Aids Help Zurich

Governance and Primary Prevention, Focus on Migration

Mary Haour-Knipe, Independent Consultant (1999-2007: Senior Advisor on Migration and HIV/AIDS at the International Organisation for Migration in Geneva)

Noël Tshibangu, Project Leader Afrimedia, Swiss Aids Federation (Aids-Hilfe Schweiz)