THE REPUBLIC OF CROATIA

MINISTRY OF HEALTH

COUNTRY PROGRESS REPORT
Croatia

Reporting period:
January 2012 – December 2013

March 2014

GLOBAL AIDS RESPONSE PROGRESS
COUNTRY REPORT
Croatia

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Submission date: *March 31, 2014*

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II. Introduction

Croatia has not taken part in the 2013 round of reporting but has, in support of a two-year reporting cycle and given the fact that we have a low lever epidemic, asked for previously reported data to be used in the 2013 round of reporting. Reports formerly called UNGASS have been submitted in years 2005, 2008 and 2010. This narrative part of the report represents an account of the HIV/AIDS situation in Croatia for the period January 2012 – December 2013. It is based on data from routine HIV/AIDS surveillance, i.e. the National HIVA/IDS Register maintained at the Epidemiology Service of Croatian Institute of Public Health and studies among the most-at-risk-populations conducted in this reporting period.

III. Status at a glance

The inclusiveness of the stakeholders in the report writing process

All the relevant stakeholders have taken part in compiling this report. Even tough no workshop has been organized solely to this purpose, the major partners gave their contribution to this report through everyday work they have done during this reporting period and have helped the M&E Unit when compiling the report through providing extensive consultations and phone interviews, promptly and expertly providing the information needed per email.

These are:

Dunja Skoko-Poljak, MD, Ministry of Health and Social Welfare,

Prof. Josip Begovac MD, PhD, University Clinic for Infectious Diseases "Fran Mihaljević",

Tatjana Nemeth-Blažić, MD, M&E Unit Croatian National Institute of Public Health

Jasmina Pavlić, prof, M&E Unit Croatian National Institute of Public Health

Iva Jovović; UNDP Croatia, UN Theme group on HIV/AIDS

Prof. Aleksandar Štulhofer, Faculty of Philosophy Zagreb,

Valerio Bačak, Faculty of Philosophy Zagreb,

MSc Ivanka Mihaljević, Croatian Institute of Transfusion Medicine,

Bojana Knežević, Croatian Institute for Health Protection and Safety at Work

and the following NGOs:

NGO Iskorak – a LGBTIQQ group for promotion and protection of different sexual orientations,

NGO Help – a youth help organization

NGO Institut

NGO for improving the quality of life "LET",

NGO Terra,

The Croatian Red Cross,

Croatian Association for HIV (CAHIV)

NGO HEPATOS Rijeka,

UN Theme Group for HIV/AIDS

Blaženka Retkovac, MD, Prison hospital in Zagreb

The status of the epidemic

The HIV/AIDS situation has been monitored in Croatia since 1985, when the first AIDS cases were documented here. Between 1985 and 2013, there were 1106 documented cases of HIV infection, 419 of which progressed to AIDS. During the same period of time, of the 1106 diagnosed HIV 208 patients died of AIDS. Four fifths of HIV/AIDS cases are male, who are mostly infected between the age of 25 – 49.

With respect to probable transmission routes 56.8% of all HIV infections are attributed to sex between men, also 20.6% HIV infections occurred through heterosexual route outside a stable relationship and 10% through a heterosexual route of transmission from a HIV positive partner and 6.3% of all HIV infections occurred through injecting drug use. When we consider the receiving of blood products as a transmission route, 0.2% of all infections occurred in this way. Additionally, 1.3% of all infections were found among hemophiliacs. Also, 1.2% of the HIV infections cases were cases of mother to child transmission. Finally 3.6% were of unknown mode of transmission.

From laboratory registries, in 2012. there were 222.275 doses of blood tested of which 163 (0.07%) were HIV positive (this is not excluding possible double testings).

The policy and programmatic response

The Epidemiology Department with the Croatian Institute of Public Health has been following the epidemiologic situation regarding HIV infections since 1985, when first AIDS patients were registered in Croatia. The Epidemiology Department is following the situation using its own information system based on individual reporting. Data is collected within the surveillance of all communicable diseases that under surveillance in Croatia which is regulated by law (reports/ notifications of infectious disease/death). HIV infected persons as well as AIDS cases and deaths are reported and are being entered into the National HIV/AIDS Registry, maintained at the Epidemiology Department with the Croatian Institute of Public Health. Registry data are part of the world information system are being reported through TESSy.

Unlike some European countries with a low level AIDS incidence, Croatia has had all the necessary prerequisites for an early entrance of the HIV epidemic into the country – open borders, citizens travelling abroad, migrant workers, developed tourism industry etc. The Croatian National Programme for HIV/AIDS prevention includes measures of primary, secondary and tertiary prevention. A large proportion of measures for HIV/AIDS prevention are based on health education in the general sense, especially focusing on populations with high risk behaviour, with the goal of changing such behaviour. Due to the low level of HIV/AIDS risk in the Republic of Croatia these measures are predominantly focused on promotion of protective behaviour in general population and adolescent population and on prevention of determined risk behaviour within certain most–at–risk groups. A part of these measures refers to risk reduction among populations such as MSM, IDUs, CSWs, heterosexuals with a high partner change rate, sexual partners of HIV positive persons, prisoners and others. Protection measures against nosocomial infections as well as blood control and control of immunobiologic preparations are continually conducted in Croatia. The action plan of the Croatian National Programme for HIV/AIDS prevention includes five major areas, described in more detail in chapter V. - National response to the AIDS epidemic.

IV. Overview of the AIDS epidemic

a) The HIV/AIDS situation has been monitored in Croatia since 1985, when the first AIDS cases were documented here. Between 1985 and 2013, there were 1106 documented cases of HIV infection, 419 of which progressed to AIDS. During the same period of time, of the 1106 diagnosed HIV, 208 patients died, (Figure 4). Four fifths of HIV/AIDS cases are male (Figure 1), who are mostly infected between the age of 25 – 49, (Figure 2).

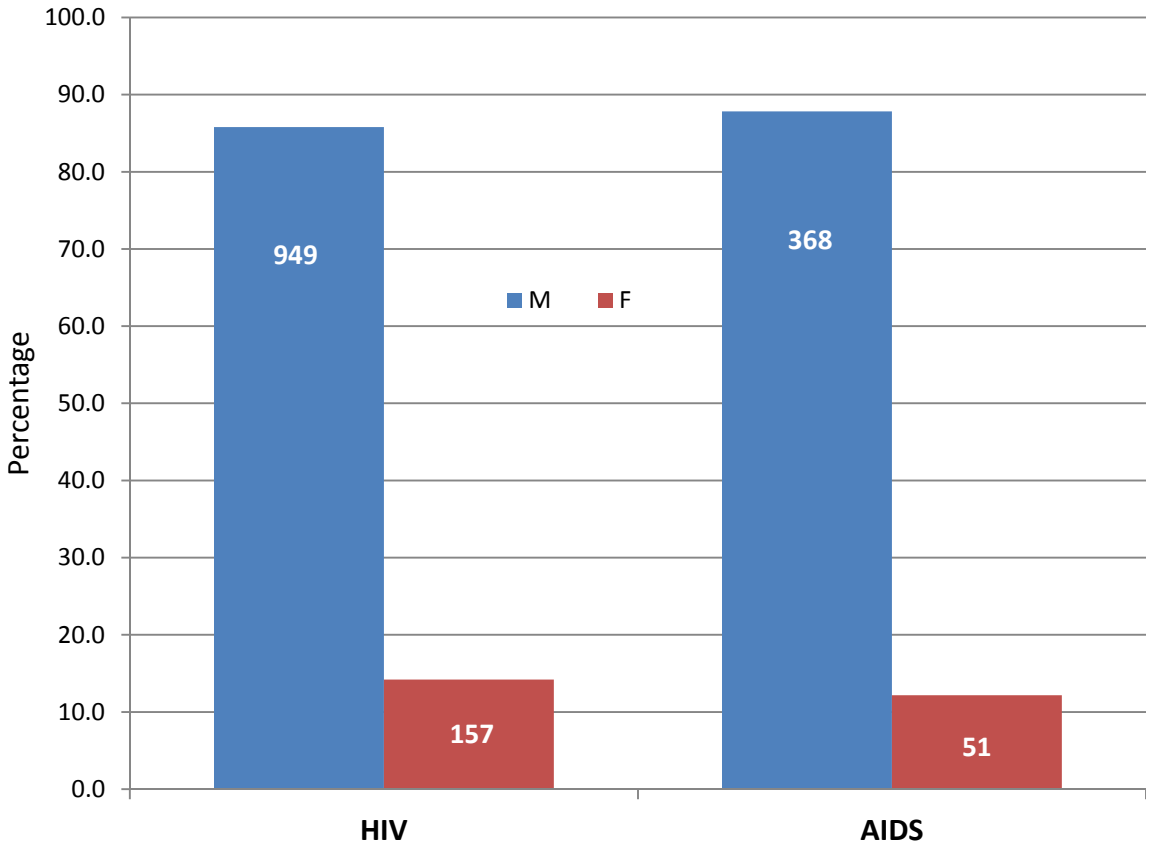


*Figure 1. Gender distribution of HIV and AIDS cases in Croatia 1986-2013**
(data for 2013 are preliminary)

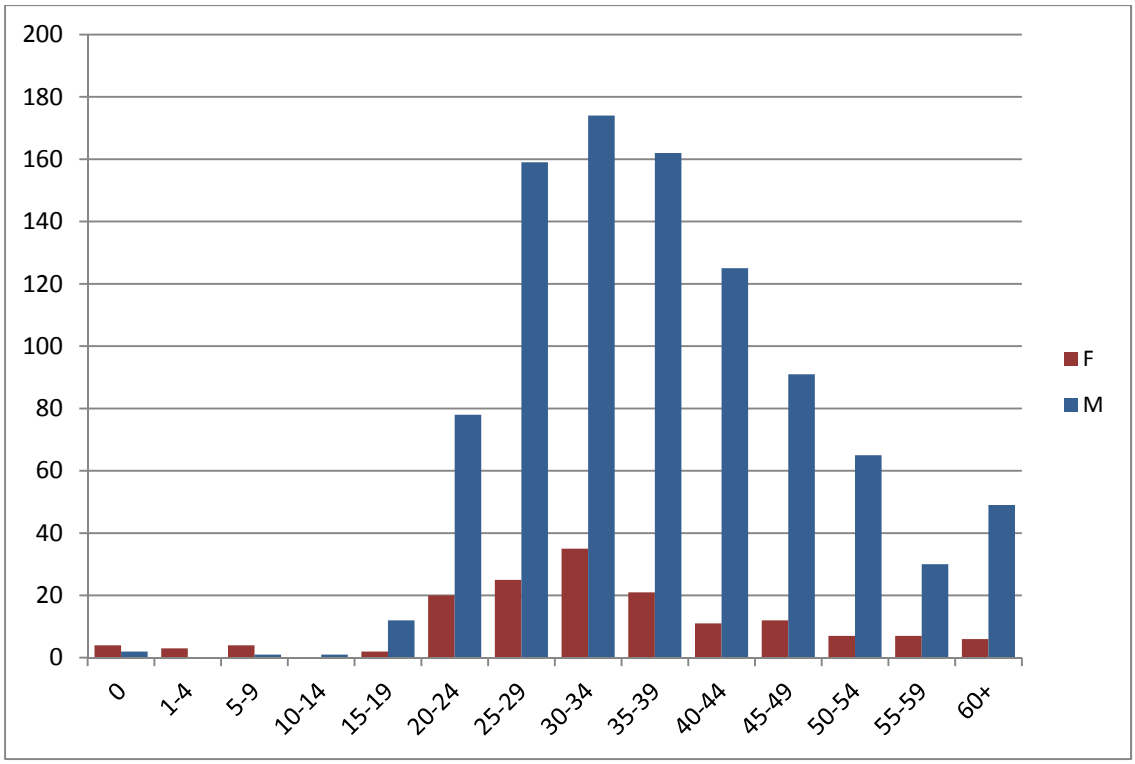


Figure 2. Age/gender distribution of HIV cases at the time of diagnosis in Croatia

b) With respect to probable transmission routes (Figure 3), while the majority of cases are attributed to sex between men, of which there is 56.8% among all HIV cases, 20.6% HIV infections occurred through heterosexual route outside a stable relationship and 10% through a heterosexual route of transmission from a steady partner and 6.3% of all HIV infections occurred through injecting drug use. When we consider the receiving blood products as a transmission route, 0.2% of all infections occurred in this way. Additionally, 1.3% of all infections were found among hemophiliacs. Also, 1.2% of the HIV infections cases were cases of mother to child transmission. Finally 3.6% were of unknown mode of transmission.

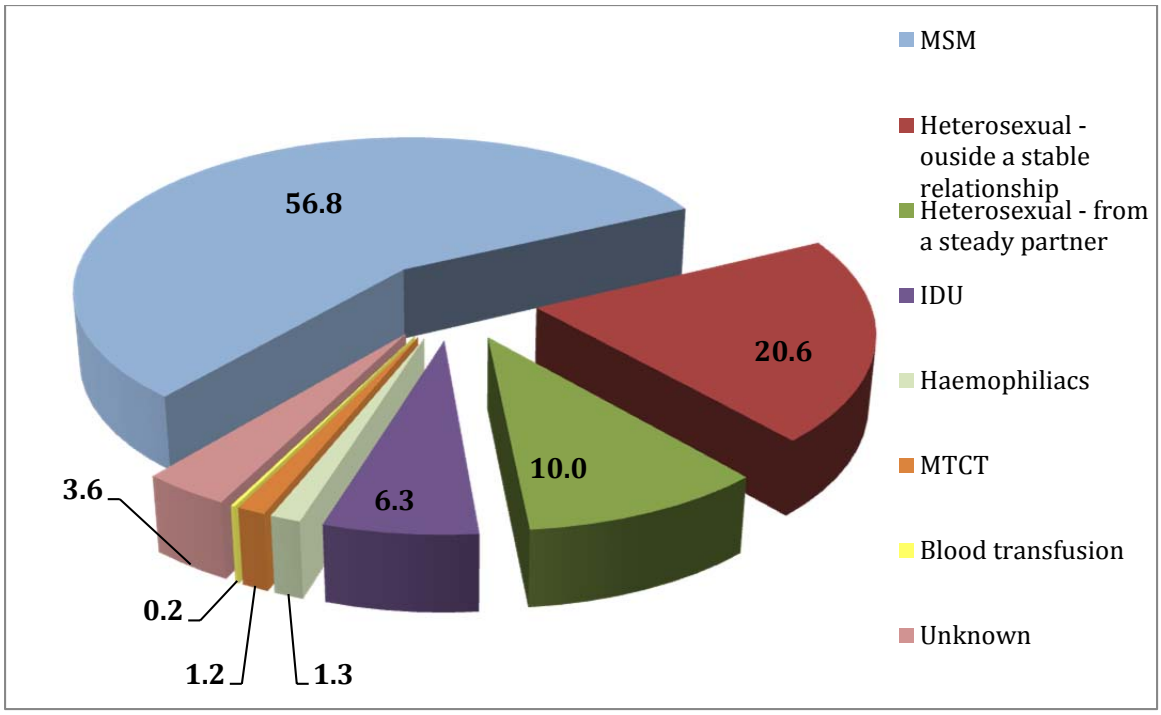


Figure 3. Probable routes of transmission

c) According to reports from laboratory registries, in 2012 there were 222.275 doses of blood tested of which 163 (0.07%) were HIV positive (this is not excluding possible double testings).

Ad a) According to obligatory registration of infectious disease, the incidence of AIDS cases in Croatia increased yearly until 1994, when it began to stabilize and stayed so till 1999. Between 1994 and 1999, there was a mean of 16 reported cases per year. In the last ten years there are about twenty reported cases annually. With the introduction of the highly active anti-retroviral therapy, the number of AIDS cases and deaths from AIDS showed a slight decrease, while the number of HIV positive persons increased. This increase can partially be explained by increased reporting due to improved diagnostic measures (increased availability of HIV testing services), especially within MARPs. In the last ten years, the annual AIDS incidence is registered at a value of about 4 per 1 million inhabitants, and HIV infection incidence is in the last several years at 12-17 per 1 million inhabitants. These values place Croatia in the category of countries considered to have a low HIV/AIDS incidence.

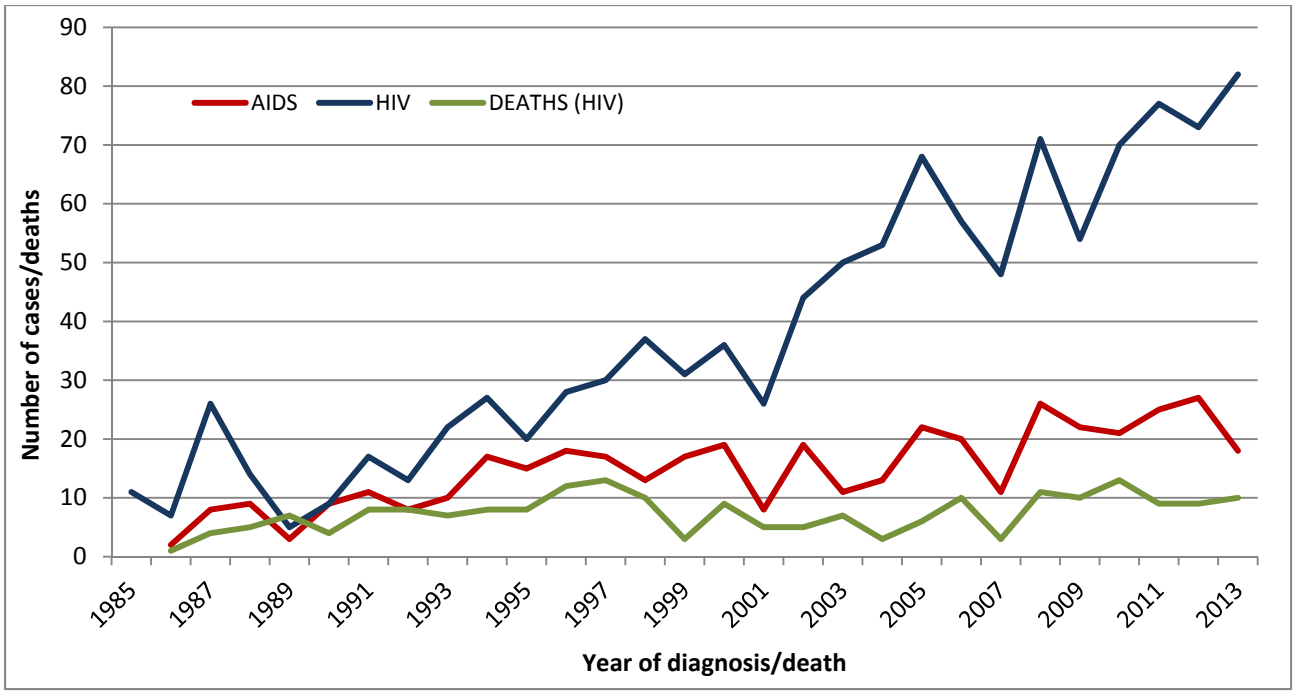


Figure 4. Annual number of registered HIV/AIDS cases and deaths in the Republic of Croatia, for the period 1985-2013

Incidence, prevalence and dominant modes of transmission of HIV vary by region in Croatia. AIDS patients and the HIV infected persons are found in all parts of the country. The incidence and prevalence, of both HIV and AIDS, is somewhat higher in the coastal areas, though the total number of HIV/AIDS cases is the highest in the capital, Zagreb. Among the infected in Zagreb, HIV is transmitted most frequently through MSM contact. Epidemiological data shows that this is the case of virus transmission among the domestic MSM population. In the coastal regions (Primorje and Dalmatia) transmission via heterosexual contact is dominant. In these regions, the infection is often transmitted by men infected abroad during contact with promiscuous persons and sex workers. This infection is then conferred to regular sexual partners, usually wives and girlfriends, living in the country. In Istria, transmission via intravenous drug use and needle sharing is dominant, though other routes of transmission are present in this area.In the Split-Dalmatia county aside from heterosexual transmission also transmission through intravenous drug use is equally high.

Ad b) The fraction of HIV-infected individuals who have acquired the infection abroad versus domestically varies by risk group. Almost all HIV-infected heterosexual men in Croatia, for example, have acquired the HIV infection outside the country working as migrant workers, mostly sailors.

HIV-infected heterosexuals (35.3%) are almost always men who have spent extended periods of time abroad and their steady female partners in Croatia. Among those infected via heterosexual transmission, there are no adolescents. Thirteen children in Croatia have contracted HIV from their mothers, and four have progressed to AIDS.

Intravenous drug users (IDUs) comprise 6.7% of total AIDS cases in Croatia and 6.3% of the total HIV infected population. Among IDUs, the HIV prevalence is less than 1%. The percentage of HIV infected IDUs has not increased over the last 15 years. According to the data of the Register of persons treated for phychoactive drug use at the Croatian National Institute of Public Health, in 2012. 4.684 persons were treated for intravenous drug use. Regarding risk behavior of persons treated for physchoactive drug use according to the data of the Register of persons treated for phychoactive drug use there has been a decrease of injecting equipment sharing in the period 2005-2012. (Table 1).

Sharing needles and syringes ever in life:								
YES	2005	2006	2007	2008	2009	2010	2011	2012
	71,3%	70,7%	70,2%	68,0%	68,1%	61,3%	61,0%	59,7%
Sharing needles and syringes in the last month:								
YES	2005	2006	2007	2008	2009	2010	2011	2012
	23,0%	21,6%	19,9%	17,8%	20,7%	10,5%	3,6%	2,7%

Table 1: Persons treated for drug use 2005-2012 according to sharing of needles and syringes ever in life and in the last month. Source: Annual report on persons treated for psychoactive drug use for 2012., Croatian National Institute of Public Health

Ad c) Voluntary donation, low prevalence of HIV infection, and mandatory blood product testing has kept the rate of infection via receipt of blood and blood products low. In Croatia, all donated blood has been tested on for HIV since 1987, and additional

prevention measures are employed when taking blood from higher-risk donors (Figure 5). According to the National HIV/AIDS Health Protection Programme, only blood from donors in Croatia is used, a principle known as "self containment". This principle is likewise followed with other blood products. If import of blood derivatives is necessary, a set of procedures exist to ensure the safety of the blood products. Approval by the Croatian Agency for Medicinal Products and Medical Devices is required.

A number of cases have been reported in Croatia in which HIV has been transmitted through blood or blood products. Since 1985, 14 patients with haemophilia have contracted HIV and 8 have developed AIDS. All patients with haemophilia received imported blood derivatives. Since 1992, there were no new registered HIV infected patients from this group. There were also two registered non-hemophiliac cases of HIV infection after transfusion of blood from within the country (in 2004).

The system of monitoring HIV infected persons through laboratory registries provides a valuable indicator of trend movements, but as with all the information systems used to collect data from laboratories, it is subject to over-reporting (testing in another laboratory, testing of earlier reported cases). According to data obtained from laboratory reports in 2012. a total of 222.275 blood samples have been tested of which 163 were positive for HIV (0.07%). In 2011 a total of 212.639 samples were tested of which 161 were positive for HIV (0,08% while in 2010 of 121.406 tested samples 148 were positive for HIV (0,07%).

According to data of the Croatian Institute for Transfusion Medicine among 182.086 tested voluntary blood donors (VBD) in 2012, six were HIV positive, in 2011 among 177.650 VBD two were positive for HIV while in 2010 of 176.891 tested blood donors none were positive for HIV (Figure 5).

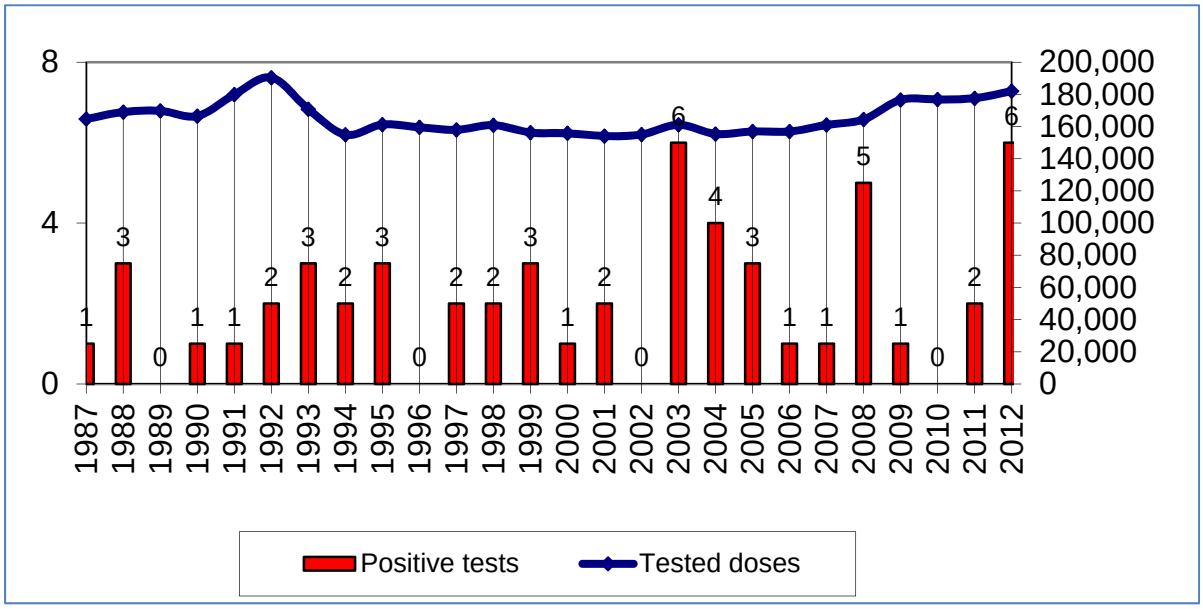


Figure 5. Number of HIV positive tests among voluntary blood donors in Croatia

V. National response to the AIDS epidemic

The Croatian National Programme for HIV/AIDS prevention includes measures of primary, secondary and tertiary prevention. A large proportion of measures for HIV/AIDS prevention are based on health education in the general sense, especially focusing on populations with high risk behaviour, with the goal of changing such behaviour. Due to the low level of HIV/AIDS risk in the Republic of Croatia these measures are predominantly focused on promotion of protective behaviour in general population and adolescent population and on prevention of determined risk behaviour within certain most–at–risk groups. A part of these measures refers to risk reduction among populations such as MSM, IDUs, CSWs, promiscuous persons, sexual partners of HIV positive persons and others. Protection measures against nosocomial infections as well as blood control and control of immunobiologic preparations are continually conducted in Croatia and these measures should be conducted further on. Respecting and promoting human rights of HIV infected persons is also of exceptional importance. HIV infected people have a right to privacy, normal education, health care, housing and non-discriminating relations in all aspects of their life. The public should be introduced to the importance of overcoming prejudice, ignorance and discrimination prevention in the fight against AIDS.

The action plan of the Croatian National Programme for HIV/AIDS prevention includes: first, strengthening of national forces for the surveillance of the infection development, analysis of the epidemiologic situation and monitoring of risk behaviour as well as development and implementation of efficient programs for HIV prevention and conducting and evaluating these programs through monitoring normative activities, monitoring the epidemiologic situation in Croatia and the world and improving cooperation and coordination; second, increasing the number of voluntary counselling and testing so as to enable a timely counselling and prevention of the progress of the disease by introducing new models of voluntary testing, counselling and referral; third, providing optimal care to the HIV infected, development of preventive services for the HIV infected and fight against their stigmatization and discrimination by implementing the diagnostics procedure, therapy and treatment regarding the HIV infection, providing

care for the HIV infected and by implementation of promotional activities; fourth, application of standard protection measures with the goal of minimizing risks of HIV transmission and other causative agents transmitted by blood through conducting standard protection measures in health organizations, educational organizations, institutions of social care, sports and other organizations and through blood safety, safety of immunobiologic preparations, tissues and replacement organs; and fifth reducing the infection transmission among particular populations through prevention of HIV spreading among high risk populations (MSM, IDU, heterosexual men and women of risky behaviour, migrant-workers) and the prevention of HIV spreading among adolescents and grown-up population.

Treatment and care

Croatia has a low-level epidemic; the epidemic started in 1985. The first cases were identified among labor migrants who returned from western European countries, and seafarers who acquired HIV in Africa and Eastern Asia. However, recent data suggest that a concentrating epidemic among men who have sex with men is emerging.

Croatia has a centralized system of treatment and care for patients with HIV infection and all patients are treated in Zagreb at the University Hospital for Infectious Diseases (UHID). Antiretroviral drugs are only given from the hospital pharmacy at UHID. HIV infected patients need no referral from primary care physicians to enter care at UHID. There is a close collaboration of Voluntary testing and counseling centers and other hospitals with UHID.

Health insurance is universal and all health care expenses including the cost of antiretrovirals and monitoring are free of charge for the individual. Highly active antiretroviral therapy became available through the national health insurance scheme in April 1998. At the end of 1997 determination of HIV-1 RNA by PCR became available. Since 1997, there is a comprehensive electronic database on HIV infected patients available at UHID. The total number of patients in care per calendar year increased from 120 in 1999 to 793 in 2013.

The process of registration and approval of antiretrovirals is slow. In March 2014 the following antiretrovirals are found on the Croatian National Health Insurance Drug

List: zidovudine, lamivudine, zidovudine plus lamivudine, abacavir plus lamivudine, tenofovir plus emtricitabine, stavudine, didanosine, abacavir, nevirapine, efavirenz, indinavir, ritonavir, lopinavir/ritonavir, darunavir and raltegravir. Currently (March 2014) 725 patients are receiving antiretrovirals.

Reduction in HIV prevalence

Since we are dealing with a low-prevalence epidemic in Croatia, we are concentrating on one major impact indicator, that is, the reduction in HIV prevalence among most-at-risk populations. These groups, in Croatia include MSM (men who have sex with men), commercial sex workers, sex workers' clients and IDU (iv drug users) and mobile populations.

The highest prevalence among most-at-risk groups is found within the MSM (men who have sex with men) population, amounting to 3.3%, the next most-at-risk group are commercial sex workers, where data shows a prevalence of 1.5%. HIV prevalence within the group of clients of sex workers is somewhat lower compared to the two previously mentioned groups, amounting to 0.6%, whereas the same prevalence (0.6%) is to be found among IDU (iv drug users) and mobile populations were found to have the lowest prevalence (0.2%). The prevalence in those having more than 2 partners in the last 12 months was found to be 1.2% and those with a history of STI 0.8%.

Group	Prevalence; Confidence interval for prevalence (%)
Intravenous drug users (IDU)	0.6; 0 – 1.5
Clients of commercial sex workers	0.6; 0 – 1.5
Men who have sex with men (MSM)	3.3; 0.9 – 5.7
Migrant workers	0.2; 0 – 0.6
Commercial sex workers (CSW)	1.5; 0 – 4.4
>2 partners in the last 12 months	1.2; 0.3 – 2.1
History of STI	0.8; 0 – 1.9

A new study of seroprevalence of HIV and STI among MARPs in Croatia started in 2011 and is currently still being conducted (recruitment of respondents will last until the end of 2014).

Knowledge and behaviour change and HIV testing

Knowledge and behaviour change is what we seek to achieve when conducting preventive programs. Since in Croatia the data of the National HIV/AIDS registry show that the MSM population is the risk group among which the highest number of infections are found, this being observed for some time now, we conducted behavioural studies conducted among the MSM population with the aim to gain an insight into the behaviour / behaviour change. Thus we conducted behavioural surveys among the MSM in 2005, 2007 and 2009. Also knowledge and behaviour of young people in Croatia is also a subject matter of research conducted in this reporting period.

The HIV testing policy in Croatia is, due to the low level epidemic present, a non-mandatory one. This means that there is no mandatory testing prescribed neither for general population, nor for most-at-risk populations. The 10 VCT centres established during the Global fund project (2003-2006) (including one for the prison system) through which voluntary and free-of-charge services of counselling and testing are offered to the clients continue to offer services meant to target most-at-risk populations in Croatia (MSM, IDU, CSW, migrants, prisoners).

Eight VCT centers function within Public Health Institutes, one within the prison system and one in the Referent Center for HIV/AIDS at the University Hospital for Infectious Diseases “Fran Mihaljević”. In 2012 and 2013 all VCT centers in Croatia have provided 10.674 counselling sessions for 5589 clients and conducted 5842 HIV testings of which 70 were positive.

Additionally in collaboration with the NGO Iskorak in 2012 and 2013 community testing (targeted MSM) for HIV is offered on the premises of the LGBT center in Zagreb using rapid tests. In 2012 this service was offered in the community for two months and in 2013 for three months. During that time 104 persons were given counselling and testing in community settings. Currently we are working on setting up permanent community testing services for the MSM population.

In collaboration the Croatian National Institute of Public Health, University Clinic for Infectrious Diseases and NGO Iskorak plan to implement another preventive activity within which we plan to use the Internet to promote testing among the MSM population referring them to get tested in VCT centers in Croatia, advise and motivate them to test regularly and track their testing patterns hoping to see whether there has been an uptake of regular testing among the MSM population.

Another community testing location in Zagreb was opened on May 3, 2013 and until the end of 2013 has provided 1319 counselling sessions and using rapid tests have tested 1215 persons for HIV of which 13 were positive. This community testing location also offers rapid testing for HCV, in the mentioned period 1002 persons were tested for HCV of which 6 were positive.

All those whose tests either in VCT or community settings came back positive were referred to further confirmatory testings and inclusion in care to University Clinic for Infectious Diseases "Fran Mihaljević".

Good collaboration with NGOs conducting harm reduction programs continues and according to the reports received, NGOs HELP, LET, Institut, Red Cross and TERRA have in 2012 distributed 570.197 needles and 288.698 syringes while in 2013 the mentioned NGOs have distributed 279.939 needles and 211.715 syringes.

Below we present the results of several recent studies. All available published articles relevant for the provided data on indicators are attached in the online tool. Aside from the seroprevalence of HIV and STI in risk populations currently conducted by the CNIPH and the VCT network in County PHI in Croatia a new study into Risks of HIV infection among female sex workers in Zagreb and Split (previous study article is attached) is under way.

1. **Knowledge and attitudes of girls attending first year of grammar schools / trade schools on prevention of sexually transmitted diseases and vaccination against HPV infections**

In October 2010 started the implementation of a study titled „Study into knowledge and attitudes of girls attending first year of grammar schools / trade schools

on prevention of sexually transmitted diseases and vaccination against HPV infections". The study was conducted in the cities of Rijeka and Zagreb among first year female students of grammar schools and trade schools using an anonymous questionnaire compiled by the Infectious Disease Epidemiology Service of the Croatian National Institute of Public Health which the respondents filled in after being given instructions on how to do that by the researcher. The survey was conducted in collaboration of epidemiologists and school medicine specialists from Infectious Disease Epidemiology Service of the CNIPH, PHI of the City of Zagreb and PHI of the County of Primorje-Gorski kotar.

The goal of the study was to determine whether there is a connection between risky sexual behavior, primarily early sexual debut and vaccination against HPV infection since in Croatia vaccination against HPV infection was offered in 2008 and 2009 (with highest response to vaccination in the cities of Zagreb and Rijeka) to girls of seventh grade primary school in some cities and counties in Croatia at which occasion school medicine specialists also organized lectures on routes of transmission and HPV infection prevention and have also provided individual counseling on responsible sexual behavior for those girls that were vaccinated. Another goal of this survey was to check the level of knowledge the girls have on STI, primarily on HIV infection and vaccination against HPV infection by comparing the knowledge of vaccinated and those who were not vaccinated. Upon handing in the filled in questionnaires to the researcher, the respondents were given correct answers to questions relating to knowledge on HIV and HPV infection and vaccination.

There was a total of 1504 respondents, the majority aged 15 (1116 - 74,2%), and 16 (297 – 19,7%); 49 were younger than 15 (3,2%) and 22 older than 16 (1,5%); 21 respondents did not give their age. There were 504 respondents recruited in Zagreb and 1000 in Rijeka. There seems to be a higher proportion of sexually active girls in the group vaccinated against HPV, while no significant difference was found in the level of knowledge on HIV and STI between the vaccinated and unvaccinated girls.

2. Changes in HIV and STI related sexual risk taking among young Croatian adults: 2005 and 2010 population based surveys

The second wave of the population based study titled „Changes in HIV and STI related sexual risk taking among young Croatian adults“ was conducted in 2010 (the first one was conducted in 2005) by the Sexology Unit, Department of Sociology, Faculty of Humanities and Social Sciences.

The aim of the study was to determine changes in sexual behaviors and other relevant characteristics related to human immunodeficiency virus (HIV) and sexually transmitted infection (STI) risks among young Croatian adults. Respondents were adults 18-25 (n= 1005). In both study waves the sample was probabilistic, and stratified by county, settlement size, age, and gender. The samples were non-matched. Trained interviewers conducted structured face-to-face interviews in participants' households. The part of the questionnaire assessing sensitive information was self-administered. Results show that the majority of participants at both survey points (85.2%-86.2%) were sexually active. Median age at sexual debut (17 years) remained unchanged. Lifetime number of sexual partners was also stable. More women than men reported only one lifetime sexual partner. The prevalence of condom use at first intercourse increased (from 62.6 to 70%, $P = 0.002$), while the prevalence of condom use at most recent sexual intercourse remained stable (54% in 2005 and 54.7% in 2010). Consistent condom use also remained unchanged. Consistent condom use in the past year was reported by 19.2% participants in 2005 and 20% in 2010.. At both survey points for both genders, consistent condom use was associated with age (odds ratio [OR] W2005 = 0.74, $P = 0.004$; ORW2010 = 0.72, $P < 0.001$; ORM2005 = 0.73, $P < 0.001$; ORM2010 = 0.80,$P = 0.006$), negative attitudes toward condom use (ORW2005 = 0.84, $P = 0.001$; ORW2010 = 0.90, $P = 0.026$; ORM2005 = 0.92, $P = 0.032$; ORM2010 = 0.90, $P = 0.011$)), and condom use at first intercourse (ORW2005 = 3.87, $P < 0.001$; ORW2010 = 4.64, $P < 0.001$; ORM2005 = 5.85, $P < 0.001$; ORM2010 = 4.03, $P < 0.001$). In the observed period, HIV/AIDS knowledge was stable. An article related to this study was published in the Croatian Medical Journal and a copy is attached to this report.

3. Behavior and infections among gay and bisexual men – an RDS study conducted in 2010/2011

Between September 2010 and February 2011 a research on STI and protective and risk behaviors among MSM was conducted in Zagreb. The study was conducted by the NGO Iskorak – Sexual and Gender Minorities' Rights Center, "Andrija Štampar" School of Public Health - WHO Collaborating Centre for Capacity Building in HIV/AIDS Surveillance of the Medical School of the University of Zagreb and the University Clinic for Infectious Diseases "Dr. Fran Mihaljević". The study was conducted using the RDS method to recruit respondents. The respondents gave informed consent before being included into the study, have filled in the questionnaire and gave samples for HIV, genital herpes, syphilis, hepatitis A, B and C, and gonorrhea and Chlamydia testing. During 19 weeks of research a total of 402 respondents were included into the study. Over 95% of the respondents came back to get their testing results, as opposed to 78% in the study conducted in 2006. Data on behavior obtained through this study show that 64% of the respondents were involved in sexual activities with a person other than their steady partner in the last 12 months, whereby 82% of the respondents said they had used a condom at last intercourse with a non-steady partner. 68% of the men tested for HIV at least once in their life, in comparison to 50% of the respondents being tested ever in life in the 2006 study. In the last 12 months 33% of the respondents tested for HIV. The main reason for not testing stated by 58% of the respondents is that they feel that they are not at risk, while 16% does not want to get a test, and 10% do not test because they fear that the result might be positive. At the moment of recruitment into the study 38,2% of the men stated being in a relationship with a man. The condom at last anal intercourse was used by 45% of the men. In total, 81% of the men define their relationship as monogamous and 19% as an open relationship. Out of those that had anal intercourse without using a condom, 82% talked to their partner about their HIV status before engaging in sexual intercourse without a condom, while 18% did not speak about this with their partners. The results also show that 70% of the respondents knew the HIV status of their partner whereby in the 2006 study this 53% of the respondents knew their partner's HIV status. The average duration of a relationship among MSM is 26 months, every other relationship lasts 14 months or shorter and open relationships last 5 times

longer than monogamous. With respect to STI a total of 2,8% of men was HIV infected, in 2006 this number amounted to 4,5%. Due to the overlapping of CI the researchers find that there was no significant change in the incidence of HIV among MSM. Also, due to a large proportion of younger men, and because of the fact that 82% of newly discovered HIV cases in Croatia in 2010 were among MSM, it is presumed that the incidence of HIV infection is greater. Genital herpes was found in 5,9% of men, hepatitis A antibodies in 20,4% and hepatitis B antibodies in 44%. Hepatitis B infection is currently found in 6,9% of the respondents and hepatitis C infection in 0,6%. In comparison with the 2006 results there has been an increase in hepatitis A and B antibodies which is a consequence of people getting vaccinated more and there has been a slight decrease in other viral infections. Chlamydia in the rectum or urinary tract was found in 7,2% of men. In relation to the 2006 study, there has been a decrease of incidence of Chlamydia and gonorrhea which can partly be explained by the use of more specific test. Syphilis antibodies were found in 7,6% of men, which shows that at the time of the conducting this research the respondents either had a syphilis infection or had already had one in the past.

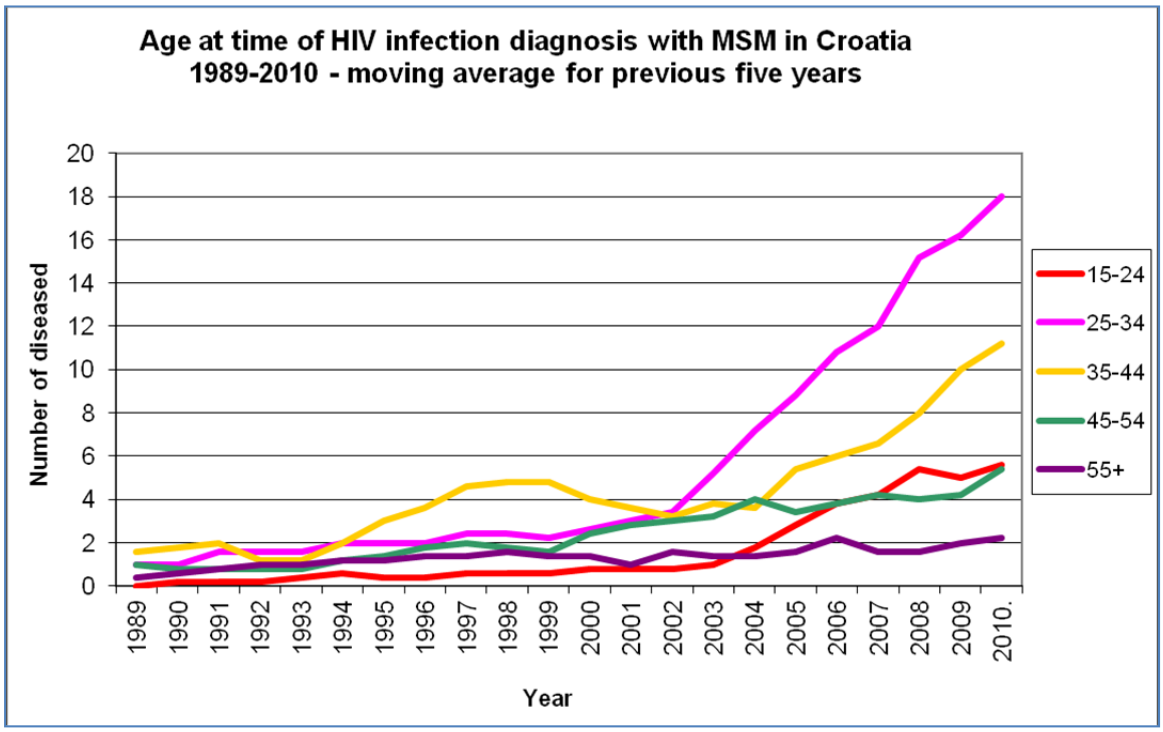
An article related to the results of this study has is attached.

4. Epidemiological analysis of the trend of risk factors for acquiring HIV infection among the MSM basing on surveillance data collected until 2010

Basing on the data of surveillance of AIDS and HIV infection Infectious Disease Epidemiology Service of the CNIPH conducted an epidemiological analysis of the trend of risk factors for acquiring HIV infection among the MSM basing on surveillance data collected until the end of 2010. This analysis was based on several sources: routine surveillance – data of the HIV/AIDS register maintained by the Infectious Disease Epidemiology Service of the CNIPH, bihevioral studies conducted by the Service in collaboration with the NGO Iskorak, on the data of the 2003-2006 HIV seroprevalence study among groups of heightened risk for acquiring HIV infection.

Data of the HIV /AIDS Register of Infectious Disease Epidemiology Service of the CNIPH from 1985 show that among newly diagnosed HIV infections in the last ten years there is an increase in the share of those belonging to the MSM group of heightened

risk. The majority of the HIV Infected MSM are in the age group 25-34, followed by 34-44 age group.



In the last three years the share of MSM population of the age group 15-24 among the newly diagnosed is increasing. The distribution of MSM population according to where the infection was acquired shows that 58,3% has an autochthonous infection while 41,7% acquired this infection abroad.

Distribution of MSM with an HIV infection according to Counties shows that 65% live in large cities, 43% in the capitol Zagreb, with 9,1% in Osijek-baranja county, 6,3% Primorje-gorski kotar county, 6,1% in Split-dalmatia county, the remainder lives in other counties in Croatia.

The following table gives the distribution of HIV infection according to leading transmission routes in Croatia for several counties in the period 1985 – 2010.

	Croatia	City of Zagreb	Osijek-baranja County	Istria County	Primorje-gorski kotar County	Split-dalmatia County
Homo/ bisexual	51,2% (441)	66,0% (190)	78,4% (40)	29,5% (13)	27,2% (28)	23,7% (27)
Heterosexual	34,2%	22,9%	15,7%	31,8%	33%	55,3%

	(295)	(66)	(8)	(14)	(34)	(63)

Behavioral research the Service conducted in 2005, 2007 and 2009 were conducted in collaboration with NGO Iskorak – Sexual and Gender Minorities' Rights Center were conducted in order to give a better insight into risk behaviours for acquiring of the MSM population in Croatia in order to improve and focus planned preventive activities. The data was collected by recruiting respondents who filled in a questionnaire in physical locations where MSM population frequents and through internet. Data on risk behavior, protective behavior and knowledge on HIV were collected. The table shows a comparison of results of the three surveys.

	2005	**2007**	**2009**
I have heard of HIV/AIDS			
Yes	98.05	99,3%	/
No	0.6%	0,7%	/
Condom is an efficient means of protection from HIV infection (#use of condom decreases risk of acquiring HIV infection)			#
Yes	75.4%	84,7%	95,5%
No	12.3%	11,5%	2,5%
I do not know	12.0%	3,8%	2%
I have tested for HIV			/
Never	53.1%	48,8%	/
Once	21.4%	24%	/
Several times	25.3%	27,2%	/
HIV testing in the last 12 months			
Yes	/	/	31,6%
No	/	/	68,4%
Condom use at oral intercourse			
Always	6.1%	6,8%	8,9%
Never	69.9%	79,8%	72,3%
Condom use at anal intercourse in the last year			
Always	47.1%	40,3%	48,4%
Never	18.3%	20,2%	14%

Condom use at last anal intercourse			
Yes	57.0%	53,2%	65,7%
No	39.8%	46,8%	34,3%
Reasons for not using condoms at last anal intercourse			
"I did not find it necessary." (*steady, monogamous relationship	31.9%	61,9%*	9,7% 42,3%*
"I was overwhelmed by passion and did not."	14.3%	15,7%	13,3%
"I do not like having sex condoms“	11.2%	7,3%	13,7%
"I did not have a condom on me at that moment."	7.9%	7%	10,1%
"The partner did not want to."	4.4%	2,8%	5,2%
"Condoms are too expensive."	0.7%	1,7%	/
Something else**	29.5%	3,6%	5,7%**
Lubricant use at last anal intercourse			
Yes	64.2%	74%	84,3%
No	31.9%	26%	15,7%
The most commonly used lubricant[d]			
Factory made water based lubricant	44.5%	69,5%	74,2%
Various oil lubricants	48,7%	25,5%	13,6%
Something else	6.8%	5%	12,2%
Sexual relations with women[d]			
Yes	34.0%	25,5%	27,6%
No	61.1%	74,5%	72,4%
Condom use in intercourse with women[d]			
Always	20.4%	26,8%	38,8%
Never	65.3%	46,5%	41,8%

The 2003-2006 HIV seroprevalence study among groups of heightened risk for acquiring HIV infection included 1361 respondents, from this 134 (9,8%) female and 1215 (89,3%) male, 12 (0,9%) of unknown sex. The age median was 31 and ranged 18-76. 44,6% had only one type of risk, 40,3% had two types of risk, 11,6% three risks, 2,7% four risks, 0,7% five and 0,1% six types of risk for acquiring HIV. Within the

framework of this research there were 232 respondents who belonged to MSM population, with the age median 29.

This research found the prevalence in each MARP was lower than 2%, with the exception of the MSM group, where id was found to be 3.3%, which corresponds to the structure of HIV infected persons registered in the Croatia.

Preparations for a new round of seroprevalence study of HIV and STI among MARP started at the end of 2010, the implementation being planned for the period 2011 - 2014. The implementation of this new round of the study started in 2011 and is still under way.

5. Analysis of epidemiological characteristics and risk factors for acquiring HIV infection among clients of the VCT centre of the Croatian National Institute of Public Health in the period 2006 – 2009

In 2010, an analysis of epidemiological characteristics and risk factors for acquiring HIV has been analyzed in clients who have sought services of the VCT center at the Croatian National Institute of Public Health in the period 2006-2009. All the persons tested were of age. The data on VCT clients was collected using an anonymous questionnaire asking for demographic data, reasons for testing, and past risk behavior of the clients, history of STI, voluntary blood donorship (VBD) and history of HIV testing and testing for other STI. In the mentioned three year period 1931 person sought the Center's services, of this 1224 men (63%) and 697 women (36%); 10 of unknown sex. More than a half of the VCT clients (56%) belongs to the age group 25-39, and a large majority of the clients live in large cities (91%). As for sexual orientation, 80% of the clients is heterosexual, 12,7% homo/bisexual and 149 clients did not give data on this. From the total number of clients who visited the center in the period 2006-2009 1880 were tested for HIV out of which 16 (0,9%) persons were positive for HIV. Only 80 persons (5%) of the total number of clients did not come back to pick up their test results, out of these, there was only one tested positive. A total of 618 (34,1%) of the clients had already tested for HIV earlier while 1185 (64,4%) did not test before in their life. Among the re-testers, 390 (65,4%) stated to be of heterosexual orientation while 205 (34,4%) were of homo/bisexual orientation.

The majority (1349/71,8%) of the clients states as reason for testing one risk in the past, the majority of those sexual intercourse without protection (1140/ 86,3%) and some report having homosexual intercourse (162/12,7%). Other risks are less common: intravenous drug use 42 (3,3%), promiscuous behavior with 4 (0,3%) clients and prostitution with one client. A smaller number of clients were exposed to multiple risks in the past. From the total number of clients who visited the center 154 (8,2%) state having been exposed to two risks. Of these the largest number (145/95,4%) was exposed to unprotected intercourse while 104 clients (68,4%) stated having homosexual contact ever in the past. From clients exposed to two risks in the past 151 (98,1%) have tested for HIV and in 4 persons the test result was positive.

1561 (80,8%) clients gave information on condom use outside a stable relationship. Of these 18,6% stated they had no intercourse outside a their relationship while 24,2% stated they had always used a condom outside a stable relationship, 24,2% said they used condoms most of the time, 22,5% sometimes and 12,3% stated they never use condoms outside a stable relationship. From clients who had more than one partner in the last year 1586 (82,1%) gave information on condom use at last sexual intercourse outside a stable relationship. From these 1586 clients, 6,8% stated having no other partner than their steady partner, while 34,8% stated using a condom with the last time they had intercourse outside the stable relationship whereas 56,4% had not used condoms the last time they had intercourse outside the stable relationship.

Of those who gave information on this, 18 (1%) stated paying for sexual services often, occasionally 110 (6,3%) and 1632 (92,7%) stated they have never paid for sexual services. Five clients often charged for providing sexual services (0,3%) and seven (0,4%) did this occasionally while 1748 (90,5%) never charged for sexual services.

On drug use 14 clients (0,8%) stated that they use drugs often, 371 (21,3%) occasionally, 1351 (77,7%) never. Alcohol consumption at time of sexual activities was reported to be often by 17 (1%) clients, occasionally by 618 (35,6%) and 1101 (63,4%) said they never use alcohol at the time of sexual intercourse.

On being asked about history of STI, 278 (16,8%) clients stated having a history some of the listed STI. Of these, 15 persons had hepatitis B some time in their life, 13 persons had hepatitis C, 38 persons had gonorrhea, 13 clients reported having syphilis

some time in life, 146 clients had HPV and 75 clients reported having Chlamydia while 35 clients reported having history of some other STI. Of those clients who reported a history of STI only 58 (24,6%) said they always used a condom outside a stable relationship.

Current voluntary blood donors from the total number of clients are 170 (9,5%) persons, of this number 167 (98,2%) tested negative in the remaining number was at no risk for HIV and did not test. Among VBD clients of our VCT 38,5% had no partner or only one partner in the last year while the rest had two or more sexual partners in the last year. Using a condom consistently in sexual activities outside a stable relationship reported 34 (23,3%) and with last sexual intercourse 66 (40,5%). One VBD states often paying for sexual services and 9 occasionally, while none charged for providing sexual services. Eight persons (4,8%) who are currently VBD reported using drugs intravenously in the last month while two (1,2%) shared injecting equipment at that occasion. Among VBD who used out VCT services, 57 (33,7%) had already tested for HIV before.

To conclude, we can say that a large majority of the people who have used the services of the VCT center at the CNIPH in the period 2006 – 2009 are males, inhabitants of large cities and over a half of our clients are aged 25-39, that is they represent sexually active population. A large majority of the VCT clients state to be of heterosexual orientation (80%) and some report that they are of homo/bisexual orientation (12,7%). Regular condom use in general in all clients who have used the services of our center, regardless of the type of risk they have exposed to is not satisfactory. Also, it is worrying to see that eight of the current 170 voluntary blood donors who have used the services of our center have used drugs intravenously in the last month. Through the work of the center in this three year period 16 HIV positive persons were discovered and all were provided medical care (diagnostics, treatment and psychosocial support) at the UCID "Fran Mihaljević". A large number of the clients, 95% of them come back for their test results which points to a quality of the counseling work provided. Also, having looked at the data on types of risk our clients expose to, it is also visible that we managed to reach only a very small number of CSW and their clients which still remain the most "hidden" population of all MARPs.

Best practices

Croatia has received a GFTAM grant for the period 1. Dec. 2003 – 30. Nov. 2006 with the following key objectives of this project also identified in the national action plan:

1. Maintain the universal access to treatment and improve the psycho-social support to PLWHA.
2. To increase the level of protected behaviors among young people, through school based peer education prevention program.
3. To increase access to VCT services, particularly for members of vulnerable groups
4. To implement targeted interventions for people under increased risks.
5. To strengthen the HIV surveillance system

Prior to the Global Fund project there were only two voluntary counselling and testing (VCT) sites in Croatia. These testing sites were at the University Hospital for Infectious Diseases (UHID) in Zagreb and at the Clinical Centre Rijeka. HIV testing, albeit with limited counselling, has also been performed at Transfusion centres throughout Croatia. Anonymous testing was not widely available before the Global Fund project. However, all citizens of Croatia are entitled to Health Care Insurance and HIV testing was free of charge if proof of insurance was presented. The Global Fund project enabled us to open altogether 10 VCT sites during 2004 and 2005. Positive HIV screening tests are sent to the Reference Laboratory at UHID in Zagreb where confirmatory testing is performed.

The support of the GFTAM project resulted in the establishment of an Outpatient Centre for HIV/AIDS which was opened at UHID in June 2005, the integral part of which is also psychosocial support. HIV infected patients need no referral from primary care physicians, which is usually required for other diseases, to enter care at UHID. Antiretrovirals are also given to patients at UHID from the hospital pharmacy. There is a close collaboration of VCT centres and other hospitals with UHID. In addition, a small renal dialysis unit for HIV infected patients was opened at UHID in 2005.

Multisectoral cooperation has significantly improved thanks to the Global fund project, notably resulting in involvement of civil society in the policymaking process through civil society representatives' active role in the NAC.

Another important achievement one must mention are studies conducted during the period 2003-2006 which were published as a supplement 2 to Collegium Antropologicum volume 30 in 2006.

The most valuable achievement in the 2014 reporting round is the fact that financial sources are keep on to be secured for the implementation of all the activities started during the Global fund grant. Even though this is happening at a smaller scale (financially speaking) the sustainability achieved has certainly shown the commitment of decision makers to persist on achieving goals set in the HIV/AIDS prevention, particularly if we consider the fact that the GFTAM funding has ended quite a few years ago.

VI. Major challenges and remedial actions

The major challenges are still the stigma and taboo of HIV infection connected to additional discrimination of "hard-to-reach" populations.

Additional possible challenges lie in the process of increasing knowledge about HIV/AIDS among medical staff and problems related to second generation HIV surveillance goals.

Generally, at this point of the epidemiologic situation in Croatia, aside from the necessary application of all protection measures according to the National HIV/AIDS Health Protection Program it is a priority to:

1. Continue with the work of Centers for voluntary counseling and testing including strengthening of community based HIV testing within high risk populations.

2. Intensify health education within the MSM population and intensify education on sexual health for youth promotion of health education and HIV testing within the MSM population.

3. Systematically and efficiently combat the still existing prejudice towards the HIV infected persons and groups of high risk.

VII. Support from the country's development partners

The private sector in Croatian economy has still not shown interest in investing finances into fight against AIDS.

VIII. Monitoring and evaluation environment

Epidemiologic monitoring of the HIV situation as well as the evaluation of the implementation of the National HIV/AIDS prevention program is the responsibility of the Infectious Diseases Epidemiology Service of the Croatian National Institute of Public Health which has been monitoring the situation even before the first HIV and AIDS cases were registered in Croatia.

Additionally, in 2006, M&E units at the Croatian National Institute of Public Health and Ministry of Health and Social Welfare were established. These units enable a better flow of information and ensure that all the data are collected from all the relevant stakeholders taking part in implementation of the National HIV/AIDS prevention program, including both the health sector and the nongovernmental sector. This is an additional help to the implementation of the National HIV/AIDS prevention program as such. Major challenges in improving the M&E environment is still the lack of human resources, i.e. there are no responsible persons who would devote their full attention to M&E, but work only part time on this issue. In the 2014 reporting round the M&E units at the Croatian Institute of Public Health and Ministry of Health are still functioning, but no efforts were made to resolve the lack of human resources.

ANNEXES

ANNEX 1: Consultation/preparation process for the country report on monitoring the progress towards the implementation of the Declaration of Commitment on HIV/AIDS

The following is a list of steps that have been taken within Croatia preceding the production of this report. The Ministry of Health and the Croatian Institute and its M&E Unit responsible for the compiling of this report would like to thank

the following NGOs for their work, without which it would not be possible to collect data necessary for the completion of this report:

- NGO Iskorak – a LGBTIQQ group for promotion and protection of different sexual orientations,
- NGO Help – a youth help organization
- NGO for improving the quality of life "LET",
- NGO Terra,
- PRO-REPRO a non-government organization for education in, promotion and protection of reproductive health,
- The Croatian Red Cross,
- International Organization for Migrations,
- Croatian Association for HIV (CAHIV),
- NGO Institut
- NGO Hepatos Rijeka

the following health organizations:

- National HIV/AIDS Reference Centre University Clinic for Infectious Diseases “Fran Mihaljević”
- Prison hospital in Zagreb (where one VCT center is located)
- Croatian Institute for Health Protection and Safety at Work

and of course the regional Public Health Institutes in which VCT centres are located:

- Brod-Posavina,
- Dubrovnik-Neretva,
- Istria,
- Osijek-Baranja,
- Primorje-Gorski kotar
- Split-Dalmatia and
- Zadar counties.

All of the abovenamed partners have continuously collaborated in everyday work and have helped complete this report providing extensive consultation whenever this was needed.

Steps taken that preceded the production of this report include the following:

- Collecting and compiling data
- Entering data into the online tool
- Generation of relevant tables and graphics
- Insertion of graphics into the narrative report. Source for all the epidemiological data, including the graphs and charts is the Croatian HIV/AIDS Register, maintained at the Epidemiology Department of the Croatian National Institute of Public Health.