HBV-HCV-HIV: Three different and serious threats for European young people. A Network to study and face these challenges in the EU

H-CUBE

Analysis of the local contexts (D3)

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Index

List of abbreviations and acronyms

AIDS	Acquired Immunodeficiency Syndrome
Anti-HBc	Hepatitis B Core Antibody
Anti-HBs	Hepatitis B Surface Antibody
ÁNTSZ	National Public Health and Medical Officer Service (Hungary)
ART	Antiretroviral Therapy
ARV	Antiretroviral
ASL	Local Health Agency (Italy)
CCNASHCBI	National Center of Communicable Diseases Prevention and Control (Romania)
CDC	Centers for Disease Prevention and Control
CLSI	Clinical and Laboratory Standards Institute
COA	Operartive Centre for AIDS
CPTDA	Centre for the Prevention and Treatment of Illicit Drug Addiction
DTP-HBV	Combined Vaccine Against HBV and Diphtheria, Tetanus, and Pertussis
EASL	European Association for the Study of the Liver
EAHC	Executive Agency for Health and Consumers
ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EFTA	European Free Trade Association
EHRN	Eurasian Harm Reduction Network
EKA	Education, Knowledge and Awareness
ELPA	European Liver Patients Association
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EPIDAT	Program to ensure notification, registration and analysis of morbidity due to infections in Czech Republic
ESZCSM	Ministry for Health, Social and Family Affairs
EU	European Union
EUROSTAT	Statistical Office of the European Commission
EUROHIV	European Centre for the Epidemiological Monitoring of HIV/AIDS
FAQ	Frequently Asked Questions
GIS	Chief Sanitary Inspectorate (Poland)
GLP	Good Laboratory Practice
GP	General Practitioner
HAART	Active Antiretroviral Treatment
HbsAg	Hepatitis B Surface Antigen
HBV	Hepatitis B Virus
HCC	Hepatocellular Carcinoma

HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HCDCP/KEELPNO	Hellenic Center for Diseases Control and Prevention
IDP	Infectious Diseases Programme
IDU	Injecting Drug User
ISS	National Institute of Health
ISTAT	Italian National Institute of Statistics
KENTHEA	Center for Drug Prevention and Rehabilitation for Substance Dependent Person
LGBT	Lesbian, Gay, Bisexual, and Transgender People
MMWR	Morbidity and Mortality Weekly Report of the CDC
MSM	Men Who Have Sex with Men
N/A	Not Available Data
NCIPD	National Centre of Infections and Parasitic Diseases
NFP	National Focal Point
NGO	Non-governmental Organization
NIPH	National Institute of Public Health
NILS	Newly Independent States
NPHMOS	National Public Health and Medical Officers' Service (Hungary)
NRC	National reference centre for HIV/AIDS
NSP	Needle and Syringe Exchange Programme
OEK	National Centre for Epidemiology (Hungary)
PCP	Pneumocystis Carinii Pneumonia
PEPLA	Peer Education Program of Los Angeles
PLWHA	People Living with HIV/AIDS
NIZP- PZH	National Institute of Public Health-National Institute of Hygiene (Poland)
RNA	Ribonucleic acid
RIPCPH	Regional Inspectorate for Prevention and Control of Public Health
RR	Relative Risk
SEIEVA	Italian Epidemiological Integrated System on Acute Viral Hepatitis
SIMI	Italian Infectious Diseases Information System
SRB	Sexual Risk Behaviours
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme

UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UNPD	United Nations Development Programme
USA	United States of America
USSR	Union of Soviet Socialist Republics
VCT	Voluntary Counselling and Testing for HIV
VHPB	Viral Hepatitis Prevention Board
WHO	World Health Organization
WSSE	Regional Sanitary Inspectorate Departments (Poland)

PREAMBLE

HIV/AIDS in Europe: a EU Commission point of view

The EU Commission's strategy to fight the increase of AIDS and other sexual infectious diseases among the EU Member States and the European neighbouring countries is defined in the new guidelines released in 2009 "*Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Combating HIV/AIDS in the European Union and neighbouring countries, 2009-2013*"[1]. In this document is underlined that, in 2007, were **50.000 newly diagnosed HIV cases in the EU** and the neighbouring countries and 2 million people living with HIV/AIDS (PLWHA), with prevalence rates of HIV, in a range from 0.1% to 1.2% across Europe.

In the EU, **HIV is predominantly transmitted by heterosexual contacts and Men Having Sex with Men (MSM)**, while in European neighbouring countries the main mode of transmission is injecting drug use (57%). Moreover, the Commission guidelines emphasize that in EU/EFTA countries the highest proportion of new HIV cases was reported among MSM (39%), even if heterosexual HIV transmissions are increasing in several European countries and around 40% of these were diagnosed in persons originating from countries with generalised epidemics.

Currently, in Eastern Europe, HIV and AIDS are increasing at an alarming rate also because between 30% and 50% of HIV infected people in the EU, and up to 70% in European neighbouring countries, are unaware of their HIV status. In addition, considering the high mobility of people, it's fundamental a high spectrum policy involving these countries.

Identified priorities by EU

The EU Commission, therefore, highlights that it's very important to mobilise **all necessary efforts and resources to prevent HIV transmission effectively**, to promote the human rights of PLWHA and affected communities, embedded in the Charter of Fundamental Rights of the EU, and to deliver high quality HIV treatment and care to all who need it. In particular, the Commission Communication suggests to:

a) Scale up the implementation of **prevention strategies, which effectively target on local realities and needs**, while working towards ensuring universal access to prevention, treatment, care and support. To achieve the point object the Commission underlines that it is strategic to involve **Civil Society organisations, including those representing PLWHA and affected communities**. In fact, Civil society has undergone strong internationalisation and professionalization and the Commission wants to ensure that Civil society stays involved in HIV/AIDS related policy development and implementation and remains a front line partner in a coordinated response, sharing responsibility for meeting commitments.

b) Support an effective response to HIV/AIDS in **priority regions**, such as the mostly affected EU Member States, the Russian Federation and the most affected neighbouring countries. Currently in **Eastern Europe HIV and AIDS are increasing at an alarming rate**: the prevalence rate of HIV in several Eastern European countries is high, the numbers of new infections are still rising or have stabilised at a high rate, co-infections such as Tuberculosis and Hepatitis are a serious public health threat, and most marginalised groups such as **IDUs**, **migrants** and **MSM** are over proportionally affected.

c) Reach and support the **populations most-at-risk** and **most vulnerable** to HIV/AIDS across Europe. A large proportion of young people have not experienced the AIDS realities of the past making them more

[1] http://ec.europa.eu/health/ph_threats/com/aids/com_aids_en.htm, available on 10th November 2009.

negligent towards the risk of HIV-infection. As stated in the guidelines, future actions to combat HIV/AIDS should concentrate on most at risk populations to have the biggest impact on the epidemic:

- **MSM is the main at risk population in the EU**. Stigma, discrimination and homophobia are often associated with homosexuality and may lead to biased surveillance data and subsequent underestimation of this group in the HIV/AIDS epidemic. Targeted prevention programmes should be reinforced to reach MSM. Besides, voluntary and counselled HIV testing (along with effective screening and treatment for sexually transmitted infections) needs to be intensified for MSM and risk populations. Accessible, nondiscriminatory and confidential HIV treatment, care and support services for MSM are paramount.
- **Injecting drug use (IDU) is the main driver of HIV transmission in Eastern Europe**, where it accounts for 2/3 of all new infections. Drug addiction calls for an integrated medical and social response. Access to sterile needles, evidence-based addiction treatment, including substitution and other harm reduction measures, have proven to be very effective, including in high prevalence areas and in particular settings such as prisons. Investment in comprehensive IDU health care should help to decrease the number of new HIV-infections among drug users, and to alleviate the burden associated with drug use.
- **Migrants from countries with a high HIV prevalence and mobile populations are particularly affected by HIV/AIDS**, although, more data on the relationship between migrants´ legal, socio-economic status and access to health services and their vulnerability to HIV/AIDS would be needed. **Heterosexual HIV transmission among migrants accounts for about 40% of all new sexual HIV diagnoses in the EU**. Access to comprehensive prevention measures and to voluntary and confidential HIV testing and counselling and to health and social services needs to be promoted. The development of public health and social services for migrants would constitute an effective measure against the transmission of HIV.

In the end of the Communication, the Commission emphasizes on the importance to **improve Education, Knowledge and Awareness (EKA) on HIV/AIDS**. The inclusion of sexual and reproductive health education in school curricula would be beneficial for **HIV and STIs** prevention and should receive broad political support. Young people should also be empowered and involved in the shaping of information that concern them, and tailored information should be developed, particularly for youth at risk of social exclusion. **Restricted knowledge and unawareness of facts around HIV/AIDS and STIs lead to increased transmission rates**. The knowledge base shall be assessed on a regular basis in order to priorities distinct issues and to keep educational efforts close to the needs of target groups.

With the aim to support any EC initiative, **H-CUBE project will implement its activities according to these new guidelines**[2].

In the drafting of this report it has been followed the stylistic rules proposed by "UNAIDS' Terminology Guidelines" realised in 2008.

[2] http://data.unaids.org/pub/Manual/2008/JC1336_unaids_terminology_guide_en.pdf, available on 14th October 2009.

1. INTRODUCTION

1.1. Background of the project and of the report

This report has been developed within the H-CUBE project, financed by the Executive Agency for Health and Consumers (EAHC), for the *2008 Call for Proposals for Projects Programme of Community Action in the field of health (2008-2013)*. H-CUBE project includes eleven EU member states as partners, of which nine are new members: **Bulgaria, Cyprus, Czech Republic, Hungary, Lithuania, Malta, Poland, Romania, Slovenia**. The other two EU member states are **Greece** and **Italy**.

The aim of the report is to provide an **overview of the European situation on HBV, HCV and HIV among European young people**. Especially, its goal is to present in depth the **current state of these diseases** in each country involved in the project, focusing on three target **groups at high risk of infection**: "**Injecting Drug Users**" (IDUs), "**migrants**", "**Men Who Have Sex with Men**" (MSM). The methodology to collect data and information has been agreed by project partners and approved by the EAHC.

Increasing and diffusion of sexually transmitted diseases (STDs) among young people is a serious threat to the health of youth all over Europe. In particular, the fight against Hepatitis B and C and against HIV/AIDS represents a priority for the health policies of the World Health Organization and of the European Commission for the European Union countries and the neighbouring countries. In detail, the key resolutions released by the United Nations are:

- UN Security Council Resolution 1308[3] (2000);
- United Nations Millennium Declaration[4] (2000);
- Declaration of Commitment on HIV/AIDS[5] (2001);
- Political Declaration on HIV/AIDS[6] (2006);

On the other hand, the key declarations on HIV/AIDS published from the European Union and its bodies are:

- Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia *Breaking the barriers' Partnership to fight HIV/AIDS in Europe and Central Asia*[7] (2004);
- *Coordinated and Integrated Approach to Combat HIV/AIDS in the European Union and in its Neighbourhood* (2004)[8];
- "Vilnius Declaration" on *Measures to Strengthen Responses to HIV/AIDS in the European Union and in Neighbouring Countries*[9] (2004);
- *Communication from the Commission to the Council and the European Parliament on combating HIV/AIDS within the European Union and in the neighbouring countries, 2006-2009*[10] (2005);
- Bremen Declaration on Responsibility and Partnership - Together Against HIV/AIDS[11] (2007);

[3] http://data.unaids.org/pub/BaseDocument/2000/20000717_un_scresolution_1308_en.pdf, on 21st September 2009.
[4] http://www.unaids.org/en/AboutUNAIDS/Goals/MDG/default.asp, on 21st September 2009.
[5] http://www.unaids.org/en/AboutUNAIDS/Goals/UNGASS/default.asp, on 21st September 2009. It established that in 2003 it would be defined a "time-bound national targets to achieve the internationally agreed global prevention goal to reduce by 2005 HIV prevalence among young men and women aged 15 to 24 in the most affected countries by 25 per cent and by 25 per cent globally by 2010".
[6] http://www.unaids.org/en/AboutUNAIDS/Goals/2006Declaration/default.asp, on 21st September 2009. It is particularly focused on achieving universal access to HIV prevention, treatment, care and support. In addition, it reaffirms the 2001 Declaration of Commitment on HIV/AIDS and the attainment of "the internationally agreed development goals and objectives, including the Millennium Development Goals, in particular the goal to halt and begin to reverse the spread of HIV/AIDS" by 2015.
[7] http://ec.europa.eu/health/ph_threats/com/aids/docs/dublin_decl.pdf, on 21st September 2009.
[8] http://ec.europa.eu/health/ph_threats/com/aids/docs/ev_20040916_rd01_en.pdf, on 21st September 2009.
[9] http://ec.europa.eu/health/ph_threats/com/aids/docs/ev_20040916_rd03_en.pdf, on 21st September 2009.
[10] http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&numdoc= 52005DC0654&model=guichett, on 21st September 2009.
[11] http://www.eu2007.de/en/News/download_docs/Maerz/0312-BSGV/070Bremen.pdf, on 21st September 2009.

- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Combating HIV/AIDS in the European Union and neighbouring countries, 2009 -2013 (2009).

1.2 Definition of the three diseases

1.2.1 HBV

According to the WHO, "Hepatitis B is a potentially life-threatening liver infection caused by the Hepatitis B virus" [12]. HBV is a **major global health problem and the most serious type of viral Hepatitis**. As stated by the ECDC, those "who become chronically infected by Hepatitis B virus (from >30% among children to <5% among adults) are at a higher risk of serious consequences: liver cirrhosis (25%) and cancer (5%). Moreover, they act as a reservoir for continuing disease transmission"[13].

Acute illness ranges from a moderate to a very serious disease. Hepatitis B in children frequently goes with no symptoms, with a higher tendency to become chronic. Furthermore, "liver cancer caused by HBV is among the first three causes of death from cancer in men, and a major cause of cancer in women"[14]. High rates of chronic infections have been found in the Southern parts of Eastern and Central Europe, too[15].

Modes of transmission are the same for the Human Immunodeficiency Virus (HIV) - hetero/homosexual, parenteral, mother to child – but HBV is from 50 to 100 times more infectious. Indeed, Hepatitis B "is usually spread when blood, semen, or another body fluid from a person infected with the Hepatitis B virus enters the body of someone who is not infected"[16]. The virus can survive outside the body for at least 7 days and during that time the virus can still cause infection if it comes into the body of a person who is not infected. Common modes of transmission in developing countries are perinatal (from mother to baby at birth); early childhood infections (inapparent infection through close interpersonal contact with infected household contacts); unsafe injections practices; blood transfusions; sexual contact. The virus incubation period is 90 days on average but can vary from about 30 to 180 days. HBV may be detected 30 to 60 days after infection and persist for widely variable periods of time.

Hepatitis B occurs worldwide with a very high burden of disease (an estimated 280 million carriers worldwide). **About 2 billion people worldwide have been infected** with the virus and about **350 million live with chronic infection**. About 600.000 persons die each year due to the acute or chronic consequences of Hepatitis B[17]. HBV-related end stage liver disease or Hepatocellular carcinoma (HCC) are responsible for over 1 million deaths per year and currently represent 5–10% of cases of liver transplantation[18].

In 2005, the reported cases in European Union states were 6798, with an overall estimated incidence of 1.49 per 100.000. The most affected age groups were 15-24 and 25-44 years (incidence 2.49 and 2.98). Male incidence (1.33) was 2.3 times more than women's one (0.58)[19]. HBV vaccination is available.

[12] World Health Organization (WHO), *Hepatitis B*; URL: http://www.who.int/mediacentre/factsheets/fs204/en/, on 11th September 2009.
[13] European Centre for Disease Prevention and Control (ECDC), *Hepatitis B*; URL: http://ecdc.europa.eu/en/Health_topics/Hepatitis/HepatitisB/, on 23th July 2009.
[14] World Health Organization (WHO), *Hepatitis B*; URL: http://www.who.int/mediacentre/factsheets/fs204/en/, on 11th September 2009.
[15] European Centre for Disease Prevention and Control (ECDC); *Hepatitis B*; URL: http://ecdc.europa.eu/en/Health_topics/Hepatitis/HepatitisB/, on 23rd July 2009.
[16] Centers for Disease Control and Prevention (CDC), *Hepatitis B*; URL: http://www.cdc.gov/Hepatitis/HepatitisB.htm, on 21th September.
[17] World Health Organization (WHO), *Hepatitis B*; URL: http://www.who.int/mediacentre/factsheets/fs204/en/, on 23rd July 2009.
[18] EASL (2009), *Clinical Practice Guidelines: Management of chronic Hepatitis B*, in "Journal of Hepatology", 50, pp.227–242.
[19] European Centre for Disease Prevention and Control (ECDC), *Hepatitis. Statement for World Hepatitis Awareness day*; URL: http://ecdc.europa.eu/en/healthtopics/Pages/Hepatitis_Awareness_Day.aspx, on 25th August 2009.

1.2.2. HCV

As stated by the CDC, "Hepatitis C is a contagious liver disease that results from infection with the Hepatitis C virus. It can range in severity from a mild illness lasting a few weeks to a serious, lifelong illness"[20]. HCV represents a major cause of **acute Hepatitis** and **chronic liver disease**, including **cirrhosis** and **liver cancer**. Indeed, about 80% of newly infected patients progressively develop chronic infection. Cirrhosis develops in about 10% to 20% of persons with chronic infection, and liver cancer develops in 1% to 5% of persons with chronic infection over a period of 20 to 30 years"[21].

Humans are the only reservoir of the Hepatitis C virus. The infection is mainly acquired through contact through broken skin with infectious blood, often through sharing contaminated equipment among injecting drug users (globally, 90% of the new Hepatitis C infections are attributed to injection drug use[22]). The risk of mother-to-child transmission is around 3–5% but in cases of simultaneous HIV-infection it may reach 15%. Sexual transmission is less frequently.

After 1991, blood transfusions and blood products became much safer than before, as routine HCV tests started to become widely available[23]. The incubation period of the Hepatitis B infection "before the onset of clinical symptoms ranges from 15 to 150 days. In acute infections, the most common symptoms are fatigue and jaundice; however, the majority of cases (between 60% and 70%), even those that develop chronic infection, are asymptomatic"[24].

The disease burden of Hepatitis C is high, with up to **170 million people** estimated to **have had contact with the virus** and **130 million people chronically infected worldwide**. The most effective preventive measures are screening and testing of blood and organ donors, virus-inactivating processing of blood products, good infection control and safe injection practices in healthcare settings. The cases reported in the EU in 2005 were 29.167, with an overall estimated incidence of 8.7 per 100.000. Males were more affected (62% of reported cases), and the highest incidence was in the age group 25-44 years (9.74 per 100.000) [25]. No Hepatitis C vaccination is yet available.

1.2.3. HIV/AIDS

According to the definition of the ECDC, the Human Immunodeficiency Virus (HIV) is "an infection associated with serious disease, persistently high costs of treatment and care, significant number of deaths and shortened life expectancy" [26]. HIV is a virus which attacks the immune system and causes a lifelong harsh illness: AIDS. AIDS stands for Acquired Immunodeficiency Syndrome and is the final stage of HIV-infection after a long incubatio period (10-15 years to develop)[27].

HIV is spread by sexual contact with an infected person: about the half regarding heterosexual contacts (53%), whereas a third of the cases are diagnosed among men who have sex with men (MSM). Another route of transmission is by sharing needles or syringes (10%), principally for drug injection, with someone who is infected (IDUs)[28]. Less common, and now very seldom in countries where blood is screened for HIV

[20] Centers for Disease Control and Prevention (CDC), *Hepatitis C*; http://www.cdc.gov/Hepatitis/HepatitisC.htm, on 23rd July 2009.
[21] World Health Organization (WHO), *Hepatitis C*; URL: http://www.who.int/mediacentre/factsheets/fs164/en/index.html, on 23rd July 2009.
[22] Hellard, Margaret; Sacks-Davis, Rachel; Gold, Judy (2009), *Hepatitis C Treatment for Injection Drug Users: A Review of the Available Evidence*, in "Clinical Infectious Diseases", 49, p. 561.
[23] European Centre for Disease Prevention and Control (ECDC); *HCV*; URL: http://ecdc.europa.eu/en/Health_topics/Hepatitis/HepatitisC/, on 23rd July 2009.
[24] World Health Organization (WHO); *Hepatitis C*; URL: http://www.who.int/mediacentre/factsheets/fs164/en/index.html, on 25th August 2009.
[25] European Centre for Disease Prevention and Control (ECDC); *Hepatitis - Statement for World Hepatitis Awareness day*; URL: http://ecdc.europa.eu/en/healthtopics/Pages/Hepatitis_Awareness_Day.aspx, on 25th August 2009.
[26] European Centre for Disease Prevention and Control (ECDC); *HIV/AIDS*; URL: http://ecdc.europa.eu/en/healthtopics/Pages/HIV_AIDS.aspx, on 23rd July 2009.
[27] Centers for Disease Control and Prevention (CDC); *Basic information. HIV*; URL http://www.cdc.gov/hiv/topics/basic/index.htm, on 21st September 2009.
[28] European Centre for Disease Prevention and Control (ECDC); *HIV/AIDS - Factsheet*;

antibodies, is through transfusions of infected blood or blood clotting factors. Newborns to HIV-infected women may become infected before or during birth or through breastfeeding[29].

Antiretroviral drugs can slow down the process even further. Effective combination therapies – introduced in the mid-1990's and widely used in developed countries – have had a profound effect on the course of HIV-infection, improving the quality of life and delaying the onset of AIDS and death in HIV-infected individuals. However, intolerance to side effects and appearance of resistant strains remain causes for concern. **Globally, in 2007 there were an estimated 33 million people living with HIV, with an estimated 25 million deaths worldwide already caused by it**[30].

A recent study has demonstrated the correlation between sexual risk behaviours (SRBs) and depression. In particular, "high rates of clinical depression are found among individuals who engage in HIV risk behaviors"[31]. In adolescent, depression has been considerably linked with subsequent condom nonuse, birth control nonuse, pregnancy, and having non-monogamous partners[32]. In general, symptoms of depression are related with unprotected sexual intercourse, multiple sex partners, trading sex for money or drugs, and contracting sexually transmitted diseases (STDs)[33]. Sometimes depression may increase the likelihood of risk behaviours to mitigate distress. Moreover, depression can compromise motivation to change these behaviours. Clinic patients with sexually transmitted diseases show at high risk for HIV and present high rates of depressive symptoms. Compared with nondepressed patients, "depressed patients were more likely to have sex for money or drugs, have sex when 'high' on alcohol or drugs, and to have had a sex partner who used intravenous drugs"[34].

A study has examined the association of depression severity and STD risk behaviour among injection drug users, showing that greater "severity of depression is associated with greater frequency of injection risk behaviour among depressed injection drug users. Risk reduction programs that target depressed injection drug users need to be designed"[35]. It's important to mark that depression do not increase injection frequency in the subjects in our study. The authors have hypothesized various alternative mechanisms by which depression may increase risk taking.

In fact, psychological factors may condition an injector's perception of the threat of an infectious disease. For instance, depression may produce fatalism about HIV, a form of passive suicidal behaviour. Additionally, depression has been proved to be considerably and negatively correlated with drug users' confidence in giving careful thought to the consequences of life decisions: depression could thus lower the likelihood of taking preventive action. Another psychological mechanism produced by depression may affect an individual's attention, promoting carelessness in drug use behaviours, leading lesser ability to cope with stressful life events and increasing levels of unmindful sharing of drug equipment.

Furthermore, mental disorders may contribute to the probability of contracting HIV disease in this high risk population and could also make difficult treatment. Indeed, given that depression compromise

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URL: http://ecdc.europa.eu/en/healthtopics/Pages/HIV_AIDS_Factsheet.aspx, on 21st September.

[29] European Centre for Disease Prevention and Control (ECDC); *HIV/AIDS*; URL: http://ecdc.europa.eu/en/healthtopics/Pages/HIV_AIDS.aspx, on 23rd July 2009.

[30] UNAIDS (2008), *2008 Report of the Global AIDS Epidemic*,
URL: http://www.unaids.org/en/KnowledgeCentre /HIVData/GlobalReport/2008/2008_Global_report.asp, on 23rd July 2009.

[31] Hutton, Heidi E.; Lyketsos, Constantine G.; Zenilman, Jonathan M.; Thompson, Richard E.; Erbelding, Emily J. (2004), **"**Depression and HIV Risk Behaviors Among Patients in a Sexually Transmitted Disease Clinic", *The American Journal of Psychiatry*, 161, p. 912.

[32] Rubin, A.G.; Gold, M.A.; Primack, B.A. (2009), "Associations Between Depressive Symptoms and Sexual Risk Behavior in a Diverse Sample of Female Adolescents", *Journal of Pediatric and Adolescent Gynecology*, 22, 5, pp. 306-312.

[33] Hutton, Heidi E.; Lyketsos, Constantine G.; Zenilman, Jonathan M.; Thompson, Richard E.; Erbelding, Emily J. (2004), **"**Depression and HIV Risk Behaviors Among Patients in a Sexually Transmitted Disease Clinic", in "The *American Journal of Psychiatry*, 161, p. 912-914.

[34] *Ibidem*, p. 913.

[35] Stein, Michael D.; Solomon, David A.; Herman, Debra S.; Anderson, Bradley J.; Miller, Ivan (2003), **"**Depression Severity and Drug Injection HIV Risk Behaviors", *The American Journal of Psychiatry*, 160, pp. 1659.

both physical and cognitive functioning, it hinders adherence to treatment and can interfere with the management of most diseases[36].

1.3 HBV, HCV, HIV co-infection

In addition, **HBV and HCV-infections are common among patients with HIV because of shared routes of viral transmission**. Liver disease due to chronic HBV and HCV-infection is becoming a leading cause of death in people living with HIV. HCV is most efficiently spread through direct exposure to contaminated blood or blood products. Sexual transmission of HCV is inefficient, and the exact risk related to different types of sexual activity is unknown, although there has been increasing recognition of cases of acute HCV-infection associated with unsafe sex practices among men who have sex with men.

1.3.1 HBV/HCV co-infection

HBV/HCV co-infection is not uncommon, because the two viruses share similar modes of transmission, especially where a high endemic level of both infections is reported, such as South- East Asia and Mediterranean[37]. In the worldwide, coinfected population may be about 25 million to 50 million[38]. Patients with HBV/HCV co-infection have more severe liver disease and an increased risk for progression to hepatocellular carcinoma (HCC).

The precise number of patients coinfected with HCV and HBV is unknown. Generally, the prevalence is around 10-20% in patients with chronic HBV-infection, while 2-10% of anti-HCV positive patients have markers of HBV. Co-infection of HBV and HCV is frequently found in injecting drug users (42.5%)[39]. Numerous cases of simultaneous acute HBV and HCV were reported even if they are rare[40]. The clinical framework is frequently characterized by biphasic elevations in aminotransferases levels and HCV incidence of chronicity remains comparable to the rate with HCV monoinfection.

In HBV/HCV co-infection viral markers in serum can be modified, and consequently complicate the diagnosis and antiviral strategies. Indeed, one virus can potentially inhibit the other and result in the emergence of one dominant virus. It has been noted that "the interaction between the two viruses is frequently characterized by suppression of HBV replication by HCV. However, patients with combined infections may show a wide spectrum of virologic profiles, and one or both viruses may have varying phases of either active or suppressed replication"[41].

HBV or HCV superinfection in a patient with chronic Hepatitis of the contrary viral etiology may be associated with a fulminant course. Frequently, "patients who are 'superinfected' experience an elevation in aminotransferases levels, commonly attributed to flares of Hepatitis; therefore, screening for other He-

[36] Hutton, Heidi E.; Lyketsos, Constantine G.; Zenilman, Jonathan M.; Thompson, Richard E.; Erbelding, Emily J. (2004)**, "**Depression and HIV Risk Behaviors Among Patients in a Sexually Transmitted Disease Clinic", *The American Journal of Psychiatry*, 161, p. 912-914.
[37] Liu, Zhihua; Hou, Jinlin (2006), "Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) Dual Infection", *International Journal of Medical Sciences*, 3, pp. 57-62.
[38] Mendizabal, Manuel; Bengsch, Bertram; Rajender Reddy, K (2009), "Management of HBV, HCV, and HDV Co-infection", *Current Hepatitis Reports*, 8, pp. 111-118.
[39] Pallas, JR; Farinas-Alvarez, C; Prieto, D; Delgado-Rodriguez, M (1999), "Co-infections by HIV, Hepatitis B and Hepatitis C in imprisoned injecting drug users", *European Journal of Epidemiology*, 15, pp. 699-704.
[40] Chen, Shuo-Wei; Lee, Tsung-Shih; Hu, Ching-Chih; Chang, Liang-Che; Chien, Rong-Nan (2007), "Simultaneously acute Hepatitis B virus and C virus co-infection and subsequent chronic Hepatitis C", *Scandinavian Journal of Infectious Diseases*, 39, 4, pp 351-354.
[41] Mendizabal, Manuel; Bengsch, Bertram; Rajender Reddy, K (2009), "Management of HBV, HCV, and HDV Co-infection", *Current Hepatitis Reports*, 8, p. 112.

patitis viruses may not be done. HCV superinfection is often seen in areas of high prevalence of HBV-infection, the most common scenario for HBV/HCV co-infection"[42].

1.3.2 HBV/HIV co-infection

Co-infection with the Hepatitis B Virus and HIV is common: it has been estimated that more or less 10% of the HIV-infected population worldwide is infected with Hepatitis B (2–4 million)[43]. Given that the rate of clearance of HBV changes according to the patient's age, the risk of HIV and HBV co-infection hinge on the patient's age at the time of exposure to both viruses.

In Europe, HBV is typically acquired during sexual activity in adolescence or early adulthood[44]. Therefore it is not surprising that there is a high frequency of co-infection, since both the Hepatitis B virus and the HIV virus share similar transmission routes. Indeed, sexual activity and/or injection drug use are the most common routes of transmission of the Hepatitis B virus among those also infected with HIV.

The overall prevalence of chronic HBV-infection among HIV-positive persons in Europe is less than 10%, and it is highest among men who have sex with men and among intravenous drug users. The consequences of associated illnesses such as the Hepatitis B co-infection have become more relevant, even if highly active antiretroviral therapy (HAART) has dramatically improved the lives of those with HIV[45]. It has been estimated that 70-90% of HIV-infected individuals having evidence of past or active infection with HBV[46]. The prevalence of Hepatitis B surface antigen (HBsAg) chronic carriage among HIV-infected individuals is 1.9-9%[47].

Among IDUs, 90% of HIV-infected individuals have evidence of exposure to Hepatitis B (Hepatitis B core antibody [anti-HBc] positivity) and 60% also have evidence of past infection with presence of Hepatitis B surface antibody (anti-HBs). Additionally, anti-HBc is more frequently found in HIV-infected MSM compared with those who are HIV seronegative (72% vs. 31%, respectively)[48]. In worldwide, among HIV coinfected persons in Western Europe and in the United States, MSM represent 9%–17%[49].

1.3.3 HCV/HIV co-infection

Approximately 30% of HIV-positive people in Europe and the United States are coinfected with HCV; furthermore over 10% of HIV deaths are leaded by liver disease. In the worldwide there are an estimated 40 million HIV people infected and 170 million with HCV, of whom 10 million will be coinfected[50].

HIV shows to accelerate HCV-related liver disease but HCV does not appear to affect the rate of HIV disease progression. **Hepatitis C is found in 60–90% of HIV-positive haemophiliacs and 50–70% of HIV-positive IDUs**[51]. The risk of transmission is also enhanced by traumatic sexual practices enough to result in

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[42] *Ivi*.
[43] HEPATITIS B FOUNDATION, *What is HBV/HIV co-infection?*, URL: http://www.hepb.org/hepb/hbv_hiv_co-infection.htm, on 9th September 2009.
[44] Koziel, Margaret; Peters, Marion (2007), *Viral Hepatitis (HCV, HBV) in HIV Infection REVIEW***,**
URL: http://www.natap.org/2007/HIV/040507_03.htm.
[45] Soriano, Vincent; Barreiro, Pablo; Nuñez, Marina (2006), "Management of chronic Hepatitis B and C in HIV-coinfected patients", *Journal of Antimicrobial Chemotherapy*, 57, 5, pp. 815-818.
[46] Kumar, A. Ganesh; K. Sridharan, K.; Thirunalasundari, T. (2007), "Prevalence Pattern of Blood Borne Hepatitis Group of Viruses in Liver Disease Patients", *World Journal of Medical Sciences*, 2, 1, pp. 33-38.
[47] Motta-Castro, A. R. C.; Martins, R. M. B.; Araujo, N. M.; Niel, C.; Facholi, G. B.; Lago, B. V.; Mello, F. C. A.; Gomes, S. A. (2008), "Molecular epidemiology of Hepatitis B virus in an isolated Afro-Brazilian community", *Archives of Virology*, 153, 12, pp. 2197-2205.
[48] DEPARTMENT OF VETERANS AFFAIRS. UNITED STATES, *Co-infection with Hepatitis Viruses and HIV*; URL: http://www.hiv.va.gov/vahiv?page=pr-kb-00&post=0&kb=kb-05-03-04&sec=02&tp=HIV/Hepatitis%20C%20Co-infection &tpage=prtop06-01-rr, on 10th September 2009.
[49] Alter, Miriam J. (2006), "Epidemiology of viral Hepatitis and HIV co-infection", *Journal of Hepatology*, 44, pp. S6-S9.
[50] World Health Organization Regional Office for Europe, *HIV/HCV co-infection*;
URL: http://www.euro.who.int/HEN/Syntheses/HepatitisC/20050411_7, on 9th September 2009.
[51] Rockstroh, Jürgen Kurt; Spengler, Ulrich (2004), "HIV and Hepatitis C virus co-infection", *The Lancet Infectious Diseases*, 4, 7, pp. 437-444.

overt bleeding or ulcerative sexually transmitted infections[52]. Perinatal transmission is increased for both viruses in coinfected mothers but HAART and caesarean section reduces this to under 1% the risk of HIV transmission. Moreover, HCV co-infection with HIV is also common among active and former IDUs who acquire both viruses from injecting. Such co-infection reduces the chance of recovery from acute HCV, compromises the effectiveness of existing HCV treatment and accelerates the progression of HCV-infection to cirrhosis and liver failure.

A molecular analysis shows **large HCV transmission network among HIV-positive MSM in Europe**[53]. International mixing increases with cluster size, emphasising the rapid spread of regional outbreaks to neighbouring countries, presumably through increased travel associated with high-risk behaviours. The emergence of co-circulating HCV lineages makes easier transmission related to behaviour change among MSM rather than intrinsic viral change.

The survey was conducted on MSM who was HIV infected (with recent HCV since 2000) including cohorts of the Netherlands, France, Germany. Two-thirds of study population was on HAART. Most sequences were genotype 1a (50%) followed by genotype 4 sequences. 90% of individual sequences are genotype 1a and 4, which are difficult to treat. The sequences are 88% similar to 1 or more strains of other cases within the group, 73% are closely related.

1.3.4 Triple co-infection

Even if the rate of HBV and/or HCV co-infection in HIV patients varies according to geographic region and various risk groups, there is limited data on the prevalence and risk factors associated with triple infections with HIV/HBV/HCV in an urban clinic population. A recent survey conducted in New York City demonstrates that **co-infection with HBV/HCV/HIV is significantly associated with IDU**[54]. These results highlight the need to intensify education and optimal models of integrated care, particularly for populations with IDU, to reduce the risk of viral transmission.

A study conducted in the Netherlands presented at 44th Annual Meeting of the European Association for the Study of the Liver (EASL 2009) in Copenhagen HIV, conducted in the Netherlands shows that HIV "positive individuals with the chronic Hepatitis B virus (HBV) and the Hepatitis C virus (HCV) co-infection tend to experience more rapid liver disease progression than HIV negative people but use of HAART and well-preserved or recovered immune function are associated with better outcomes"[55]. However, people with HIV/HBV/HCV triple co-infection, as well as those with HIV-HCV co-infection, show higher risk of death, although the availability of effective combination antiretroviral therapy (ART).

1.4. Methodology

The focus of the literature review is based on the study of the fundamental texts in each country concerning HBV, HCV and HIV/AIDS issues in order to identify the general framework of the topics taken in-

[52] Wright, NMJ; Millson, CE; Tompkins, CNE (2005), *What is the evidence for the effectiveness of interventions to reduce Hepatitis C infection and the associated morbidity?*, WHO Regional Office for Europe, Copenhagen; URL: http://www.euro.who.int/document/E86159.pdf, on 11th September 2009.

[53] Danta, M.; van de Laar, T.; Brown, D.; Pybus, O.; Bhagani, S.; Vogel, M.; Neifer, S.; Baumgarten, A.; Gőtz, H.; Rockstroh, J.; Bruisten, S.; Dusheiko, G.; Coutinho, R. (2007), *Evidence of international transmission of HCV in pan-European study of HIV-positive men who have sex with men (MSM),* paper presented at "4th IAS Conference on HIV Pathogenesis, Treatment and Prevention", Sydney, 22-25 July.

[54] Kim, Jong Hun; Psevdos Jr, George; Suh, Jin; Lee Sharp, Victoria (2008), "Co-infection of Hepatitis B and Hepatitis C virus in human immunodeficiency virus-infected patients in New York City, United States", *World Journal of Gastroenterology*, 21, 14, 43, pp. 6689-6693.

[55] Highleyman, Liz, *HIV-HCV coinfected individuals and those with HIV-HBV-HCV triple infection have a higher risk of death in the HAART era*, HIV and Hepatitis.com; URL: http://www.hivandHepatitis.com/2009icr/easl/docs/060209_b.html, on 22th September 2009.

to consideration. Moreover, this activity has covered all the participating countries to allow a mapping of previous or current training courses and prevention activities targeting youth in Europe in the last 5 years.

Considered resources are in all the partners languages and English, and regarding to European, national, regional and local geographical level. The search plan for the literature review was related to a set of databases identified by all the project partners:

- Internet Google
- Pubmed
- Centers for Disease Prevention and Control (CDC)
- European Association for the Study of the Liver (EASL)
- European Center for Disease Prevention and Control (ECDC)
- European Monitoring Center for Drugs and Drug Addiction (EMCDDA)
- Viral Hepatitis Prevention Board (VHPB)
- UNAIDS and WHO Europe were contacted and/or information available on-line assessed
- European Centre for the Epidemiological Monitoring of HIV/AIDS (EuroHIV).
- WHO and UNAIDS Collaborating Centre on HIV/AIDS
- Official reports of National Healthcare Agencies
- Conference Papers
- Dissertations
- Indexes/Abstracts Printed
- Electronic Databases
- Government publications
- Scientific journals
- Reference Materials

The references reported are currently accepted reference texts in the research area and find out who has cited them in recent years. Another approach was to look for reports, scientific papers, or theses written by known experts and see who has cited them in recent years.
Besides, resources have considered the following criteria:

a) Provenance: author's credentials; author's arguments are supported by evidence (e.g. primary historical material, case studies, narratives, statistics, recent scientific findings).

b) Objectivity: author's perspective is even-handed.

c) Persuasiveness: author's theses are convincing.

d) Value: the contribute is relevant to an understanding of the subject, in order to assess validity of information gathering.

The organization of the resources has been both chronological (for example, if writers' views have tended to change over time. There is little point in doing the review by order of publication unless this shows a clear trend); and methodological (here, the focus is on the methods of the researcher, for example, qualitative versus quantitative approaches).

The English keywords were also translated into the national language of the country partners in order to carry out the national literature study. English was used as a search language for the overview of the other EU countries.

The main keywords used in the study have been:

- AIDS, HIV, HCV, HBV, Hepatitis, STIs

Combined with e.g.

- Liver inflammation
- Young people
- Transmission
- Blood transfusion
- Heterosexual/MSM
- Co-infection

The partner leader of this Work Package, the University of Sassari, submitted to the partners a scheme to fill in with the following voices (tables 1.4.1; 1.4.2; 1.4.3):

- Name of the survey
- Institution responsible
- Target group
- Mode of administration of the survey
- Average sample
- Coverage
- Indicators chosen
- Comments

These tables summarize the methodology through which the project partners have carried out the study of the literature about HBV, HCV, HIV/AIDS and co-infections situation among general population and young people, and related sub groups, in their countries. These tables refer only to national studies or official and most recent national surveys/analysis carried out by their Ministries of Health and Departments related to STIs.

These three tables present clearly the situation of data collection about HBV, HCV and HIV/AIDS in the project participating countries.he analysis of the different methodologies shows similar knowledge gaps identified in several countries in the project target group. H-CUBE countries present a wide variety of systems to report data and this causes difficulty to find data comparable. Almost all the participating countries reports do not address young people as a specific target group but they consider young people as a general population sub-group, if data are available. This, naturally, causes a lack of data about youth HBV, HCV and HIV/AIDS epidemiological situation and as a consequence, makes impossible to have data about the HIV/AIDS epidemiology among youth sub-groups as IDUs, migrants and MSM.

Table 1.4.1 – Methodology for the HBV data collected.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
BULGARIA	Sentinel Surveillance	Directorate for Prevention and Control of AIDS, Tuberculosis and STI, Ministry of Health	2004 – 2008 (annually)	Young people sub-groups (aged 18-25):	Questionnaire for face-to-face interview	N/A	Local (9 cities)	UNGASS	The analysis was developed to track in parallel biological and behavioural trends among young people most-at-risk groups regarding STIs.
BULGARIA	www.ecdc.europa.eu			IDUs, Sex workers, Roma, MSM and Prisoners					
CYPRUS	Ministry of Health - reported by healthcare professionals to the center of communicable diseases	Ministry of Health	2007	General population	N/A	N/A	N/A	N/A	N/A

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
CZECH REPUBLIC	National Reporting system EPIDAT, NIPH, Prague	Institute of Public Health, Prague	1999-2009	HBV cases in general population	Statistic methods (EPI-INFO)	All diagnosed HBV cases in separate years	National	N/A	About 300 new cases of Hepatitis B (HB) are reported in Czech Republic annually (in years 2005-2009). The secular trend is decreasing from 1983 when vaccination for professional risk groups was introduced (health workers, newborns of HBsAg+ mothers in 1989, patients under haemodialysis in 1989). According these data Czech Republic belongs to countries with low incidence and prevalence of viral Hepatitis B. But from 1997 there was observed increasing incidence of HB at the age group 15-24. As a new – incidence of HB is decreasing at the age group 15-19 years from 2006 significantly as a result new vaccination strategy implemented in CR in 2001. Mandatory vaccination was started in 12years old children. At the age group 20-24 years incidence begins to decrease slowly - in this age group only 20years old YP are vaccinated yet.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
CZECH REPUBLIC	National reporting system, EPIDAT, NIPH, Prague	Institute of Public Health, Prague	1993-2008	Persons with Hepatitis B	Statistic methods – EPI INFO	All diagnosed HB cases in separate years (from 636-306 cases)	National	N/A	The main mode of spreading HB in condition of Czech Republic in recent years was the sexual transmission (from 1997) and the main risk group is YP (in 2004 the age group of 20-24 old YP the incidence was 12,7/100 000). In 1997-2001 years the highest morbidity was registered in YP 15-19 years old and the second most affected age group was 20-24 year YP. The incidence is influenced now by implementation of vaccination of 12 year old children.
CZECH REPUBLIC	Serological survey - *The Bulletin of the Centre of Epidemiology and Microbiology*, September 2003, Vol. 12, suppl.1, pg.55-59	Institute of Public Health, Prague	2001	General population	Stratified random sample, questionnaire, data collection, data analysis, Blood taking, laboratory examination	2950 persons across age groups	national	N/A	Prevalence of HBsAg+ carrier is 0,6 % in Czech Republic in the general population and only 5.59 % of the general population has markers of past or present HBV infection of (total antiHBc antibodies positive).

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
CZECH REPUBLIC	Infectious Diseases in problem Drug Users hospitalised in the Infectious ward of the Motol University Hospital in 2002-2005	Teaching Hospital Motol, Prague: Infectious Centre for Drug Users	2007	IDUs population	Analysis of infectious diseases data in drug users patients from medical documentation between 2002-2005	436 persons	Regional - Prague	N/A	Out of 436 cases of intravenous drug users in our group, 44 % (191/436) were patients admitted with acute viral Hepatitis, 16 % (67/436) with soft-tissue or skin infections, 7 % (29/436) with respiratory infections, 4 % (18/436) with urogenital infections and 4 % (19/436) with sepsis. Progression to chronic Hepatitis B occurred in 3 % (4/125) of cases, fulminant course of acute Hepatitis B was observed in 1.6 % (2/125) of cases. Spontaneous clearance of Hepatitis C virus was demonstrated in 46 % (11/24) of subjects. Patients with the main diagnosis other than Hepatitis were screened and 71 % of them were found positive for anti-HCV, 57 % for anti-HBc total and 32 % for anti-HAV total.
CZECH REPUBLIC	*Clin microbiol inf med* 2006, 13 (2), pp. 70-75								During the analyzed period, no HIV-positive drug users were found. The findings are in striking contrast to data published abroad. Treatment of drug users is often complicated by low compliance with the treatment and hospital regimens and/or by a frequent lack of follow-up treatment. Despite this fact, no significant variations in the course or results of infectious diseases in drug users were found in comparison to the general population.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
GREECE	Vana Papaevangelou and Pierre Van Damme, "Prevention and Control of viral Hepatitis in Greece Q lessons learnt", *Viral Hepatits*, vol.16, no 2, April 2008.	Viral Hepatitis Prevention Board.	2008	General population, Prisoners, Injecting Drug users (IDU), Immigrants, Blood donors	The edition of the Viral Hepatitis was based on material presented at the Viral Hepatitis Prevention Board meeting held on November 15-17 2007 in Athens, Greece	N/A	National on going HBV-HCV cohort study	Reliable surveillance data- preferably available by age, risk group and geographical region- are necessary to determine the prevalence of a disease.	Irrespective of the method used, national notification data are always involved. Should we mention that the Greek surveillance system is still under evaluation and does not yet provide reliable viral Hepatitis data, due to substantial underreporting. Even if the surveillance system is working properly, it can be considered that the cumulative Hepatitis notification rate would be underestimated due to underreporting, low levels of testing in some risk populations, the asymptomatic nature of acute Hepatitis, and the long latency period.
HUNGARY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ITALY	Sentinel STD Surveillance www.iss.it	National Institute of Health	Since 1990 until 2008	STI clinic attenders	Face – to – face interview	5000	Sentinel	N/A	A prospective STD surveillance system was developed in Italy in 1990. Newly diagnosed cases of sexually transmitted disease (STD) are reported by a network of 45 sentinel STD clinics throughout the country.
LITHUANIA	STI repeated routine data collection	STI clinics	2003–2007	People with STI diagnosis	Face-to-face interview	1000	National	N/A	Annual repeated routine data collection
LITHUANIA	Prevalence of HIV and other infections and other risk behaviour among injecting drug users in Latvia,	Lithuanian AIDS center	2007	IDUs	A cross-sectional anonymous survey of current IDUs	400	national	N/A	N/A

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
	Lithuania and Estonia.								
MALTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POLAND	National surveillance system www.pzh.gov.pl/epimeld	National Institute of Public Health - National Institute of Hygiene on behalf of the Chief Sanitary Inspectorate	Monthly, annually	Population based (stratified by age group, sex, region and type of infection)	Standardized case report forms.	Polish population	National	Incidence, deaths	National Surveillance System
ROMANIA	The Reproductive Health Survey Romania 2004 available online at http://siteresources.worldbank.org/INTROMANIA/Resources/study.pdf.	Cooperation among the Ministry of Health, the World Bank, UNFPA, UNICEF, USAID/JSI R&T, SDC and WHO.	2004	Women aged 15-44 and Men, aged 15 -49 years	Face-to-face interviews	The sample included 4441 women aged 15-44 and 2361 men, aged 15 - 49 years.	National	UNGASS	Slightly over 50% of sexually experienced young women (53%) and two-thirds (66%) of the sexually experienced young men reported that they or their partners used a form of contraception at the time of their first sexual experience. In 2004, the percentage using modern methods (condoms) increasing to 44.7% and traditional methods falling to only 8.2%. Almost all contraceptive users among young men used a condom at first experience: 63% of 66% total users. The situation has also improved a great deal in the case of young adult men. In 1999, only 62% of the males who used a contraceptive at first sexual experience used a modern method; in 2004, 98% used a modern method.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
ROMANIA	Trends in Hepatitis B incidence in Romania, 1989-2005, *EUROSURVEILLANCE* Vol . 13 · Issues 1–3, Jan–Mar 2008 · www.eurosurveillance.org.	National Centre of Communicable Diseases Prevention and Control, Institute of Public Health, Bucharest, Romania	2008	General population	1.The mandatory reporting of acute viral Hepatitis (in place since 1978). to the local (district) public health authorities, and from there to the National Health Statistics Centre. 2.A case-based passive surveillance system for acute viral Hepatitis, in place since 1997 in order to provide additional data regarding risk factors, vaccination status and laboratory results.	N/A	National	UNGASS	A review of the change in incidence of HBV infection in Romania from the late 1980s until 2005
SLOVENIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 1.4.2 – Methodology for the HCV data collected.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
BULGARIA	Sentinel Surveillance www.ecdc.europa.eu	Directorate for Prevention and Control of AIDS, Tuberculosis and STI, Ministry of Health	2004 – 2008 (annually)	Young people sub-groups (aged 18-25): IDUs, Sex workers, Roma, MSM and Prisoners	Questionnaire for face-to-face interview	N/A	Local (9 cities)	UNGASS	The analysis was developed to track in parallel biological and behavioural trends among young people most-at-risk groups regarding HIV.
CYPRUS	Ministry of Health - reported by healthcare professionals to the center of communicable diseases	Ministry of Health	2007	General population	N/A	N/A	N/A	N/A	N/A
CZECH REPUBLIC	National reporting system EPIDAT, NIPH, Prague	Institute of Public Health, Prague	1993-2008	Persons antiHCV positive	Statistic methods - EPI INFO	all antiHCV diagnosed persons annually	National	N/A	Hepatitis C (HC) has become the most often reported Hepatitis in Czech Republic. In our reporting system EPIDAT the acute and chronic HC is notified together because to diagnose of acute Hepatitis C is very rare. About 1000 new cases (844-1022) of Hepatitis C are reported in Czech Republic annually (in years 2005-2008). The highest number of HC cases was reported in 2006: 1022 persons with Hepatitis C. The trend of occurance is decreasing from that time (in 2009 – 821 cases). Laboratory test of HCV antibodies (antiHCV) has been available in Czech Republic since 1990. So that is not possible to tell something

									strict about HCV problems before this year. HC is related to drug problems in Czech Republic. Drugs addiction has increased in the nineties because of unblocking frontiers and better availability of drugs.
CZECH REPUBLIC	Serological survey - *The Bulletin of the Centre of Epidemiology and Microbiology*, Septembre 2003, Vol. 12, suppl.1, pg.55-59	Institute of Public Health, Prague	2001	All population	Stratified random sample, questionnaire, data collection, data analysis Blood taking, laboratory examination	2950 persons across age groups	National	N/A	But in common population antibodies were documented at 0,2% persons only (according to serologic survey from 2001). HC is problem of risk groups, particularly IDUs. Therefore the seroprevalence in the whole population is so low. The highest prevalence is at IDUs: More than 60% of IDUs are antiHCV positive. Therefore the highest morbidity is at age groups 20-24 and 25-29 years old people. The prevalence and incidence in very promiscuous population (it represents more than 20 of sexual partners) can be also higher but the sexual transmission in HC is rare.. The next risk group are patients under haemodialysis. The proportion of antiHCV+ persons is at this patient group about 2 %.
CZECH REPUBLIC	Infectious Diseases of Drug Users in Czech Republic Journal of the Czech Physicians, 2007, 146, pp 137-141	Teaching Hospital Motol, Prague: Infectious Centre for Drug Users	2007	IDUs Population	Analysis of infectious diseases data in drug users patients from medical documentation between 2002-2005	435 persons	Regional - Prague	N/A	Prevalence of drug users in CR remains stable in the last years (about 22 to 38 thousands). Two thirds of drug users administer the drug intravenously, what is the most risky way of application. Therefore the number of infectious diseases in that community has not decreased. 435 of drug users were hospitalised between 2002-05 at the Infectious Centre for Drug Users of the Hospital Motol. Most pa-

									tients were screened for VH and HIV infections. 44% of patients were hospitalized with acute VH in (191/436), skin and soft tissue infection in 15%, chronic Hepatitis in 15% and none HIV+. 50% of them are infected with HCV. VH is the most frequent infectious disease of i.v. drug users in the CR.
GREECE	Vana Papaevangelou and Pierre Van Damme, Prevention and Control of viral Hepatitis in Greece Q lessons learnt *Viral Hepatitis*, vol.16,no 2, April 2008	Viral Hepatitis Prevention Board	2008	General population Prisoners Injecting Drug users (IDU) Immigrants Blood donors	The edition of the Viral Hepatitis was based on material presented at the Viral Hepatitis Prevention Board meeting held on November 15-17 2007 in Athens, Greece	N/A	National on going HBV-HCV cohort study	Reliable surveillance data- preferably available by age, risk group and geographical region- are necessary to determine the prevalence of a disease. Several approaches exist for obtaining initial seroprevalence data, relying both on active and passive surveillance,	Irrespective of the method used, national notification data are always involved. Should we mention that the Greek surveillance system is still under evaluation and does not yet provide reliable viral Hepatitis data, due to substantial underreporting. Even if the surveillance system is working properly, it can be considered that the cumulative Hepatitis notification rate would be underestimated due to underreporting, low levels of testing in some risk populations, the asymptomatic nature of acute Hepatitis, and the long latency period.
GREECE									

								such as the use of a prediction model through back calculation methods, based on current data; seroprevalence study, based on residual samples; population-based serosurvey, or national health survey.	
GREECE	Emanuel K. Manesis George V. Papatheodoridis, Giota Touloumi, Anastasia Karafoulidou, John Ketikoglou, George E. Kitis, Anna Antoniou, Stylianos Kanatakis, Sotirios J. Koutsounas, Irene Vafiadis, Natural course of treated and untreated chronic HCV infection: results of the nationwide HEP-	HEPNET GREECE NETWORK	2008	N/A	N/A	N/A	N/A	N/A	HEPNET-GREECE for Hepatitis B, is an ongoing nationwide retrospective–prospective study initiated in 1997. The study is sponsored by the Greek government, approved and conducted through the Hellenic Center for Disease Control and Prevention (HCDCP, HCDCPPNO, Greece). The main aims of the study are to evaluate the epidemiology and the course of HBV infection in Greece and their longitudinal changes.

	NET.GREECE Cohort study.								
HUNGARY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ITALY	Sentinel STD Surveillance www.iss.it	National Institute of Health	Since 1990 until 2008	STI clinic attendees	Face – to – face interview	5000	Sentinel	N/A	A prospective STD surveillance system was developed in Italy in 1990. Newly diagnosed cases of sexually transmitted disease (STD) are reported by a network of 45 sentinel STD clinics throughout the country.
LITHUANIA	STI repeated routine data collection	STI clinics	2003–2007	People with STI diagnosis	Face-to-face interview	1000	National	N/A	Annual repeated routine data collection
	Prevalence of HIV and other infections and other risk behaviour among injecting drug users in Latvia, Lithuania and Estonia.	Lithuanian AIDS center	2007	IDUs	A cross-sectional anonymous survey of current IDUs	400	national	N/A	N/A
MALTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POLAND	National surveillance system www.pzh.gov.pl/epimeld	National Institute of Public Health - National Institute of Hygiene on behalf of the Chief Sanitary Inspectorate	Monthly, annually	Population based (stratified by age group, sex, region and type of infection)	Standardized case report forms	Polish population	National	Incidence, deaths	National Surveillance System
ROMANIA	2006 NATIONAL REPORT (2005	National Anti-drug Agen-	2006	Drug injecting users who	Direct interviews ”Drug Related	297 persons rec-	Bucharest	N/A	The data available for 2005 show a prevalence

	data) TO THE EMCDDA by the Reitox National Focal Point "ROMANIA" New Development, Trends and in-depth information on selected issues	cy/Romanian Monitoring Centre for Drugs and Drug Addiction		demanded medical care in 2005	Treatment Demand"	orded as injecting drug users			of HVC infection of 45.8%, a figure comparable to those from previous years, placing Romania among the European countries with an average prevalence of HVC infection. The prevalences for VHB and HIV remained low or very low as compared with the previous years (2003/2004), while VHC is a major public health issue, because of its high prevalence
ROMANIA	The Reproductive Health Survey Romania 2004 available online at http://siteresources.worldbank.org/INTROMANIA/Resources/study.pdf.	Cooperation among the Ministry of Health, the World Bank, UNFPA, UNICEF, USAID/JSI R&T, SDC and WHO.	2004	Women aged 15-44 and Men, aged 15 -49 years	Face-to-face interviews	The sample included 4441 women aged 15-44 and 2361 men, aged 15 - 49 years.	National	UNGASS	Slightly over 50% of sexually experienced young women (53%) and two-thirds (66%) of the sexually experienced young men reported that they or their partners used a form of contraception at the time of their first sexual experience. In 2004, the percentage using modern methods (condoms) increasing to 44.7% and traditional methods falling to only 8.2%. Almost all contraceptive users among young men used a condom at first experience: 63% of 66% total users. The situation has also improved a great deal in the case of young adult men. In 1999, only 62% of the males who used a contraceptive at first sexual experience used a modern method; in 2004, 98% used a modern method.
SLOVENIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 1.4.3 – Methodology for the HIV/AIDS data collected.

COUNTRY	NAME OF THE SURVEY	INSTITUTION RESPONSIBLE	YEARS DONE	TARGET GROUP	MODE OF ADMINISTRATION OF THE SURVEY	AVERAGE SAMPLE	COVERAGE	INDICATORS	COMMENTS
BULGARIA	Second Generation HIV Sentinel Surveillance www.ecdc.europa.eu	Directorate for Prevention and Control of AIDS, Tuberculosis and STI, Ministry of Health	2004 – 2008 (annually)	Young people subgroups (aged 18-25): IDUs, Sex workers, Roma, MSM and Prisoners	Questionnaire for face-to-face interview	N/A	Local (9 cities)	UNGASS	The analysis was developed to track in parallel biological and behavioural trends among young people most-at-risk groups regarding HIV.
BULGARIA	KAP analysis - UNAIDS Country Progress Report www.unaids.org	National Committee for Prevention of AIDS and STIs at the Council of Ministers	2006 - 07 (latest version)	Most at risk population	Data obtained from the Department for Prevention and Control of AIDS, Tuberculosis and STIs at the Ministry of Health, the National Unit for Second Generation HIV Sentinel Surveillance at the National Centre of Infectious and Parasitic Diseases, the National	814 HIV registered cases (2007)	National	UNGASS	A chapter of the report is dedicated to young people aged 15-24. The questions for constructing the complex indicator for knowledge on ways of HIV prevention and rejection of major misconceptions among young people were included in the national representative survey of UNFPA, conducted in May 2006.

					Centre of Hematology and Transfusiology, as well as all information on activities and performance results achieved by the non-governmental organizations working in the field of HIV/AIDS.				
CYPRUS	Ministry of Health - reported by healthcare professionals to the center of communicable diseases	Ministry of Health	2007	General population	N/A	N/A	N/A	N/A	N/A
CZECH REPUBLIC	Current situation HIV/AIDS in Czech Republic - Vandasova, Stankova XII. Czech and Slovak congress of Infectious diseases, Usti nad Labem - June	National Reference Laboratory for HIV/AIDS, National Institute of Public Health, Prague	2008 (by may 2008)	HIV+ population	Summary and analysis of confirmed laboratory data since 10/1985 by May 2008	N/A	National	UNGASS	This report comments HIV/AIDS epidemiological situation in Czech Republic. Cumulative data from October 1985 up to may 2008 are presented. Number of new cases of HIV+ is increasing monthly and annually. Since beginning 2008 66 new HIV+ persons were confirmed. In 2007 122 HIV+ persons were indicated and it represents 29 cases increase than in 2006. The high-

	2008								est proportion is represented by MSM - 55% and the next are persons with heterosexual transmission -31% (in 86% HIV+ persons sexual transmission is confirmed). The highest number of HIV+ persons is in 25-29 year age group.
CZECH REPUBLIC	HIV/AIDS in Czech Republic in 2006 *Eurosurveillance*, vol. 12, issue 14, April 2007: Bruckova, Maly, Vandasova, Maresova	National Reference Laboratory for HIV/AIDS, National Institute of Public health, Prague	2007	HIV+ population	Summary and analysis of confirmed laboratory data since 10/1985 by December 2007	N/A	National	UNGASS	In 2006, a total of 819,812 HIV tests were performed in the Czech Republic and 93 newly diagnosed HIV infections were reported, the highest number since 1985, when the HIV reporting system was established. Between 1985 and 2006, a total of 920 HIV infections were reported. Women represented 21.3% of all HIV+ cases registered between 1985 and 2006, and 20.4% of the HIV infections newly diagnosed in 2006. The prevalence rate of HIV/AIDS in the CR is relatively low (9.1 cases per million population in 2006), but an upward trend has been noted during the last three years (6.2, 7.1, and 8.8

									cases per million population in 2003, 2004, and 2005 respectively). Within the country, the highest prevalence rates are reported in the capital city of Prague (36.91 per million populations in 2006).
CZECH REPUBLIC	Infectiuos Diseases of Drug Users in Czech Republic Journal of the Czech Physicians, 2007, 146, pp 137-141	Teaching Hospital Motol, Prague: Infectious Centre for Drug Users	2007	IDUs population	Analysis of infectious diseases data in drug users patients from medical documentation between 2002-2005	435 persons	Regional – Prague	UNGASS	Prevalence of drug users in CR remains stable in the last years (about 22 to 38 thousands). Two thirds of drug users administer the drug intravenously, what is the most risky way of application. Therefore the number of infectious diseases in that community has not decreased. 435 of drug users were hospitalised between 2002-05 at the Infectious Centre for Drug Users of the Hospital Motol. Most patients were screened for VH and HIV infections. 44% of patients were hospitalized with acute VH in (191/436), skin and soft tissue infection in 15%, chronic Hepatitis in 15% and none HIV+. 50% of them are infected with HCV. VH is the most frequent infectious disease of i.v. drug users in the CR.
CZECH REPUBLIC	Czech Gynecology (Ceska Gynekol) - Zamensky et	Czech Medical Association J.E.Purkyne Hospital Bu-	2007	HIV+ women	Retrospective descriptive analysis	62	National	UNGASS	The study included women with delivery between Jan 1985 to Dec 2006 (7 secundiparae) who gave 71 new-borns (twice

	al : Analysis of HIV Positive Women who Gave Birth in the Czech Republic	lovka, Faculty of Medicine, Charles University in Prague							twins). The deliveries were performed by C-section. Breast-feeding was interrupted. All new-borns were born alive. No congenital disorderś were found. Three new-borns were transfered to intensive care unit for new-born babies (two dysmaturity, one abstinence syndrome). 3 new-borns were HIV positive (4.2% of 71 new-borns). Conclusion: Routine HIV prenatal screening is important to decrease rate of vertical transmission HIV infection in the Czech Republic.
CZECH REPUBLIC	Czech and Slovak Psychiatry (Čes. a Slov. Psychiat.), 100, 2004, no.2 - Zikmundova M., Weiss P. : Commercial Sex and the HIV Risk	Czech Medicine Society J.E.Purkyne	2004	female prostitutes	Questionnaire	119 (18 - 53 years old), average 3,5 years in sexbusiness	National	UNGASS	Besides the higher incidence of STDs, more risky sexual practices and not consistent use of condoms and lubricants in the work or in private sexual activities, also the victimization (sexual, abuse, experiences with violence) and younger age may contribute. The speific factor from the viewpoint of HIV/AIDS risk is then the drug abuse leading to less responsible commercial sexual behavior of prostitutes.
GREECE	1.HIV/AIDS surveillance report 2.National Strategy for	Ministry of Health & Social Solidarity Hellenic Center for Infec-	2008	General population,MSM, IDUs, Haemophi-	The annual "H.C.D.C.P. HIV/AIDS surveillance report" includes	N/A	National	UNGASS	Period of reported data: 1984-2007 (31/10/2007)

	HIV/AIDS 2008-2012	tious Diseases Control (H.C.I.D.C.)		liacs/Coagulation disorder, Transfusion recipients, Heterosexuals, Mother to child	all HIV/AIDS cases reported to the H.C.D.C.P. since the beginning of the epidemic in Greece. Data presented in the HIV/AIDS surveillance report are provided by the Infectious Diseases Units, the AIDS Reference Centers and the Hospitals' Blood Bank Units. Data are recorded and managed by the H.C.D.C.P Office of HIV Infection, Sexually Trasmitted Diseases and ESTHER.				
HUNGARY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ITALY	Sentinel STD Surveillance www.iss.it	National Institute of Health	Since 1990 until 2008	STI clinic attenders	Face – to – face interview	5000	Sentinel	N/A	A prospective STD surveillance system was developed in Italy in 1990. Newly diagnosed cases of sexually transmitted disease (STD) are reported by a network of 45 sentinel STD clinics

									throughout the country.
LITHUANIA	KAP analysis – UNAIDS Country Progress Report www.unaids.org	Lithuanian AIDS Centre	2006 – 07 (latest version)	MSM, SW, IDUs	Face – to – face interviews	N/A	National	UNGASS	NONE
LITHUANIA	Assessment of the knowledge on HIV/AIDS among university students	Lithuanian AIDS Centre	N/A	Students	Face – to – face interviews	270 students	Local	UNGASS	Methods: a survey of 270 students of third-fourth study year using a questionnaire including 46 questions was applied. The respondents included 91 students of Mykolas Romeris (MRU) (33.7%), 92 of Vilnius Pedagogic (VPU) (34.1%) and 87 of Vilnius Gediminas Technical Universities (VGTU), of them 33.3 % male and 66.7% female.
MALTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POLAND	National surveillance system www.pzh.gov.pl/epimeld	National Institute of Public Health - National Institute of Hygiene on behalf of the Chief Sanitary Inspectorate	Monthly, annually	Population based (stratified by age group, sex, region and type of infection)	Standardized case report forms	Polish population	National	Incidence, deaths	National Surveillance System
ROMANIA	KAP analysis In UNGASS COUNTRY	National Institute for Health Research and	2006-2007	General population	Administration of the survey was direct,	N/A	National	UNGASS	The study revealed that about 10.30% started their sexual life before the age of 15 (17.30% of

	PROGRESS REPORT, Romania, Reporting period: January 2006– December 2007 Submission date: 31 January 2008	Development Romania			face-to-face interviews				the men and 3.30 of the women); 1 out of 6 people among the targeted group had at least 2 sex partners during the last 3 months; 66,2% of the men who are sexually active and 61,4% of the women declared to have used the condom during the first intercourse - an increased in the use of the condom for the first intercourse (2004 data - 58,9% of the men and 52,9% of the women); 22,6% of the respondents who have been sexually active during the last 12 months declared to have had casual sex (with partners they just met or commercial sex workers). Out of this percentage of 22,6%, less than a half (46,3%) always used a condom, more than a third (35,8%) used a condom almost every time and 6,8% never used a condom; Regarding UNGASS knowledge indicator, 9.2% of the respondents (12.5% of women and 5.8% of the male respondents) know two methods to prevent the HIV infection and 34.7% of the respondents (39.8% women and 29.4% men) correctly reject the three misconceptions. As the study did not make the

									intersection between the responses to the two prevention methods and the three misconceptions, this is not available in this report.
ROMANIA	The Reproductive Health Survey Romania 2004 available online at http://siteresources.worldbank.org/INTROMANIA/Resources/study.pdf	Cooperation among the Ministry of Health, the World Bank, UNFPA, UNICEF, USAID/JSI R&T, SDC and WHO. UNFPA (United Nations Population Fund) was in charge of coordination of the Reproductive Health Survey, establishing and coordinating the Steering Committee as well as the dissemination of the survey results.	2004	Women aged 15-44 and Men, aged 15 -49 years	Face-to-face interviews	The sample included 4441 women aged 15-44 and 2361 men, aged 15 -49 years.	National	UNGASS	More than half of the reproductive-age women do not think they are at risk of contracting HIV (54%), about the same as in 1999, when 57% percent of female respondents thought they were at no risk. In 2004, only 32% of men thought they had no risk of contracting HIV, a large decrease since 1999, when almost half of all men (49%) thought they were at no risk of HIV.
ROMANIA	BSS study among MSM - PSI Respon-	Population Services International, NGO	October 2007 - March	Men having sex with men	Survey based on face-to-face interviews	Data referred to res-	National	UNGASS	Preliminary data indicate that 46.88% of the respondents made an HIV test in the last 12

	dent Driven Survey In UNGASS COUNTRY PROGRESS REPORT Romania Reporting period: January 2006– December 2007		2008			pon-dents who took an HIV test in the last 2 years.			months and know the result, 58.59% of the respondents reported to have participated in HIV prevention programs, against 3.1% reported in 2005. The HIV knowledge indicator registered very good scores for the condom (90.63%) and lowest for meal sharing misconception (69.53%), resulting in an over all score of 45.31%, the highest in all at risk groups. Significant differences a-mong age groups is registered in the faithfulness question (80.52% respond correctly among those under 25 and only 68.63% among older MSM). Condom use at last anal sex is of 72.66%, with older MSM (<25 yo) having increased risky behaviour (68.63%) if compared to younger ones (75.32%).
ROMANIA	BSS survey conducted by NAD Agency on IDU (source:National AIDS Committee, Department for AIDS monitoring, Matei Bals National Institute for	National Anti Drug Agency (GOV)	2007	Injecting Drug Users	Direct interview (in outreach and drop-in centers)	333 IDUs - clients of prevention and treatment programmes	N/A	UNGASS	The HIV knowledge indicator extracted from a special BSS survey conducted by NAD Agency in 2007 registered good scores for the condom (84.28%), even if less if compared to other groups and lowest for the mosquito one (57.28%), resulting in an over all score of 29.8% (only 27.6% of the 500 IDUs who responded in 2004 had used sterile injecting

	Infectious Diseases, Bucharest, 2007, "The evolution of the HIV/AIDS phenomenon in Romania between 1985-2007)								equipment the last time they injected, with females having significantly lower scores (17.43% versus 30.18% for males). 73% of the heroin injectors used non-sterile injecting equipment during the last injection and over 90% injected with used needle within the last month
ROMANIA	Behavioural survey of Young people living with HIV/AIDS.	Romanian Angel Appeal NGO	2009	Young People Living with HIV/AIDS (YPLWH)	Face-to-face interviews	The sample included 585 YPLWH (341 de girls and 254 boys), mean age 20,6 years	National (9 regional centers for HIV/AIDS)	UNGASS	38% of the respondents had a maximal score at UNGASS comprehensive knowledge indicator (correct responses at all 5 questions). 53% declared they do not know the symptoms of a STI, while 34% declared to have had an STI during their lifetime, only 6% were diagnosed with a STI during the last year. 34% declared not having started their sex life. The median age for first sexual contact was 17 years. 56% of those who declared to have started their sexual life declared to have had one single sex partner during the last year, in 33% of the cases this was a HIV seropositive partner also. 38% of the seroconcordant couples did use a condom constantly. In 50% of the cases in which the sexual partner was not seropositive person or whose HIV sta-

									tus was unknown, that one did not take an HIV test during the last 12 months. 79% of those having a stable seronegative sex partner or one to whom their HIV positive status was not revealed reported to have constantly used a condom. 7% of the 595 participants (32 girls and 7 boys) had at least one child, none was confirmed to be infected.
SLOVENIA	BORDERNET KAB survey and mobility	ZZV Maribor – regional institute of public health Maribor	2006-2007	Youth, MSM	Field work with target groups with paper Questionnaires	100 each target group	regional	UNGASS, DD	NONE
SLOVENIA	Unlinked anonymous monitoring of HIV among MSM, behaviour component added in 2000	IPH RS	2000 – 2008	Young MSM	Paper questionnaire, one night one venue based convenience sampling each year in December since 1996	100	local	UNGASS, DD	Key person dr. Irena Klavs
SLOVENIA	SIALON KAB SURVEY	ZZV Maribor – regional institute of public health Maribor	N/A	MSM	Paper questionnaire, MSM venues based convenience sampling	400	regional	UNGASS, DD	NONE

All data gathered through this methodology has been organized in the following two structures:

1) The first structure is:
   - Existing national reporting system of each country
   - HBV, HCV, HIV/AIDS situation in each country
   - HBV, HCV, HIV/AIDS spreading among young people
   - Current legislation in each country about HBV, HCV, HIV/AIDS
   - Last prevention and information activity about HBV, HCV, HIV/AIDS in each country

2) The second structure is:
   - General country data:
     - Size of population
     - Life expectancy at birth
     - Percentage population under 15 years
     - Population below the poverty line
     - Median age at first contact
     - Heath expenditure per capita per year
     - Contraceptive prevalence rate
     - Birth rate
     - Maternal mortality rate per 100.000 live births
   - Epidemiological data:
     - Estimated n. of persons living with HBV, HCV, HIV/AIDS and co-infections
     - Estimated n, of children under 15 years old living with HBV, HCV, HIV/AIDS and co-infections
     - Young persons (aged 15-24) living with HBV, HCV, HIV/AIDS and co-infections
     - Adult persons (aged 15+) prevalence rate (%) about HBV, HCV, HIV/AIDS and co-infections
     - Young persons (aged 15-24) prevalence rate (%)(%) about HBV, HCV, HIV/AIDS and co-infections
     - Number of deaths due to HBV, HCV, HIV/AIDS
     - Number of newly diagnosed cases of HBV, HCV, HIV/AIDS and co-infections
     - Percentage of cases among young persons (aged 15-24) of HBV, HCV, HIV/AIDS and co-infections
     - Predominant infection mode of HBV, HCV, HIV/AIDS
   - Prevalence among young people (aged 15-24) at higher at risk of HBV, HCV, HIV/AIDS and co-infections:
     - IDUs
     - Migrants
     - MSM

These structures has been adopted in order to obtain comparable data and evaluate the **knowledge gaps**.
In particular, in Bulgaria no data on the spread of HBV, HCV and HIV/AIDS are available by national authorities and Public Institutes. Therefore, data showed in this report have been collected from scientific reports and official reports released by international agencies as UNAIDS and ECDC. Despite that, most of data on HBV, HCV and HIV/AIDS in the three target groups aren't available.

Ministries of Health or their subordinated Centres for Diseases Control and Prevention / National Institutes for Public Health were the main National data sources for all the other partners. For Cyprus, data

reported here have been collected from the Ministry of Health. With regard to the situation of Czech Republic, data have been gathered basically from the National Institute of Health, also through the Centre of Epidemiology and Microbiology. For Greece, sources have been various scientific studies for Hepatitis, notably the HEPNET study for chronic Hepatitis B, whereas official organizations, as Hellenic Centre for Diseases Control and Prevention, for HIV/AIDS. Most of data gained from Hungary are from official reports by the National Centre for Epidemiology (OEK). For Italy, data related to the general population have been collected from official sources as Ministry of Health, National Institute of Health, while data concerning special populations have been provided by scientific studies. Data of Lithuanian context have been principally identified by the Center For Communicable Diseases And AIDS, within the Ministry of Health. For Malta situation, data available belonged to the Ministry of Health (especially the Committee on Communicable Disease Control Strategy on behalf of the Health Division), UNAIDS and WHO reports. Hepatitis data related to Poland have been gathered particularly from scientific studies, whereas most of HIV/AIDS, data have been collected from the National Institute of Health. In Romania, data for HIV /AIDS where mainly gathered from the National AIDS Committee, while the data for Hepatitis B and C were compiled from a variety of sources and from many scientific studies. International data bases (EuroHIV, EMCDDA, ECDC, UNGASS, Human Rights Watch, WHO) contain more accessible and updated information compared to the national ones. Finally, for the Slovenian context, the most important source was the National Institute of Heath.

In the end, it's important to underline that it has been complicated to gain data in respect with the proposed schemes due to the **lack of official and recent data or due to the difficulty to find updated reports by the national authorities generally available**. In this framework, we consider that dissemination of the project results to the PAs will be a an added value for all of the involved partners countries Furthermore, the usage of different indicators in each country has been a challenge, and consequently **one of the main goal of this report has been the definition of a set of common indicators**.

2. OVERVIEW ON THE EPIDEMIOLOGY OF HBV, HCV AND HIV/AIDS AMONG YOUNG PEOPLE IN THE EU

2.1 European epidemiology history and trends

2.1.1 HBV (from the origin to the 1990's)

Starting from the 1940's doctors began to realize that a virus was possibly responsible for the liver inflammation. In the 1960's and in the 1970's doctors finally made a clear link between what was then called protein AA and Hepatitis[56]. This protein is now called Hepatitis B Surface Antigen, or HBsAg.

The Hepatitis B vaccine was introduced and licensed in the countries of Northern and Western Europe at about the same time, in 1981 and 1982, so they had more than 10 years' experience with the Hepatitis B vaccine and immunisation strategies. In Italy, HBV-infection was probably more widespread between the end of the 1960's and the beginning of the 1970's. Between 1970 and 1984 there has been a slow but steady reduction in new cases of disease and infection which, however, have remained markedly higher than the average values for the Northern European countries[57].

In the mid-1990's, in the WHO European Region, more than one million people became infected with HBV each year of whom about 90.000 became chronic HBV carriers, and in "the 25 countries in Central and Eastern Europe and the Newly Independent States (NILS) many states had high incidence rates of HBV-infection, only five had already yet included HBV in their national immunisation programmes"[58]. Prevalence and incidence of HBV-infection were lowest in Scandinavia and Great Britain and increased as one moves southward and eastward. Low prevalence areas include Western Europe, the Baltic States, and the Northern parts of Central and Eastern Europe. Reported incidence rates in these regions range from one to 25 cases per 100.000 population per year. In 1996 in Europe the level of endemicity increased from North to South and from West to East, with carrier rates: North-Western Europe <0.1%; Midwestern Europe 0.1-0.5%, South-Western Europe, 1-5%, Eastern Europe 2-7%.

In 1992 a study to obtain information on surveillance system (notification of cases) data on incidence of acute Hepatitis B as well as estimates of the prevalence of the Hepatitis B carriage and infection in the general population and in specific groups[59]. The average annual incidence of acute Hepatitis B for Europe was 20 per 100.000 population. The countries of Northern and Western Europe (for instance, Denmark, Finland, Norway Sweden, United Kingdom, Belgium, Luxembourg, Netherland, Germany, France, Switzerland, Austria and Northern parts of Italy) show a similar epidemiology for Hepatitis B. In the Western part of the region, Southern countries had annual incidence rates of about 6 per 100.000 while Northern countries, such as Scandinavia, Ireland and the UK, had much lower rates of about 1 per 100.000. Central Europe had markedly higher rates of about 20 per 100.000 (range 12-57).

[56] Alter, H.J.; Blumberg, B.S. (1966), "Further studies on a "new" human isoprecipitin system (Australia antigen)", *Blood*, 27, 3, pp. 297-309; Galibert, Francis; Mandart, Elisabeth; Fitoussi, Françoise; Tiollais, Pierre; Charnay, Patrick (1979), "Nucleotide sequence of the Hepatitis B virus genome (subtype ayw) cloned in E. Coli", *Nature,* 281, pp. 646-650. Baruch S. Blumberg was awarded the Nobel Prize in Physiology or Medicine in 1976 for his discovery of the Australia antigen, now called "HB_s-antigen", that represents the envelope of HBV, the virus which causes Hepatitis B infections.

[57] Crovari, Pietro (1995), "Epidemiology of viral Hepatitis B in Italy", *Vaccine*,
13, Suppl. 1, pp. S26-S30.

[58] FitzSimons, D.; Van Damme, P. (1997), **"**Prevention and control of Hepatitis B-in central and eastern Europe and the Newly Independent States. Siofok, Hungary, 6-9 October 1996", *Vaccine*, 15, 15, pp. 1595.

[59] Roure, Colette (1995), "Overview of epidemiology and disease burden of Hepatitis B in the European region", *Vaccine*, 13, Suppl. 1, pp . S18-S21.

In 1995, these countries have a low endemicity of Hepatitis B. The carrier rate for Hepatitis B surface antigen (HBsAg) ranges from 0.2 to 0.8%, and 5 to 10% of individuals showed serological signs of the past Hepatitis B virus (HBV) infection, i.e. antibodies to core and surface antigen (anti-HBc and anti-HBs)[60].

Over the last decade, the number of cases of HBV reported has steadily decreased, although there are still marked variations between Member States, and in some countries incidence is even rising. In Europe, HBV is increasingly seen as a sexually transmitted disease but there is evidence that common practices, such as tattooing and beauty treatments, are still significant sources of infection[61].

Table 2.1.1.1 – Endemicity of the Hepatitis B virus infection in Central and Eastern Europe and the Newly Independent States in terms of prevalence of HBsAg in 1996.

Low (<2%)	Intermediate (2-8%)	High (≥8%)
Armenia	Belarus	Albania
Croatia	Bulgaria	Azerbaijan
Czech Republic	Former Yugoslav Republic of Macedonia	Kazakhstan
Estonia	Georgia	Kyrgyzstan
Hungary	Lithuania	Moldova
Latvia	Romania	Russian Federation (parts)
Poland	Russian Federation (part)	Tajikistan
Slovak Republic		Turkmenistan
Slovenia		Uzbekistan
Ukraine		

Source: FitzSimons, D; Van Damme, P. (1997), "Prevention and control of Hepatitis B-in central and eastern Europe and the Newly Independent States. Siofok, Hungary, 6–9 October 1996", Vaccine, 15, 15, p. 1595.

2.1.2 HCV (from the origin to the 1990's)

It is difficult to describe and undertake studies that can credibly define the natural history of HCV because the date of infection is rarely known[62]. The existence of the Hepatitis C virus was postulate in the 1970's but the virus was discovered only in 1989.

Despite that, it has been suggested that the initial spread of the virus in Europe started during the last century through the use of unsafe parental injections, invasive medical and surgical procedures and transfusion of blood products[63]. It has been suggested that blood transfusions were a leading cause of the spread of HCV in most European countries since World War II. Indeed, in the late 1980's, 2% to 10% of

[60] Jilg, Wolfgang (1995), "Selective risk group strategies Europe", *Vaccine*, 13, Suppl. 1, pp. S44-S46.
[61] European Centre for Disease Prevention and Control (ECDC), *Hepatitis - Statement for World Hepatitis Awareness day*; URL: http://ecdc.europa.eu/en/healthtopics/Pages/Hepatitis_Awareness_Day.aspx, on 25th August 2009.
[62] Twisselmann, Birte (2000), "Infection with Hepatitis C virus", *EuroSurveillance*, 4, 31.
[63] Esteban, Juan I.; Sauleda, Silvia; Quer, Josep (2008), "The changing epidemiology of Hepatitis C virus infection in Europe", *Journal of Hepatology*, 48, pp. 148-162.

blood units in developed countries transmitted HCV[64]. **In studies conducted in the 1990's, the prevalence rate of anti-HCV antibodies in haemodialysis patients ranges from 10% to 30%**[65]. However, only 4% had been reported from the UK whereas the prevalence was somewhat higher in Sweden (12%). Mediterranean countries reported much higher prevalence, such as 25% in Spain and 33% in France and Italy[66].

According to more recent data[67], significant geographic and temporal differences in the epidemiology of HCV-infection in Europe are due to the patterns of HCV transmission. In Northern Europe the epidemic was mainly transmitted by IDUs. With an overall prevalence between 0.1 and 1%, in these countries most prevalent infections are found among adults 30–50 years old. In Central Europe HCV prevalence is intermediate, ranging from 0.2% in the Netherlands to 1.2% in France. In Southern Europe (i.e. Spain, Italy, Greece, Southern France), the overall prevalence ranges between 2.5% and 3.5%. In these countries, an initial epidemic (occurring >50 years ago) of iatrogenic nature led to a high infection prevalence in older people, followed, some 30 years later, by a still-ongoing IDU-related epidemic which spread the infection among younger people. In Eastern Europe, the incidence of acute Hepatitis C (2.2 - 9 cases per 100.000 population) was already increasing in the mid-1990's among people aged 15 to 29, as a result of the epidemic of IDU.

2.1.3 HIV/AIDS (from the origin to the 1990's)

The origin and the epidemiology of the HIV are controversial. However, the earliest known case of HIV-1 was a man from Kinshasa, Democratic Republic of Congo, and collected from a blood sample in 1959, even if the mode of infection is not known. Genetic analysis of this blood sample seemed to indicate that HIV-1 may have stemmed from a single virus in the late 1940's or the early 1950's[68].

The first HIV study reported in Western countries was identified in the United States in 1981. In fact, "MMWR published a report of five cases of Pneumocystis carinii pneumonia (PCP) among previously healthy young men in Los Angeles"[69]. In May 1983 there was the isolation of a new retrovirus (later named HIV) by the team of Francoise Barre Sinousi and Luc Montaigner (awarded with the Nobel prize in Medicine in 2008) led to the first diagnostic tests that permitted blood testing for the virus, and consequently the prevention of transmission by blood and blood derivatives.

Between 1985 and 1991, in Western Europe, the overall number of newly reported HIV diagnoses rose **21-fold from around 5.000 to 112.000**; the overall number of AIDS cases increased **39-fold from 2.000 to 76.000, and the overall number of AIDS deaths grew 45-fold from 900 to 39.000**, while Central and Eastern Europe were still generally free from HIV during this period[70].

The early stage of the HIV epidemic in the industrialized world has been described as the phase of blame, denial and punishment. It was only in the late 1980's that the first drug for HIV treatment was ap-

[64] Prati, Daniele (2006), "Transmission of Hepatitis C virus by blood transfusions and other medical procedures: A global review", *Journal of Hepatology*, 45, pp. 607-116.
[65] Ramadori, Giuliano; Meier, Volker (2001), "Hepatitis C virus infection: 10 years after the discovery of the virus", *European Journal of Gastroenterology & Hepatology*, 13, 5, pp. 465-471.
[66] Bellentani, Stefano; Miglioli, Lucia; Masutti, Flora; Saccoccio, Gioconda; Tiribelli, Claudio (2000), "Epidemiology of Hepatitis C virus infection in Italy: the slowly unraveling mystery", *Microbes and Infection*, 2, 14, pp. 1757-1763.
[67] Esteban, Juan I.; Sauleda, Silvia; Quer, Josep (2008), "The changing epidemiology of Hepatitis C virus infection in Europe", *Journal of Hepatology*, 48, pp. 148-162.
[68] Centers for Disease Control and Prevention (CDC); *Where did HIV come from?*; URL: http://www.cdc.gov/hiv/resources/qa/qa3.htm, on 23rd September 2009.
[69] Centers for Disease Control and Prevention (CDC) (2006), "Twenty-Five Years of HIV/AIDS – United States, 1981-2006", *Morbidity and Mortality Weekly Report*, 55, 21, pp. 585-589.
[70] Matic, Sradan (2006), "Twenty-five years of HIV/AIDS in Europe", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., *Hiv/AIDS in Europe. Moving from death sentence to chronic disease management*, World Health Organization; URL: http://www.euro.who.int/document/e87777.pdf.

proved in Europe. Its approval was an important step in this to fight the disease. That was the result of vigorous and often unusually provocative advocacy efforts by PLWHA (People Living With HIV/AIDS) and community-based organizations, mainly gay organizations from the United States and Western Europe that were also leading the movement for gay, lesbian, bisexual and transgender rights. the early HIV/AIDS epidemic struck gay men and injecting drug users (IDUs) in North America and Western Europe – or more precisely, it struck the members of the so-called "4-H Club" there: homosexuals, Haitians, heroin addicts and haemophiliacs[71].

The late 1980's and the early 1990's also determined an important scale-up of specific prevention plans in Western Europe. They included widespread public information and awareness campaigns and safer sex promotion efforts. Among the targeted interventions, the most significant were harm-reduction initiatives to prevent the spread of HIV through **injecting drug use**. Indeed, that was **one of the two primary modes of transmission in Western European countries** with the highest burden of HIV/AIDS (for example **France**, **Italy**, **Portugal**, **Spain** and **Switzerland**). Thanks to these and other prevention efforts, the annual increase in new reported HIV cases stabilized at around 10% annually between 1990 and 1997. These trends in Western Europe suddenly started to change for the worse from the beginning of XXI century. The recent growth in new cases there reflects an increase in both "imported" and "domestic" infections. While the feared "treatment migration" – an influx of HIV-positive foreigners attracted by better treatment options – never materialized there, economic and political immigration from former colonies hard hit by the epidemic had inevitable side-effects[72].

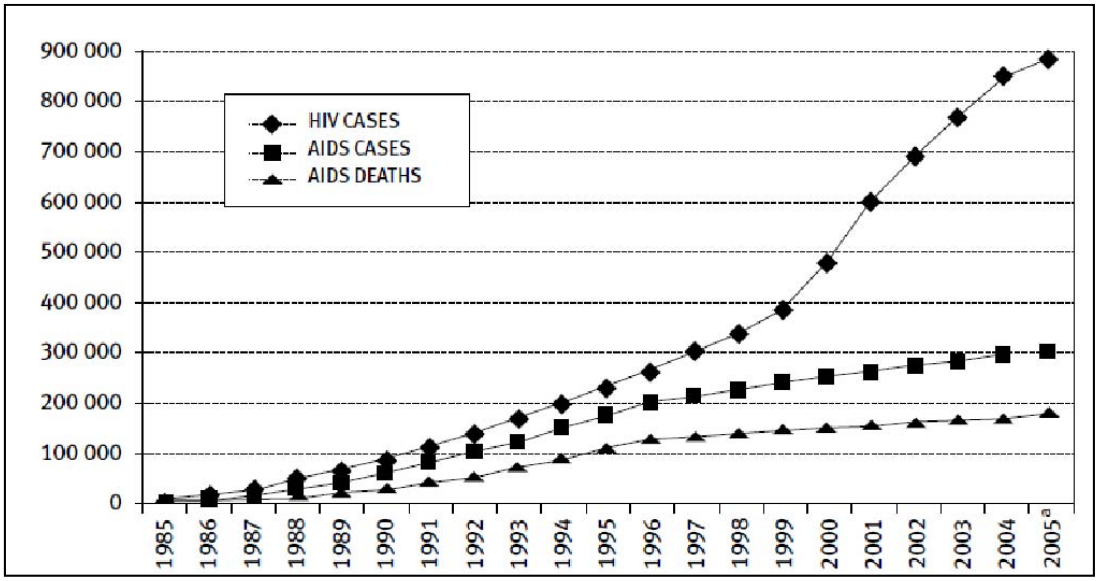
In the mid-1990's, 43% of the cumulative AIDS cases were IDU-associated. Over 90% of IDU-associated cases were concentrated in South-Western European countries with considerably higher rates in Spain (124 cases per million in 1995), Italy (68 per million), Portugal (42 per million), France (38 per million). During 1990-1995, incidence increased at an average annual rate of 11% overall and of 23% in Central and Eastern Europe. IDU have played a major role in the spread of HIV in Europe. In several Western European countries, the incidence of HIV acquired through drug use has declined following high rates in the mid-1980's[73].

[71] *Ivi*.

[72] Donoghoe, Martin C. (2006), "Injected drug use, harm reduction and HIV/AIDS", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., *Hiv/AIDS in Europe. Moving from death sentence to chronic disease management*, World Health Organization; URL: http://www.euro.who.int/document/e87777.pdf.

[73] Hamers, Françoise F.; Batter, Véronique; Downs, Angela M.; Alix, Jane; Cazein, Françoise; Brunet, Jean-Baptiste (1997), "The HIV epidemic associated with injecting drug use in Europe: geographic and time trends", *AIDS*, 11, 11, pp. 1365-1374.

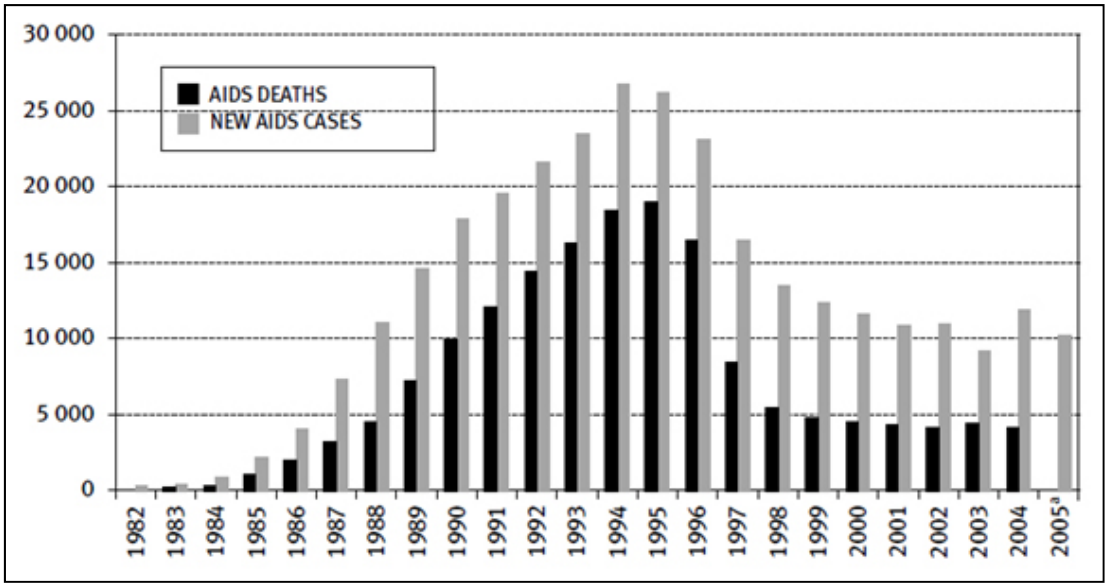
Figure 2.1.3.1 – Cumulative reported case of HIV and AIDS, WHO European region (52 countries).



[a]Data as of 1 October 2005, based on partial and preliminary national reports. *Source: Matic, Sradan (2006), "Twenty-five years of HIV/AIDS in Europe", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., Hiv/AIDS in Europe. Moving from death sentence to chronic disease management, WHO; URL: http://www.euro.who.int/document/e87777.pdf.*

The number of newly reported AIDS cases and AIDS deaths levelled off after 1999 but appears to have been increasing since 2003. Two primary reasons contribute to this trend. First of all, the main reason that infected people progress toward AIDS and AIDS-related death is the lack of access to antiretroviral treatment in Eastern Europe. Second, even though in countries where treatment is easily accessible exist the need of further reduction in new AIDS cases because there are still a significant number of individuals who seek medical care only at a well-advanced stage of the infection.

Figure 2.1.3.2 – Reported AIDS deaths and new AIDS cases, WHO European Region (52 countries).



[a]Data as of 1 October 2005, based on partial and preliminary national reports. *Source: Matic, Sradan (2006), "Twenty-five years of HIV/AIDS in Europe", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., Hiv/AIDS in Europe. Moving from death sentence to chronic disease management, WHO; URL: http://www.euro.who.int/document/e87777.pdf.*

2.2 Current situation in Europe

2.2.1 HBV

In the general population the prevalence of Hepatitis B surface antigen differs widely among EU countries, with higher rates in Romania (6%), Bulgaria (4%) and Latvia (2%) and lower rates in the Netherlands, Slovenia and Norway (all below 0.5%). Due to the large disparities that exist in surveillance systems, reporting practices, data collection methods and case definitions across EU countries, the surveillance data are hard to compare across countries[74].

As reported by the ECDC[75], in 2007 the Hepatitis B cases in EU and EEA/EFTA Member States were 6481, a rate of 1.51 per 100.000 inhabitants. The highest notification rates were observed in Bulgaria (10 cases per 100.000), Latvia (7.2 per 100.000), Denmark (5.1 per 100.000) and Romania (4.3 per 100.000). Among countries that reported cases, the number of Hepatitis B cases increased by 7% in 2007 on 2006. The most affected age groups are those between 25 and 44 years old with 52% of cases (3.0 cases per 100.000), followed by the 15–24 year-olds (2.6 cases per 100.000). The highest rates among young people aged 15–24 years were reported in Iceland (13 per 100.000), Romania (11 per 100.000) followed by Denmark (6.8 per 100.000).

In Europe, from 20% to 60% of IDUs are seropositive for HBV and immigrants from highly endemic regions are 5-90 times more frequently touched by HBV than the general population[76]. Rates in IDUs under the age of 25 are between 20% and 80%, showing that transmission continues. IDUs have low rates of HBV vaccination (4-22% of IDUs without active or past infection had been vaccinated)[77].

In the early 1980's when the Hepatitis B vaccine became available, nearly all countries opted to vaccinate only at-risk groups[78]. In this decades, much progress has been made since HBV vaccine. The World Health Assembly in 1992 resolved that "[H]epatitis B vaccine be included in routine immunisation schedules for all children in all countries"[79]. In the European Region of the WHO (representing 52 countries), 43 countries have implemented a universal HBV immunisation programme[80].

All countries in Central and Eastern Europe implemented universal neonatal, infant or childhood immunisation programmes: most of these countries have since 2000 seriously progressed towards the implementation of universal HB immunisation, reaching coverage rates over 90% and their success offers an excellent model for other countries[81].

Also in Western Europe, most countries started with a universal infant/neonate or adolescent immunisation programme. Indeed, Belgium (1999), Germany (1995), Italy (1991), Portugal (adolescents in 1994; neonates in 2000) and Spain (adolescents in 1993; neonates in 1998) have adapted both universal programmes[82]. These countries will finish the adolescent programme when the first immunised infant/newborn cohort has reached the target age of the adolescent programme. This has already happened in Italy in 2004 and also some Western European countries are considering this issue and making budgetary

[74] Rantala, M; van de Laar, M. J. (2008), "Surveillance and epidemiology of Hepatitis B and C in Europe – a review", *EuroSurveillance*, 13, 21.
[75] European Centre for Disease Prevention and Control (ECDC) (2009), *Annual Epidemiological Report on Communicable Diseases in Europe 2009*, Stockholm.
[76] European Centre for Disease Prevention and Control (ECDC) (2009), *ECDC Technical Report. Migrant health: Background note to the 'ECDC Report on migration and infectious diseases in the EU'*.
[77] Brewer, DD; Hagan, H. (2009), "Evaluation of a patient referral contact tracing programme for Hepatitis B and C virus infection in drug injectors", EuroSurveillance, 14, 14.
[78] Piazza, Marcello (2008), "Universal Hepatitis B vaccination", *The Lancet Infectious Diseases,* 8, 2, p. 90.
[79] World Health Organization (WHO) – Departement of Vaccines and Biologicals (2001), *Introduction of Hepatitis B vaccine into childhood mmunization services. Management guidelines, including information for health workers and parents*, p. 1.
[80] World Health Organization (WHO), *Vaccine-preventable Diseases and Immunization. Hepatitis B*,
URL: http://www.euro.who.int/vaccine/diseases/20090127_15, on 23rd September 2009.
[81] Van Damme, Pierre (2001), "Hepatitis B: vaccination programmes in Europe — an update", *Vaccine*, 19, pp. 2375-2379.
[82] Van Damme, Pierre (2004), "Introducing universal Hepatitis B vaccination in Europe: differences still remain between countries"*, EuroSurveillance*, 8, 47.

provisions for introduction of HBV vaccine into their vaccination programmes, sometimes in a restricted way. Even though the WHO recommended that the universal childhood Hepatitis B vaccination be implemented globally, the Northern European countries (Denmark, Finland, Iceland, Ireland, Netherlands, Norway, Sweden, and UK) have yet to implement such a policy, choose to provide the Hepatitis B vaccines only to well-defined risk groups (e.g. IDUs, MSM and dialysis patients), in addition to screening pregnant women to identify and vaccinate exposed newborns[83]. Risk group vaccination policy identifies individuals often when already infected, misses a substantial part of the respective risk groups and will not be able to control further transmission at country level.

In the Netherlands, HBV vaccination is recommended for children who have at least one parent who was born in a HBV highly endemic country. In Denmark numerous recent initiatives have been undertaken to improve surveillance and prevention of Hepatitis B. For day-care and children exposed to a carrier in a day-care setting. In addition, national guidelines are currently being re-evaluated and the need for universal childhood HB immunisation assessed[84]. According to Van Damme, studies on economic evaluation and sero-epidemiological analysis "have indicated that epidemiological and economic arguments cannot be used to delay the implementation of universal Hepatitis B vaccination"[85].

Indeed, immunisation strategies targeting only multiple risk groups have failed because didn't provide adequate coverage in the United Kingdom. In the Netherlands, after 20 years of risk-group vaccination, the Hepatitis B virus still circulates in the men who have sex with men (MSM) group, and Dutch blood donors were recently shown to have acquired the strains circulating in the MSM group. In addition, the increasing number of immigrants moving to Europe, often from highly endemic regions, is leading to a profound change in the Hepatitis B epidemiology of low endemic countries[86].

[83] Zuckerman, Jane; van Hattum, Jan; Cafferkey, Mary; Gjørup, Ida; Hoel, Terje; Rummukainen, Maija-Liisa; Weiland, Ola (2007), "Should Hepatitis B vaccination be introduced into childhood immunisation programmes in northern Europe?", *The Lancet Infectious Diseases*, 7, pp. 410-419.
[84] Van Damme, Pierre (2004), "Introducing universal Hepatitis B vaccination in Europe: differences still remain between countries", *EuroSurveillance*, 8, 47.
[85] Van Damme, Pierre (2001), "Hepatitis B: vaccination programmes in Europe — an update", *Vaccine*, 19, pp. 2375-2379.
[86] Van Damme, Pierre (2004), "Introducing universal Hepatitis B vaccination in Europe: differences still remain between countries", *EuroSurveillance*, 8, 47.

Table 2.2.1.1 – Year of introduction of HBV vaccine in the EU MS.

COUNTRY	NEW BORN/INFANT UNIVERSAL VACCINATION PROGRAMME	ADOLESCENT/CHILDHOOD UNIVERSAL VACCINATION PROGRAMME
AUSTRIA	1998	N/A
BELGIUM	1999	1999
BULGARIA	1991	N/A
CZECH REP.	2001	2001
CYPRUS	N/A	N/A
DENMARK	No universal programme	N/A
ENGLAND-WALES	No universal programme	N/A
ESTONIA	2003	1999
FINLAND	No universal programme	N/A
FRANCE	1994-1995	1994-1995
GERMANY	1995	1995
GREECE	1998	1998
HUNGARY	N/A	1999
IRELAND	No universal programme	N/A
ITALY	1991	1991
LATVIA	1997	N/A
LITHUANIA	1998	2002
LUXEMBOURG	1997	N/A
MALTA	N/A	1997
NETHERLANDS	No universal programme	N/A
POLAND	1993-1996	2000
PORTUGAL	2000	1994-1995
ROMANIA	1995	1999
SLOVAK REP.	1998	N/A
SLOVENIA	N/A	1998
SPAIN	1998	1993
SWEDEN	No universal programme	N/A

Source: Leuridan, E.; Van Herck, K.; Vorsters, A; Van Damme, P. (2005), Overview of Hepatitis B prevention programmes. Results of the EUROHEP.NET feasibility survey; URL: http://www.eurohep.net/files/surveyresults/BookPreventionprogrammeshepB.pdf, on 23rd July.

One of the most effective programme to prevent HBV-infection is the Needle and Syringe Exchange Programme (NSP). NSPs have been established in all European countries, with the possible exceptions of Cyprus and Malta. In Western Europe, many countries introduced NSPs relatively early in their epidemics. Programmes in the Netherlands and the United Kingdom preceded infectious diseases among IDUs. Denmark, France, Germany, Ireland, Norway, Spain and Sweden all established programmes in the mid-to-late 1980's. Austria, Belgium, Italy, Luxembourg and Portugal did not have such programmes until the early or

the mid-1990's. Finland, Greece and Northern Ireland were the last countries in Western Europe to introduce needle and syringe programmes[87].

2.2.2 HCV

In 2006, 12 EU (Czech Republic, Germany, Denmark, Finland, Hungary, Italy, Lithuania, Latvia, Malta, Netherlands, Slovakia, and Sweden) countries reported their total number of notified cases, of which 5 countries reported a total of 22.050 combined acute or chronic cases, only Denmark informed 300 chronic cases, and seven countries (including Denmark) reported a total of 400 acute cases. Eleven of the 12 countries provided the figure of notifications with known risk factors. The proportion of notified cases with known risk factor has amplified slightly (from 40% in 2001 to 43% in 2006) but on the whole it has remained very low. In 2006, this proportion varied across countries, from 8% of cases in the UK (England and Wales) to 88% in Denmark[88].

In 2007, 27.591 cases of Hepatitis C infection were reported by 27 EU and EEA/EFTA Member States, of which 26.840 were confirmed, giving an overall notification rate of 6.87 per 100.000 population. No data were available from France, Liechtenstein or Norway[89]. In 2007, 16.968 confirmed cases of Hepatitis C were reported in men (63 %) and 9 467 in women (35 %), with rates of 8.2 and 4.4 per 100 000, respectively (male to- female ratio 1.8:1). Slightly more than half of the Hepatitis C cases were reported in the age group 25–44 years (52 % of the total). The highest rates in that age group were observed in Ireland (81 per 100.000), Iceland (54 per 100.000), Finland (44 per 100.000), Sweden (36 per 100.000) and the United Kingdom (35 per 100.000). The highest rates in young adults aged 15–24 years were reported in Finland with 375 cases (57 per 100.000) and Iceland with 24 cases (54 per 100.000).

In Western Europe blood transfusion and intravenous drug use are the two main transmission modes[90] and in certain European countries (**UK**, **Sweden**, **Norway**) **illegal injection drug use (IDU) has been the dominant mode of HCV transmission during the past 35 years, accounting for 60% to 90% of prevalent infections**[91]. The prevalence of HCV-infection in IDUs is extremely high, as reported by EuroSurveillance[92], at least 500.000 drug injectors in the EU are seropositive for HCV and this does not include a possible large number of infections in former drug users: ranging from about 40% to over 90%. Up to now, "in many countries, including France, Germany, Austria, Greece, Sweden and Italy the most common risk factor is injecting drug use, which accounts for 30-59% of all HCV-infections"[93]. Along with the quick increase of IDU in Eastern Europe, has placed drug users (IDUs) at the core of the HCV epidemic.

[87] Donoghoe, Martin C. (2006), "Injected drug use, harm reduction and HIV/AIDS", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., *Hiv/AIDS in Europe. Moving from death sentence to chronic disease management*, World Health Organization; URL: http://www.euro.who.int/document/e87777.pdf.

[88] Wiessing, L.; Guarita, B.; Giraudon, I.; Brummer-Korvenkontio, H.; Salminen, M.; Cowan, S.A. (2008), "European monitoring of notifications of Hepatitis C virus infection in the general population and among injecting drug users (IDUs) – the need to improve quality and comparability", *EuroSurveillance*, 13, 21.

[89] ECDC (2009), *Annual epidemiological report on communicable diseases in Europe 2009*, Stockholm.

[90] Desenclos, J. C. (2003), "The challenge of Hepatitis C surveillance in Europe", *EuroSurveillance*, 8, 5.

[91] Esteban, Juan I.; Sauleda, Silvia; Quer, Josep (2008), "The changing epidemiology of Hepatitis C virus infection in Europe", *Journal of Hepatology*, 48, pp. 148-162.

[92] Wiessing, Lucas (2001), "The access of injecting drug users to Hepatitis C treatment is low and should be improved", *EuroSurveillance*, 5, 31.

[93] Rantala, M; van de Laar, M. J. (2008), "Surveillance and epidemiology of Hepatitis B and C in Europe – a review", *EuroSurveillance*, 13, 21.

Table 2.2.2.1 – Number of reported cases of HCV-infection, number and percentage of cases with known risk factors, and number and percentage of cases with injecting drug use as the reported risk factor, by country in Europe.

Country	Acute, chronic, combined (acute + chronic)	Year of data	Number of cases reported of the year N (a)	Number of known risk factor (b) and % (b/a)	Number with IDUs as known risk factor (c) and % (b/a)
Croatia	Combined	2006	N/A	153	82 (54%)
Czech Republic	Combined	2006	1022	N/A	711
Germany	Combined	2006	7509	5686 (76%)	1992 (35%)
Denmark	Chronic	2006	300	264 (88%)	223 (84%)
	Acute	2006	6	5 (83%)	5 (100%)
Estonia	Acute	2004	N/A	N/A	54 (71%)**
Finland	Combined	2006	1181	694 (59%)	570 (82%)
Hungary	Acute	2006	29	15 (52%)	4 (27%)
Italy	Acute	2006	137	95 (69%)	40 (42%)
Lithuania	Acute	2006	62	30 (48%)	13 (43%)
Luxemburg	Combined	2004	395	174 (44%)	129 (74%)
Latvia	Acute	2006	105	72 (69%)	9 (13%)
Malta	Acute	2006	9	6 (67%)	6 (100%)
	Chronic	2006	24	15 (63%)	12 (80%)
Netherlands	Acute	2006	30	26 (87%)	8 (31%)
Slovenia	Acute	2003	11	2 (18%)	2 (100%)
Slovakia	Acute	2006	31	25 (81%)	13 (52%)
	Chronic	2006	239	198 (83%)	108 (55%)
Sweden	Combined	2006	1976	1220 (62%)	932 (70%)
UK* - England and Wales	Combined	2006	8774	673 (8%)	647 (96%)
UK* - Scoltland	Combined	2005	1600	988 (62%)	886 (90%)
UK* - Scoltland	Chronic	2003	1779	1104 (62%)	1030 (93%)
UK* - Northern Ireland	Combined	2006	140	19 (14%)	19 (100%)

*Laboratory reports

** Only these numbers were provided

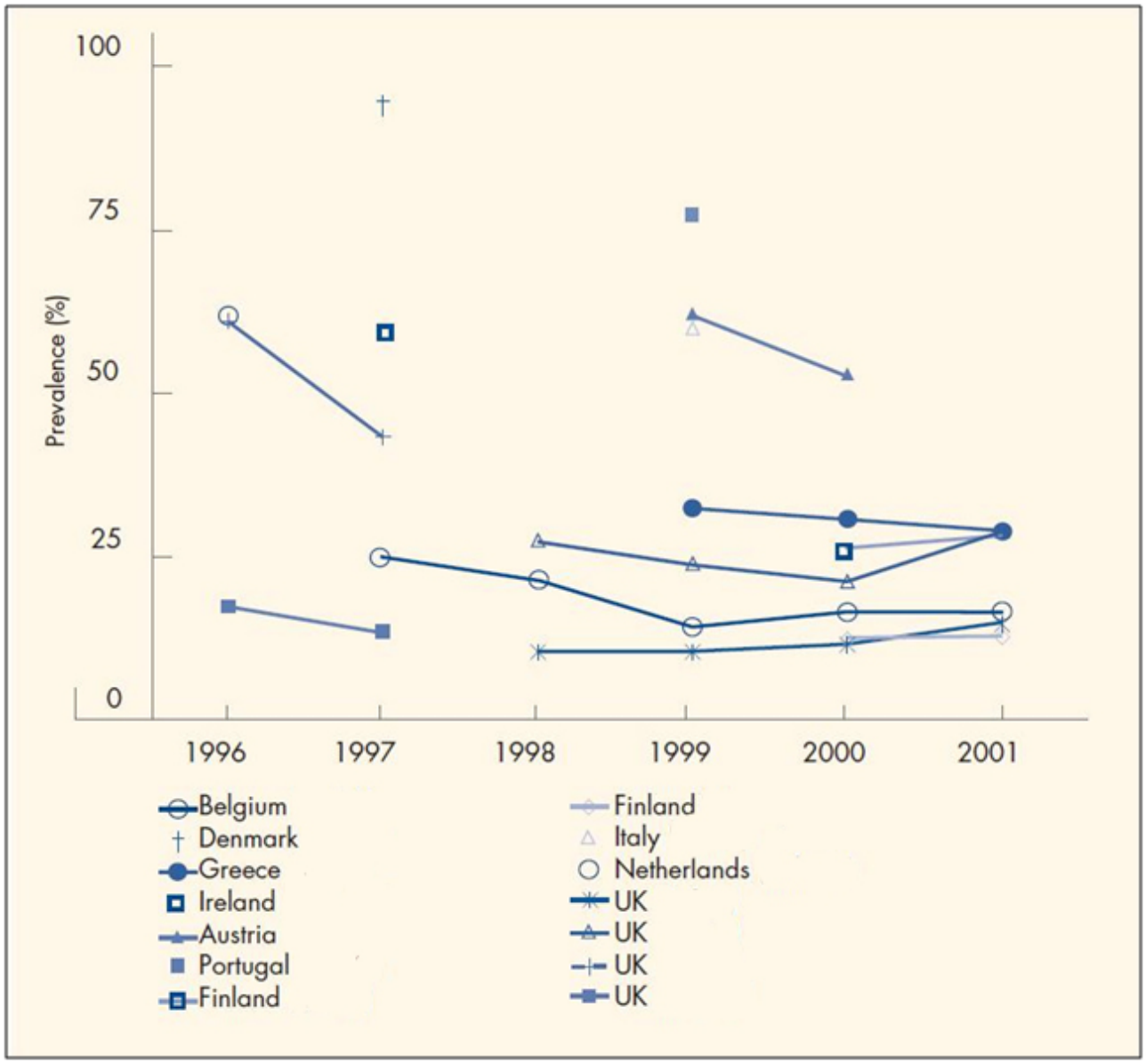
Source: Wiessing, L; Guarita, B; Giraudon, I; Brummer-Korvenkontio. H; Salminen, M; Cowan, SA (2008), "European monitoring of notifications of Hepatitis C virus infection in the general population and among injecting drug users (IDUs) – the need to improve quality and comparability", EuroSurveillance, 13, 21.

In Europe, prevalence appears to be very high among young IDUs (as showed in figure 2.2.2.1), with an unweighted median of reported prevalence in these IDUs of 30.8 (weighted median 13.9, weighted 23.5)[94]. Even in the Western Europe, IDUs are often denied HCV treatment, regardless of clinical indication,

[94] Jager, Johannes; Limburg, Wien; Kretzschmar, Mirjam; Postma, Maarten; Wiessing, Lucas (eds.), *Hepatitis C and injecting drug use: impact, costs and policy options*, EMCDDA, Lisbon 2004.

willingness to undergo therapy, and accumulating data on the safety and efficacy of HCV treatment in this population[95].

Figure 2.2.2.1 – HCV prevalence data from injecting drug users under age 25.



Source: Jager, Johannes; Limburg, Wien; Kretzschmar, Mirjam; Postma, Maarten; Wiessing, Lucas (ed.), Hepatitis C and injecting drug use: impact, costs and policy options, EMCDDA, Lisbon 2004.

Transmission of HCV by sexual contact seem to be rare although it has been observed that high-risk sexual behaviour among MSM may predispose to HCV-infection probably via permucosal route, especially in HIV infected MSM[96]. The cornerstones of preventing and reducing the burden of HCV are early diagnosis,

[95] Eurasian Harm Reduction Network (EHRN), *Treatment and diagnostics*; URL: http://www.harm-reduction.org/Hepatitis-c/treatment-and-diagnostics.html, on 25th August.
[96] Rantala, M; van de Laar, M. J. (2008), "Surveillance and epidemiology of Hepatitis B and C in Europe – a review", *EuroSurveillance*, 13, 21.

effective preventing programmes, and appropriate treatment. It is known that a large number of individuals carrying the HCV virus are not aware of being infected due to the high proportion of asymptomatic infections.

The increase of HCV prevalence associated with immigration varies among countries. In Spain, it might be estimated that about 90.000 new HCV infected persons have entered the country during the last 15 years. In other European countries, the contribution of immigrants to the HCV reservoir is even more relevant[97]. Indeed, recent estimates[98] show that immigrants account for 56% of prevalent infections in the Netherlands. In a study conducted in France among 944 underprivileged individuals, 5% had anti-HCV (being an immigrant was an independent risk factor for HCV-infection).

In a survey released in Germany, 37% of chronic Hepatitis C patients evaluated at primary health centres originated from 92 countries, mostly (21%) from Eastern Europe [99] and, moreover, 3% of late German repatriates, returning to Germany from the former USSR, were anti-HCV-positive[100]. Because of the high prevalence of HCV-infection in the general Italian and Greek populations, immigration may have not changed HCV prevalence. In three Italian seroprevalence studies among non-EU immigrants[101] and Kosovo[102] and Albanian[103] refugees, anti-HCV was found in 0.9%, 0.7%, and 0.3%, respectively, prevalence far lower than that of the Italian-born population. Similarly, 1.8% of Albanian and 0% of Kurdish refugees in Greece had anti-HCV, again far lower than the Greek local population[104].

2.2.3 HIV

AIDS is frequent among young people. Recent trends reported in Europe[105] suggests that **14% of new HIV diagnoses were young people aged 15-24 years**. In Central Europe were 17% whereas in Eastern Europe over a quarter (27%) of the new HIV diagnoses were among young people. In Europe, the burden of mortality is shifting away from men having sex with men to intravenous drug users and migrants from Sub Saharan Africa, hard hit by AIDS[106].

In Western Europe, the diminishing proportion of HIV diagnoses at 6% is connected to the use of uncontaminated injecting equipment in 2006. In Denmark and the Netherlands the number of new HIV diagnoses among injecting drug users cut down by 72% (2002) and by 91% (2006), In Central Europe newly reported HIV diagnoses in injecting drug users have decreased as well[107].

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[97] Esteban, Juan I.; Sauleda, Silvia; Quer, Josep (2008), "The changing epidemiology of Hepatitis C virus infection in Europe", *Journal of Hepatology*, 48, pp. 148–162.

[98] Sahajian, F; Vanhems, P; Bailly, F; Fabry, J; Trepo, C; Sepetjan, M. (2007), "Screening campaign of Hepatitis C among underprivileged people consulting in health centres of Lyon area, France", *European Journal of Public Health*, 17, pp. 263–271.

[99] Niederau, C; Kapagiannidis, C. (2006), "Epidemiology of Hepatitis C in Germany", *Medizinische Klinik*, 101, pp. 448–457.

[100] Holbach, M; Frosner, GG; Holbach, B; Dittmeier, E. (2004), "Hepatitis B and C infection in late repatriates", *MMW Fortschritte der Medizin*, 146, pp. 81–85.

[101] Chiaramonte, M; Pupo, A; Menegon, T; Baldo, V; Malatesta, R; Trivello, R (1998), "HBV and HCV infection among non-European Union immigrants in North-East Italy", *Epidemiology and Infection*;121, pp. 179–183.

[102] Chironna, M; Germinario, C; Lopalco, PL; Carrozzini, F; Quarto, M (2001), "Prevalence of Hepatitis virus infections in Kosovar refugees", *International Journal of Infectious Diseases*, 5, pp. 209–213.

[103] Chironna, M; Germinario, C; Lopalco, PL; Quarto, M; Barbuti, S (2000), "HBV, HCV and HDV infections in Albanian refugees in Southern Italy (Apulia region)", *Epidemiology and Infection*,125, pp. 163–167.

[104] Skliros, E.; Lionis, C.; Foudoulaki, L.; Sotiropoulos; A.; Kouroumalis, E.; Spandidos, D. (2001), "Hepatitis B and C markers in a Kurdish refugee camp in Greece", *Journal of Gastroenterology and Hepatology*, 16, pp. 839-840.

[105] European Centre for Disease Prevention and Control (ECDC), *HIV/AIDS – Factsheet*, http://ecdc.europa.eu/en/healthtopics/Pages/HIV_AIDS_Factsheet.aspx, on 25th August 2009.

[106] Brewer, DD; Hagan, H. (2009), "Evaluation of a patient referral contact tracing programme for Hepatitis B and C virus infection in drug injectors", EuroSurveillance,14,14, http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-08-357/EN/KS-30-08-357-EN.PDF.

[107] UNAIDS (2008), *2008 Report of the Global AIDS Epidemic*; URL: http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008/2008_Global_report.asp.

Needle and syringe exchange programmes (NSPs) have been established in all European countries, with the possible exceptions of Cyprus and Malta. In Western Europe, many countries introduced NSPs relatively early in their epidemics. Programmes in the Netherlands and the United Kingdom preceded HIV epidemics among IDUs. Denmark, France, Germany, Ireland, Norway, Spain and Sweden all established programmes in the mid-to-late 1980's. Austria, Belgium, Italy, Luxembourg and Portugal didn't implement such programmes until the early or the mid-1990's. Finland, Greece and Northern Ireland were the last countries in Western Europe to introduce needle and syringe programmes[108].

In 2007, 26.029 newly diagnosed cases of HIV infection were reported in 28 Member States (excluding Austria and Liechtenstein), with a rate of 6.0 per 100.000 population. Information on mode of transmission was available for 20.221 HIV cases. The number of HIV reports attributed to unknown transmission category has increased by 72% from 3033 in 2003 to 5212 in 2007. In details, heterosexual contacts account for half of the cases (10.089). However, when HIV cases reported in persons from countries with generalised epidemics (4295 cases) are excluded, this percentage decreases to 29 %. The predominant mode of transmission in EU and EEA/EFTA countries was by sex between men: 39% of the infections were diagnosed among MSM (7906 cases), with a reported case increased by 39 % (from 5722 in 2003 to 7906 in 2007). 9% of the HIV cases were reported among injecting drug users: declined by 29% from 2655 in 2003 to 1880 in 2007. Data were not available for this period for Italy, where major epidemics among IDU have been reported in the past. The majority of the newly diagnosed cases of HIV infection were reported among the 25–44 year-olds (68 %). The age distribution in AIDS cases showed a peak in the age group 25–44 (2.4 per 100.000), similar to that for HIV. Males accounted for 74 % of all reported AIDS cases, with a rate of 1.8 per 100.000, which was three times higher than the rate among females (0.6 per 100.000)[109].

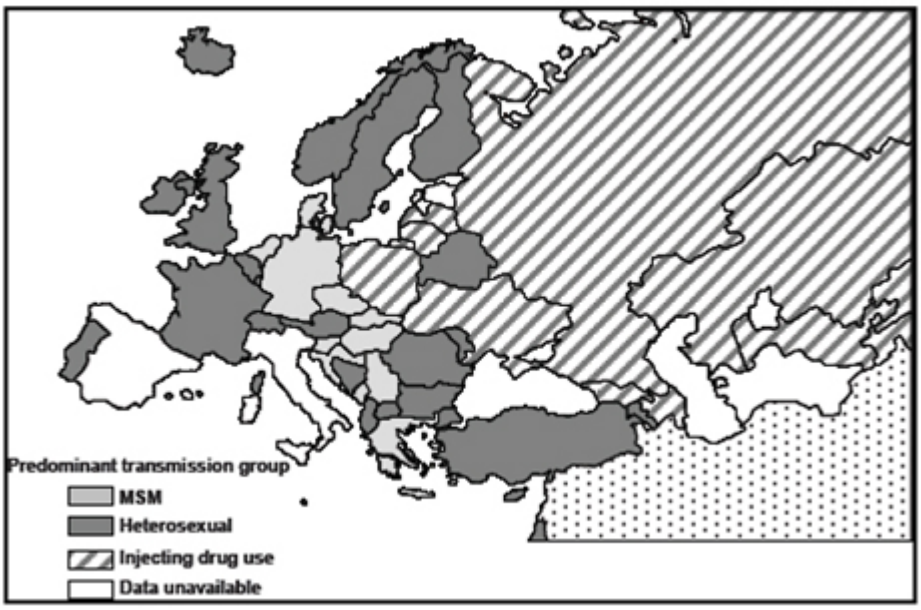
Among various strategies that have contributed to reducing transmission rates for particular risk groups are improved laboratory diagnostics, universal blood handling protocols and the promotion of voluntary blood donations have virtually eliminated HIV transmission in hospital settings via blood transfusions, the use of blood products and organ transplantation. Antiretroviral prophylaxis, safer birthing methods and breastfeeding counselling have virtually eliminated mother-to-child transmission in Western and Central Europe. Harm-reduction interventions for IDUs have prevented tens of thousands, perhaps hundreds of thousands, of HIV-infections.

More frequent outbreaks of syphilis and other sexually transmitted infections among gay men in large cities and higher reported rates of unprotected sex with partners of unknown HIV status are two indicators of the limits of changing certain human behaviours over a very long period and across generations. As reported in "*EuroHIV. HIV/AIDS Surveillance in Europe. Mid-year report 2007*", in EU member states, MSM is the predominant transmission group in Czech Republic, Denmark, Germany, Greece, Hungary, Netherlands, Slovakia, Slovenia.

[108] Donoghoe, Martin C. (2006), "Injected drug use, harm reduction and HIV/AIDS", in Matic, Sradan; Lazarus, Jeffrey V.; Donoghoe, Martin C., *Hiv/AIDS in Europe. Moving from death sentence to chronic disease management*, World Health Organization; URL: http://www.euro.who.int/document/e87777.pdf.

[109] ECDC (2009), *Annual epidemiological report on communicable diseases in Europe 2009,* Stockholm.

Figure 2.2.3.1 – Predominant route of transmission of newly diagnosed HIV cases in WHO European Region, 2006.



Source: EuroHIV (2007), HIV/AIDS in Europe. Mid-year report 2007, 76, December.

In Europe, the HIV/AIDS epidemic progressively affects migrant population and ethnic minorities. It is well known that **mobile populations** (migrants and ethnic minorities) are considered **more vulnerable and more susceptible to HIV-infection**[110].

The significance increase of migrants and ethnic minorities diagnosed with AIDS had been identified by national surveillance systems. By 2000, 47% of reported AIDS cases in Belgium were non-nationals, the majority from sub-Saharan Africa. In France, 31% of the non-French nationals with AIDS by 1998 were sub-Saharan Africans, 20% North Africans and 12% Haitians. In Spain, by 2000 the commonest areas of origin of non-Spaniards with AIDS were Western Europe (27%), Africa (29%) and Latin America (20%). In Italy, among AIDS cases diagnosed in non-Italians by 2000, the commonest group originated from Africa followed by those from South America. Of the non-European foreign nationals diagnosed with AIDS in Germany by 1997, 39% were from sub-Saharan African, 26% were North American, 18% Asian and 13% Latin American. In Sweden, "49% AIDS cases recorded by 2000 as 'having been infected outside the country', the most numerous were 'probably infected in Africa', (25%), 'European countries' (excluding Nordic countries) (8%) and 'America' (6%)"[111]. By 2001, 22% of AIDS carriers in the United Kingdom were found in non-white UK individuals, of whom Black Africans accounted for 65%.

Indeed, initially, the focus of surveillance was on the reporting of AIDS cases. It was the main tool to monitor the epidemic trends but with the introduction and widespread use of highly active antiretroviral treatment (HAART), the number of AIDS diagnoses in European countries has become less reflective of the underlying trends in HIV epidemic[112]. Starting from 1996, in all of the industrialized countries in Western Europe is available an expanded access to HIV/AIDS treatment and care and highly active antiretroviral therapy (HAART).

[110] Pajno, Maria Chiara; Di Palma, Raffaele; Marini, Annalisa; Uccella, Ilaria; Silano, Vittorio; Morrone, Aldo (2009), "HIV/AIDS prevention in young migrants across Europe: the AIDS&Mobility Project", *HAART and correlated pathologies*, 2; URL: http://www.mnlpublimed.com/public/HA02-A04.pdf.

[111] Del Amo, Julia; Bröring, Georg; Hamers, Françoise F.; Infuso, Andrea; Fenton, Kevin (2004), "Monitoring HIV/AIDS in Europe's migrant communities and ethnic minorities, *AIDS*, 2004, 18, p. 1871.

[112] EuroHIV (2007), *EuroHIV 2006 survey on HIV and AIDS surveillance in the WHO European Region.*
URL: http://www.eurohiv.org/reports/eurohiv_2006_survey_report/eurohiv_2006_survey_report.pdf.

Access to HAART in the WHO European Region varies from **100% in Western Europe, 92% in the countries of Central and South-Eastern Europe and 52% in Eastern Europe**. Assessment of access to HAART for PLWHA is even more significant: 90% of PLWHA in Western Europe have access to HAART. In Central Europe it is available to 58% of those who need it, and only 1.3% of those who need ART immediately, receive it[113].

In Eastern Europe, inequity of access to antiretroviral treatment (ART) for particular population groups represents a serious barrier for public health interventions. The majority requiring ART in Eastern Europe and Central Asia are injecting drug users (IDUs). Even where ART is available to other PLWHA, it is unavailable to IDU. In fact, IDUs are very often excluded from the treatment because of the stigma attached to their behaviour and lifestyle and the unfounded belief that they are incapable of adhering to ART. In the past few years, the attitude towards HIV testing has changed radically: from a situation in which testing was more or less discouraged, to one in which testing is encouraged. A late diagnosis of HIV is closely related to the route of transmission, which is in its turn closely related to social determinants[114].

Among people infected, about 25% who have sex with men (MSM) are diagnosed late, as opposed to half of heterosexual men. A late diagnosis involved that men who have sex with men were already sick by the time of diagnosis. As it is well-known, the short-term mortality rate is much higher in people who were diagnosed late, and is almost 6% within one year[115].

MSM took advantage of the public health campaigns, with more of them getting tested for the virus as a result. The proportion of cases that were detected early increased dramatically. On the other hand, black and ethnic minorities did not benefit. The number being diagnosed did rise but the number being diagnosed late also rose and the proportion of diagnoses made early remained unchanged.

A survey of Africans living in the United Kingdom who had recently been diagnosed with HIV informs that 73% of them had visited their general practitioner in the past year but HIV testing was only mentioned to 16% of the participants. For half of the study participants, their general practitioner's suggestion was the main reason for agreeing to an HIV test35. This proves that the introduction of antiretroviral therapy has to be accompanied by increased activities by preventative services to make sure that all those at risk get tested[116].

[113] World Health Organization Regional Office for Europe, *Access to Care*; URL: http://www.euro.who.int/aids/treatment/20040116_2, on 27th August 2009.

[114] Bayer, Ronald; Edington, Claire (2009), "HIV Testing, Human Rights, and Global AIDS Policy: Exceptionalism and Its Discontents", *Journal of Health Politics, Policy and Law*, 34, 3, pp. 301-323.

[115] ECDC (2007), *Meeting Report. Infectious diseases and social determinants*. *Stockholm, 26–27 April 2007*;
URL: http://www.ecdc.europa.eu/en/publications/Publications/0704_MER_Infectious_Diseases_and_Social_ Determinants.pdf, on 27th August 2009.

[116] *Ivi*.

Table 2.2.3.1 – Injecting drug users' access to HAART in the WHO European Region, December 2005.

Region	End 2002			End 2005		
	Number of reporting countries	Reported HIV cases, IDUs (% among total reported HIV cases with known transmission route)	Reported IDUs on HAART (% among total reported people on HAART with known transmission route)	Number of reporting countries	Reported HIV cases, IDUs (% among total reported HIV cases with known transmission route)	Reported IDUs on HAART (% among total reported people on HAART with known transmission route)
West	(8)[1]	37 179 (31%)	3 984 (10%)	(9)[2]	53 279 (29%)	43 434 (33%)
Central	(8)[3]	538 (29%)	121 (10%)	(12)[4]	6143 (42%)	1368 (14%)
East	(11)[5]	47 922 (73%)	15 (14%)	(12)[6]	218 152 (78%)	3475 (38%)
Europe	(27)	85 639 (46%)	4120 (10%)	(33)	277 574 (58%)	48 277 (32%)

[1] Andorra, Finland, Germany, Luxemburg, Malta, Netherlands, Norway, United Kingdom.

[2] Andorra, Germany, Greece, Luxemburg, Malta, Netherlands, Spain, Sweden, United Kingdom (HAART data exclude Scotland).

[3] Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Serbia and Montenegro, Slovakia, Slovenia.

[4] Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic,FYR Macedonia, Hungary, Poland, Romania, Serbia and Montenegro, Slovakia, Slovenia, Turkey.

[5] Armenia, Belarus, Estonia, Kazakhstan, Kyrgyzstan, Lithuania, Republic of Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

[6] Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Republic of Moldova, Russian Federation, Ukraine.

Source: World Health Organization Regional Office for Europe, Access to HAART for injecting drug users in the WHO European Region 2002–2005. International harm reduction conference 2007;
URL: http://www.euro.who.int/Document/SHA/ACCESS_TO_HART.pdf.

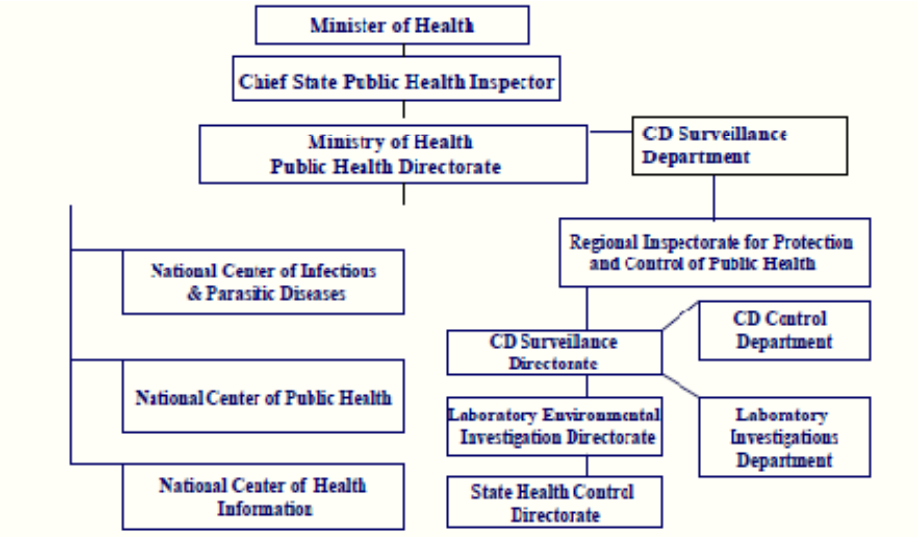
3. EPIDEMIOLOGY OF HBV, HCV, HIV AMONG YOUNG PEOPLE (MIGRANTS, IDUs, MSM): PARTICIPATING COUNTRIES CONTEXT

3.1 Bulgaria

3.1.1 Country situation on Hepatitis B and C. The Bulgarian reporting system for HBV and HCV

Department for Epidemiology and Surveillance of Communicable Diseases (NCIPD) in Sofia integrates and analyzes the whole information in the field of infectious diseases as Hepatitis B and C. Furthermore, it develops intensive international relationships for exchange of information. A notification reporting system for the infectious diseases exists since 1952. The information sources for any kind of infectious diseases are physicians in urban and rural level, GPs, hospitals, Health Centres, Private Physicians who are obliged, according to the low, to inform immediately the appropriate RIPCPH, the National Center of Infectious and Parasitic Diseases and the Ministry of Health. All Bulgarian laboratories are under constant control and monitoring on the basis of the National System for Accreditation[117].

Figure 3.1.1.1 – Structure of Communicable Diseases Surveillance and Control System in Bulgaria.



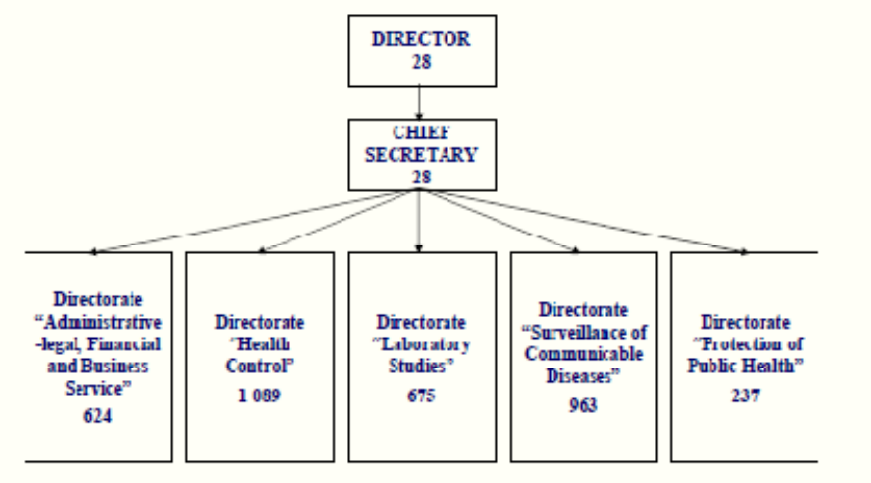
Source: Parmakova, Kremena; Georgieva, Teodora; "Communicable Disease Surveillance System in Bulgaria", paper prepared for the "Episouth First Training module", Madrid, 10 - 14 September 2007.

This activity is organized and performed by a special body, which consists of a group of the best professionals in the country, the so-called National Consultants appointed by the Minister of Health. This body, on the basis of the National Reference Laboratories for different pathogens, which belongs to the National Centre of Infectious and Parasitic Diseases, is part of the National Review Body overseeing the quality of diagnosis, the potentially dangerous activities, the risk factors. Furthermore, this body licenses the la-

[117]Compendium of National Activities, URL: http://www.opbw.org/new_process/mx2008/BWC_2008_MX_Docs/BWC_MX_2008-Compendium-1-Bulgaria_EN.pdf.

boratories and the personnel organizes the training etc., and it has all the information about the work they carry out.

Figure 3.1.1.2 – Regional Inspectorate for Protection and Control of Public Health (RIPCPH).

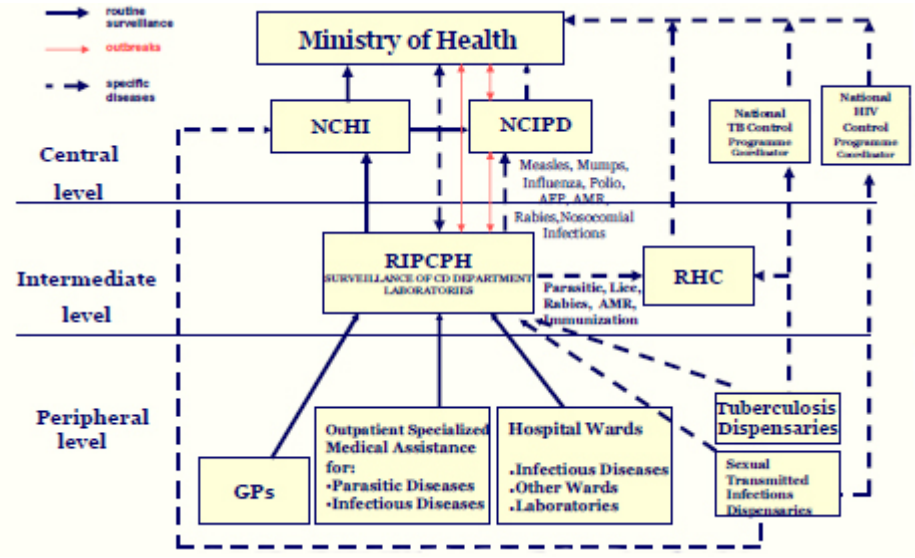


Source: Parmakova, Kremena; Georgieva, Teodora; "Communicable Disease Surveillance System in Bulgaria", paper prepared for the "Episouth First Training module", Madrid, 10 - 14 September 2007.

All laboratories are obliged to carry out their work according to the official approval by the Ministry of Health National Standards for microbiology, virology, parasitology. These standards represent a kind of constitution for the laboratories and a base for performing of the activities in these medical specialities according requirements of the GLP (Good Laboratory Practice), biosafety and biosecurity. In conformity with the National System for Accreditation, all laboratories in Bulgaria are obliged to take part twice a year in this control mechanism in order to receive a special certificate allowing to continue working and signing a contract with the National Health Insurance System.

National Reference Laboratories from 1997 are under constant external and international quality control by the European office of the World Health Organization European Office and they have the international accreditation on the base of EN/ISO/IEC 17025/2001. In terms of the quality of diagnostic work, biosafety and biosecurity in the laboratories it's very important the National Center of Infectious and Parasitic Diseases, which has full membership at CLSI (USA) from 1997. CLSI allows us to have full access to the most contemporary laboratory standards and to implement them in our practice.

Figure 3.1.1.3 – Data-flow for communicable diseases surveillance in Bulgaria.



Source: Parmakova, Kremena; Georgieva, Teodora; "Communicable Disease Surveillance System in Bulgaria", paper prepared for the "Episouth First Training module", Madrid, 10 - 14 September 2007.

The surveillance for Hepatitis B is passive. All clinically manifested acute cases are subjects to compulsory hospitalisation in an infectious disease unit, followed by the laboratory confirmation and the mandatory notification and registration.

Universal vaccination programme is in place for newborns. Newborn vaccination is included in the National Immunization calendar and it is mandatory. There is no universal adolescence immunization programme and the adolescence vaccination is recommended, but not regulated by the Ministry of Health. It is recommended for all adolescents born before 1991, but parents have to take the decision and to buy the vaccine over the counter.

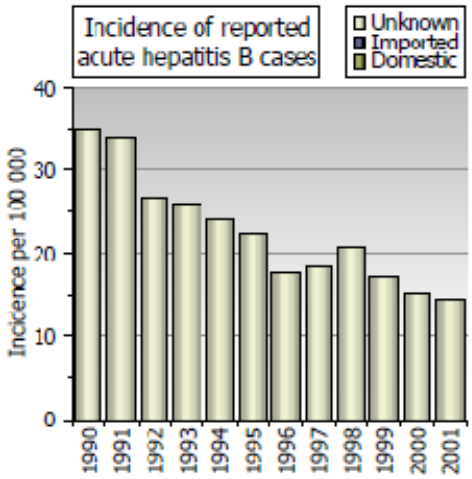
3.1.2 HBV and HCV situation in Bulgaria

Bulgaria is a country with a **intermediate endemicity of Hepatitis B infection**, instead the HBV carrier prevalence is 3-5% and more than 30% of the population has serological evidence of HBV-infection[118]. The evidence of occurrence of perinatal transmission (up to 23.4% of carrier mothers were HBeAg positive) needed a strategy for selective immunization of high risk newborns to HBV carrier mothers that was implemented from January 1988 to July 1991. In this period, Bulgaria was one of the first countries having decided to adopt routine universal infant HBV vaccination, starting as early as August 1991. Since that time, the effectiveness of Hepatitis B immunization programme has been subject to a nation-wide, prospective surveillance.

[118] Kojouharova, M.; Kurchatova, A. (2008), "The Effectiveness of the Universal Infant Immunization Against Hepatitis B in Bulgaria", *International Journal of Infectious Diseases*, 12, Suppl. 1, pp. e152.

In 2007, in the general population the incidence rate was: 10 cases per 100.000[119]. Before the introduction of the immunization, the incidence of HBV-infection in newborns and children 1-3 years of age was 31.1 and 31.6 per 100.000, respectively. The incidence was highest in people 4-7 (59.9/100.000), 15-19 (50.0/100.000) and 20-29 (50.2/100.000) years of age. During 1988-1991, the period of selective immunization, the HBV incidence declined (40.9%) only in infants. The greatest decline of acute Hepatitis B in Bulgaria occurred 16 years after the start of the universal infant vaccination. Among children 0 to 14 years of age, HBV incidence was 2.6 per 100.000 in 2007 and the decline (94.2%) coincided with the increase of the cumulative number of immunized infants. As of 2007, a total of 1.068.240 children had been fully vaccinated with 3 doses of HBV vaccine.

Figure 3.1.2.1 – Incidence of reported acute Hepatitis B cases.



Source: Kojouharova, M.; Kurchatova1, K (2005), "Surveillance, epidemiology and prevention of Hepatitis B in Bulgaria. Results of the EUROHEP.NET feasibility survey; URL: http://www.eurohep.net/files/surveyresults/BookBulgariahepB.pdf, on 23rd July.

The immunization strategy focusing on universal infant vaccination beginning at birth has been implemented with considerable success in Bulgaria.

In a study carried out in 2004[120], the **overall anti-HCV seroprevalence was 1.08%**. Higher anti-HCV seroprevalence was ascertained with increasing age except among adolescents. In 2007, the prevalence rate was 1.3/100.000[121]. Surveillance data indicate an alarming rate of Hepatitis C among **IDUs**: **63.9%**[122].

3.1.3 HBV and HCV spreading among young people in Bulgaria

The introduction in 1992 of the immunization programme reduced dramatically the incidence of acute Hepatitis B in targeted age groups. This effect will be fully achieved in 2011, when all adolescents up to 19 years of age will be immunized[123].

[119] ECDC (2009), *Annual epidemiological report on communicable diseases in Europe in 2009*, Stockholm.
[120] Atanasova, MV; Haydouchka, I.A.; Zlatev, S.P.; Stoilova, Y.D.; Iliev, Y.T.; Mateva, N. (2004), "Prevalence of antibodies against Hepatitis C virus and Hepatitis B co-infection in healthy population in Bulgaria. A seroepidemiological study", *Minerva Gastroenterol Dietol*, 50, 1, pp. 89-96.
[121] ECDC (2009), *Annual epidemiological report on communicable diseases in Europe in 2009*, Stockholm.
[122] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2006), "UNGASS Indicators Country Report. Reporting period: January 2003 – December 2005".

A study carried out in the region of Plovdiv between 2000-2006 showed that the incidence rate of young people was 31.71 per 100.000[124].

3.1.4 Country situation on HIV-AIDS. The Bulgarian reporting system for HIV/AIDS

Nowadays, the Department for Prevention and Control of AIDS, Tuberculosis and STIs at the Ministry of Health holds a main role and responsibility related to the monitoring and evaluation of the situation on HIV/AIDS. The Department is responsible for collecting, summarizing and analyzing of data from the routine HIV/AIDS surveillance that comes from:

- 28 Regional Inspectorates for Protection and Control of Public Health (RIPCPH);
- 12 Dermato-venereological Dispensaries and 5 Dermatology and Venereology Clinics at the Medical Universities;
- 5 centres of haematology and transfusiology;
- the National Centre of Infectious and Parasitic Diseases;
- the National Centre for Addictions[125].

The Department maintains a register on HIV cases including data collection, summary and analysis based on sex, age, country region, ways of transmission and diagnosis for AIDS. Data are available through the National reports for the epidemic situation related to HIV/AIDS, with references prepared for the European Center for HIV Monitoring (EuroHIV), the World Health Organization and other national and international institutions and organizations. The Department for Prevention and Control of AIDS, Tuberculosis and STIs at the Ministry of Health also summarizes and analyzes data for provision of ARV therapy to people living with HIV/AIDS in the country.

A key role and function is attributed to the Unit for Monitoring and Evaluation of the Program "Prevention and Control of HIV/AIDS", financed by the Global Fund to Fight AIDS, Tuberculosis and Malaria. The unit is in charge of collecting, summarizing and analyzing the data from the National System of Second Generation HIV Surveillance and the System for Programmatic Reporting and Monitoring of Organizations.
To achieve this purpose, a Plan for Monitoring and Evaluation was developed, starting since 2004, to provide the framework to follow up more than 30 main indicators concerning:
1) the scope of services (number of persons trained to provide specific services, number of maintained sites for provision of services and number of persons from the target groups reached through services);
2) the results concerning change in the behaviour;
3) the impact of the implemented interventions.
Data are presented through annual reports prepared for the purposes of the Global Fund to Fight AIDS, Tuberculosis and Malaria; the Ministry of Health; the National Committee for prophylaxis of HIV and STIs at the Council of Ministers; the national progress reports on Declaration of Commitment and Report on Universal Access to prevention, treatment, care and support for all in need; the European Center for HIV Monitoring (EuroHIV) with regard to vulnerable groups, the WHO and other national and international institutions and organizations. The system is developed to track in parallel biological and behavioural trends. It in-

[123] Kojouharova, M.; Kurchatova, A. (2008), "The Effectiveness of the Universal Infant Immunization Against Hepatitis B in Bulgaria", *International Journal of Infectious Diseases*, 12, Suppl. 1, pp. e152.
[124] Boykinova, O.B.; Stoilova Y.D.; Tsvetkova T.Z.; Baltadjiev, I.G. (2009), "Epidemiological, immunological and clinical characteristics of acute Hepatitis C", *Folia Medica* , Jan-Mar, 51, 1, pp. 61-9.
[125] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), *Country Progress Report. Reporting period: January 2006 – December 2007*, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

cludes one national unit based at the National Centre of Infections and Parasitic Diseases (NCIPD), which is responsible for the organization, coordination and overall implementation of the activities in this field, analyiss of data, and the preparation of reports about the results. There are also 9 regional second generation sentinel surveillance operational units respectively at and the Regional Inspectorates for Protection and Control of Public Health (RIPCPH) in 9 from a total of 28 regions in the country. The regional units are responsible for the practical conduction of the research and for the collection of primary biological and behavioural data.

3.1.5 HIV situation in Bulgaria

Based on the history of HIV-infection in Bulgaria the following periods have been characterized:

- in 1985-1986, the first HIV infected persons were identified among sailors traveling to South Africa;
- in 1986-1987, HIV-infection was confirmed in patients with haemophilia;
- in 1986-1992, HIV-infection was identified based on the obligatory mass screening of large groups of populations;
- in 1993-2001, newly infected persons were reported as a result of the revised screening policy with promotion of the voluntary testing[126].

A survey released in 1994 of the spread of the HIV-infection in Bulgaria for the period 1986-93 was carried out on at least 4 millions of Bulgarians and 72.000 foreigners. 124 HIV positive Bulgarians (0.003% of the tested population) and 90 foreigners were found. 24 infected Bulgarians developed a clinic of AIDS and 20 of them died. The conclusion of the survey was that HIV-infections had spread with a low intensity in Bulgaria and the is developed by African type. It was showed very high mortality on the base of late recognizing[127]. In a survey released in 2002 of the course of the HIV-infection in Bulgaria for the period 1986-2001, about 250.000 persons were tested for HIV-infection (blood donors, pregnancy, medical indications, voluntary testing etc.) [128].

The increase in the number of registered cases after 2004 is to a great extent due to the active finding, provision of HIV prevention services among the groups most-at-risk, referral for testing, care and support within Program "Prevention and Control of HIV/AIDS", financed by the Global Fund to Fight AIDS, Tuberculosis and Malaria. The number of HIV cases found by the networks of VCT centres and NGOs implementing outreach activities, grew from 3 in 2003 to 40 in 2006. (Table 3.1.5.1)[129].

[126] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), *Country Progress Report. Reporting period: January 2006 – December 2007*, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009

[127] Plochev, K,S.; Dicov, I.; Duchovnicova, T.; Radinov, A.; Brankova, J.; Penkova, K,; Valcova, I.; Doganova, I. (1994), "Natural history of HIV-infection in Bulgaria", *International Conference on AIDS*, Aug 7-12, Sofia, Bulgaria, 10, 144.

[128] Varleva, T.; Beshkov, D.; Georgieva, V. (2002), "Natural history of HIV-infection in Bulgaria, HIV/AIDS situation in Bulgaria: 1985-2001", *The XIV International AIDS Conference 2002*, July 7-12, 14.

[129] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), *Country Progress Report. Reporting period: January 2006 – December 2007*, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

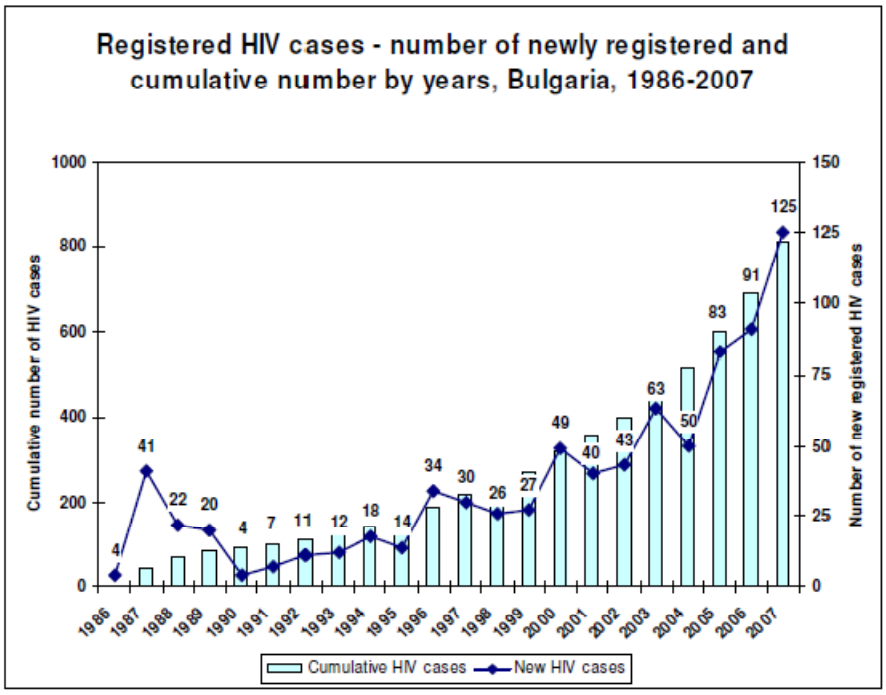
Table 3.1.5.1 – Number of newly registered HIV cases in Bulgaria (2000-2006).

Year	All registeres cases	Referred by health facilities	Referred by VCT and NGO
2000	49	49	-
2001	40	40	-
2002	43	43	-
2003	63	60	3
2004	50	44	6
2005	83	69	14
2006	91	51	40
TOTAL	419	356	63

Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

In the period 1986-2007, the overall number of registered HIV cases in Bulgaria was 814, and new cases in 2007 were 125. In comparison to 2005, the annual number of newly registered cases grew with 50%[130] (Figure 3.1.5.1).

Figure 3.1.5.1 – Number of newly registered and cumulative HIV cases by years in Bulgaria (1986-2007).



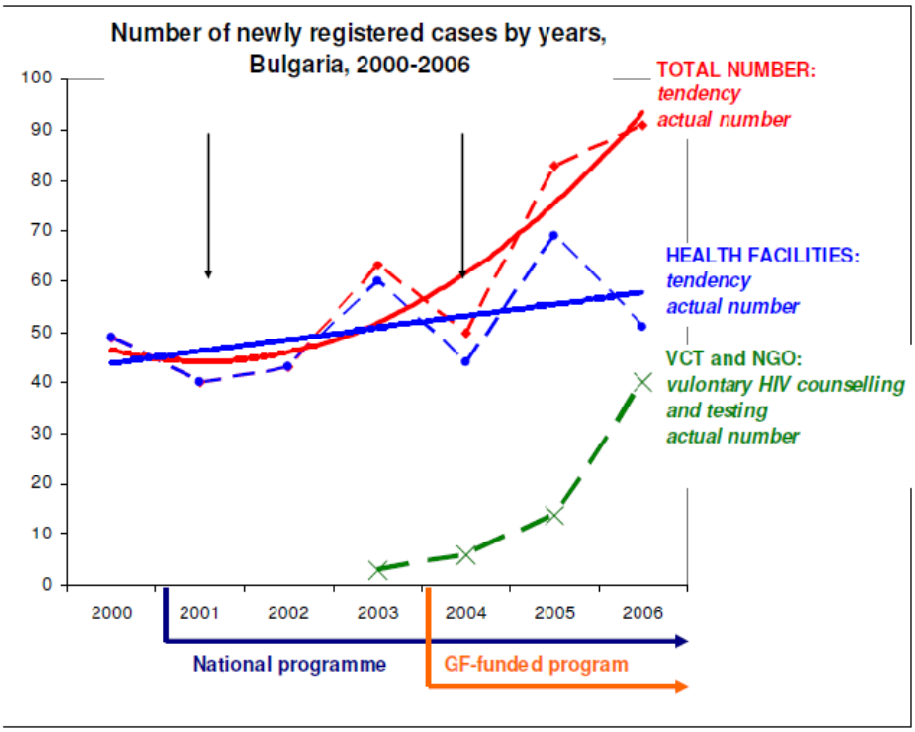
Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

[130] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), *Country Progress Report. Reporting period: January 2006 – December 2007*, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

From the cumulative number of registered cases in the period 1986-2007 with a known route of transmission, 76% were heterosexual, 13% were injecting drug users, and 8% were homo-/bisexual. 17 cases (2% of all cases) were infected through transfusion of blood and blood pre-cuts as such last were registered in 1996. A total of 7 children (1% of all cases) were infected by their mothers.

Data analysis showed that the case detection rate with VCT and NGO services was 6 times higher than the case detection rate in health facilities performing diagnostic and screening testing

Figure 3.1.5.2 – Number of newly registered HIV cases by years in Bulgaria (2000-2006).

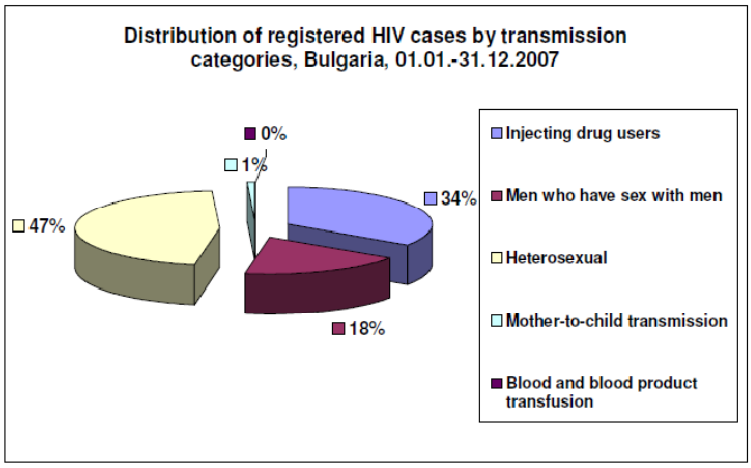


Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

Since 2004, there has been an increase in the number of HIV cases among injecting drug users. In 2007 only, their number was 43 which is 34% of all newly registered (Figure 3.1.5.3). As for men who have sex with men, there was strong stigma and discrimination which prevented many of them from disclosing their sexual orientation. Practically, Program "Prevention and Control of HIV/AIDS" started implementing activities aimed at preventing new infections in this group in 2006. Changing this situation, it was possible to reach the group with active motivation, referral and HIV counselling and testing. This explains the rate of male and female infections among the cases registered in the period 1986-2007, and the number of registered cases among men who have sex with men in 2007: 23 (18% of all newly registered cases)[131].

[131] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2006), "UNGASS Indicators Country Report. Reporting period: January 2003 – December 2005".

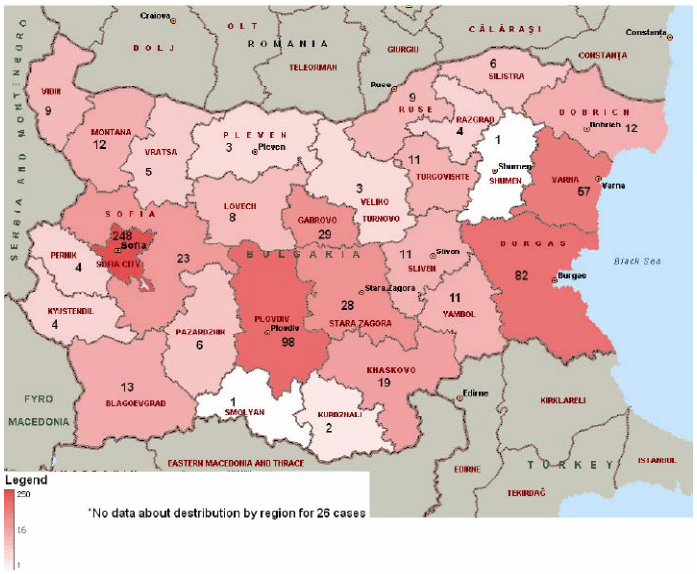
Figure 3.1.5.3 – Distribution of reg. HIV cases by transmission categories in (Bulgaria) (01/01/07-31/12/07).



Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

Registered HIV cases are concentrated in large urban areas: Sofia, Plovdiv, Bourgas and Varna. A worrying tendency had been observed the last two years: the annual number of cases registered in Plovdiv (31 in 2006) was greater than in Sofia (19 in 2006). The majority of HIV cases registered in Plovdiv were the injecting drug use category, which is related to the overall situation of heroin users, the illegal distribution of drugs and the 2004 criminalization of the "possession of a single dose" by the Penal Code.

Figure 3.1.5.4 – Number of HIV registered cases by regions in Bulgaria (1986 –2007).

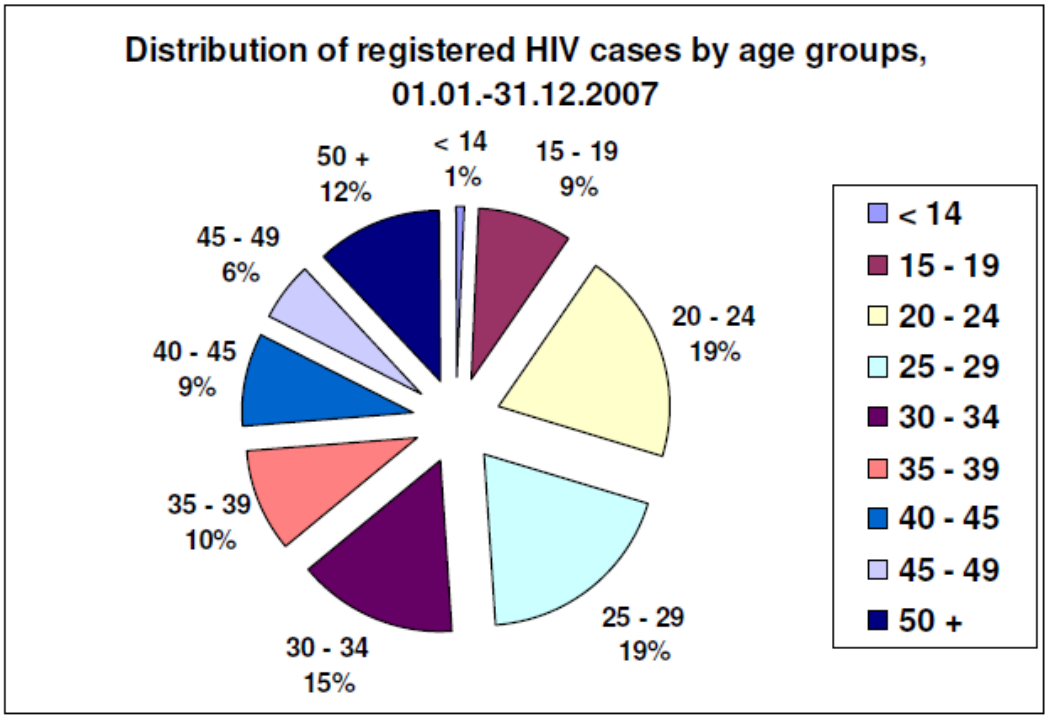


Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

3.1.6 HIV/AIDS spreading among young people

Distribution of newly registered cases in 2007 in age groups showed that the high share was in the 15-24 age group (28%), and it was worrying that the youngest person infected was 16-year old (Figure 3.1.6.1).

Figure 3.1.6.1– Distribution of registered HIV cases by age groups (01/01/2007-31/12/2007).



Source: REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2008), Country Progress Report. Reporting period: January 2006 – December 2007, URL: http://data.unaids.org/pub/Report/2008/bulgaria_2008_country_progress_report_en.pdf, on 21st September 2009.

It is important to highlight that the cases in this age group are mainly among injecting drug users and men who have sex with men.

3.2 Cyprus[132]

3.2.1 Country situation on Hepatitis B and C. The Cypriot reporting system for HBV and HCV

The national reporting system is managed by the Ministry of Health in Cyprus. As a part of Cyprus harmonization to the EU Acquis (Decisions 2119/98, 2000/96 and 2000/57, 2002/253, 2008/426) a Network for the Surveillance and Control of Communicable Diseases has been established under the Medical and Public Health Services of the Ministry of Health of Cyprus. The development of the system is under the Quarantine (Public Health) Law of 1932 and its amendments (the most recent of 2008). Mandatory Notified Communicable Diseases is one of the four systems for Surveillance of Communicable Diseases.

The Notification Procedure takes 24 hours and is as follows: Private Doctors, Health Centres, Hospitals and Private Clinics will communicate positive results for communicable diseases to the District Medical Officer of the country and to the Director of Medical and Public Health Services. The District Medical Officer will inform the District Health Inspector and the Public Health Medical Officer. The District Health inspector will advise the Chief Health Inspector and together with the Public Health Medical Officer the information will be sent to the Director of Medical and Public Health Services. The Director will inform the Permanent secretary of the Ministry of Health and in turn the information is provided to the Minister of Health. The person who is diagnosed with Hepatitis (either in state or private hospital) is to be reported to the Ministry of Health (department of Communicable Diseases) following the above procedure[133].

3.2.2 HBV situation in Cyprus

Between the years of 2000-2008, 26 cases have been recorded by the ministry of Health. It is apparent that the system of recording HBV status in Cyprus is greatly challenged because the official records of HBV instance is grossly underestimated[134].

3.2.3 HCV situation in Cyprus

Between the years of 2000-2008, 27 cases have been recorded by the ministry of Health. It is apparent that the system of recording HCV status in Cyprus is greatly challenged because the official records of HCV instance is grossly underestimated[135].

3.2.4 HBV and HCV spreading among young people in Cyprus

Currently, no official data are available regarding the HBV and HCV spreading among young people. The Ministry of Health conducted research among the general population regarding knowledge perceptions and behaviour. Although sexual contacts remains the main mode of transmission of the Hepatitis, IDU are also a concern. The national Drug council conducted its own research and speculate that half of the IDUs of Cyprus has either HBV or HCV; the numbers tested were very small and the information must be used carefully[136].

[132] The information cited in this report refer to the situation in the controlled area of Cyprus and the actual situation in the Turkish controlled areas is not known since no data are reported to the official services of the Republic.
[133] Ministry of Health (2009).
[134] *Ivi.*
[135] *Ivi*..
[136] Ministry of Health, Cyprus (2009).

3.2.5 Country situation on HIV-AIDS. The existing Cypriot reporting system on HIV/AIDS

The national reporting system is managed by the Ministry of Health in Cyprus. The Ministry of Health coordinates the National AIDS Program which has been implemented since 1986 and follows the guidelines set out by the WHO (World Health Organisation). The epidemiological situation with regard to HIV/AIDS is being evaluated through surveillance and behavioural research, on the basis of the international guidelines for second generation surveillance. Systematic epidemiological surveillance started in 1986 and cooperation with the Infectious Diseases Programme (IDP) and with professionals who deal with STDs in the public and in the private sectors has been paramount in collecting and evaluating data[137].

3.2.6 HIV/AIDS situation in Cyprus

According to the standards of the World Health Organization, Cyprus is among countries of low prevalence of HIV-infection. The basic characteristics of the epidemic remain to a large extent the same as in previous years[138], namely:

- mainly the virus is transmitted by sexual contact, homosexual as well as heterosexual contact. However, a gradual increase in the heterosexual transmission of the virus has been recorded recently;
- 71% of recorded cases are from the age group 20-39 years;
- the sex ratio has decreased, but it is still relatively high, according to international standards.

The factors that determine the extent and profile of the HIV/AIDS epidemic in Cyprus are:

- Risky sexual behaviour, which has been the main, almost exclusive, way of transmission of the virus until now;
- The circulation and use of drugs that until now has not played a part in the transmission of the virus;
- The establishment, which is expected in the future, of minority groups within the Cypriot society with their own particularities and problems;
- The growing pace of population movement to and from Cyprus, but also across the line that divides the government-controlled area from the Turkish areas.

From 1986 until the end of December 2006, 565 cases of HIV/AIDS were diagnosed in Cyprus. Of the 565 recorded cases, 331 concern people who resided or used to reside permanently in Cyprus and 234 concern people who lived abroad. The 331 permanent residents of Cyprus, who were diagnosed until 2006, included 278 Cypriots and 53 foreigners. The number of new cases recorded in 2007 was 46, which is the highest number of new cases recorded in one year in Cyprus. Of these people, 24 are living permanently in Cyprus, while were non-residents, a number that also constitutes the highest number recorded in Cyprus. The mean annual incidence since 1986 is 26 cases. The recent rise of incidence is attributed to the arrival of foreign seropositive people from Eastern Europe and of asylum seekers from sub-Saharan Africa as well as Cypriots, with AIDS or asymptomatic HIV-infection, returning to Cyprus from abroad[139].

HIV-infection mainly affects young people: approximately 71% of all the infected permanent residents in Cyprus were between 20-39 years of age at the time of diagnosis. The proportion of people aged 40 years of more was 24.9% for men and 30.2% for women. The mean age at diagnosis was 35 years for mean and 34 for women. Taking into consideration the long asymptomatic period of HIV-infection, we may assume that the mean age of infection is around 20 to 25 years.

[137] *Ivi*.
[138] Papantoniou, L. (2008), *HIV/AIDS Surveillance in Cyprus-Epidemiological Report National AIDS Program Manager*, Ministry of Health, Cyprus.
[139] Ministry of Health (2009).

Sexual transmission accounts for the majority of HIV reported cases over the last 13 years. By 2007, 92.4% of cases have been infected through sexual contact. Of those, 47.1% through heterosexual contact and **45.3% through sexual contact between men**. All reported cases regarding infections through sexual contact, concerned people over 20 years of age at the time of diagnosis. The rate of infected people who have stated that they are **IDUs is around 1%** of all known seropositives.
Other key population at higher risk of HIV exposure are[140]: foreign sex workers, foreign students (usually originating from Asian countries but also from the countries of Eastern Europe), tourists/travellers, Roma and Turkish Cypriots.

3.2.7 HIV/AIDS spreading among young people

HIV-infection mainly affects young people: approximately 71% of all the infected permanent residents in Cyprus were between 20-39 years of age at the time of diagnosis. In men this proportion is 72.8% and in women 62.2%. A proportion of 3.3% was under the age of 20. The mean age at diagnosis was 35 years for men and 34 for women. Taking into consideration the long asymptomatic period of HIV-infection, it may assume that the mean age of infection is around 20 to 25 years[141].

[140]Ministry of Health - National AIDS Programme, *HIV/AIDS The Situation in Cyprus and the World*, URL: http://www.moh.gov.cy/Moh/moh.nsf/.
[141] Ministry of Health-National AIDS Programme, *HIV/AIDS. The Situation in Cyprus and the World*, URL: http://www.moh.gov.cy/Moh/moh.nsf/; Papantoniou, L. (2008), *HIV/AIDS Surveillance in Cyprus-Epidemiological Report. National AIDS Program Manager*, Ministry of Health, Published by the Press and Information Office, Cyprus.

3.3 Czech Republic

3.3.1 Country situation on Hepatitis B and C. The Czech reporting system for HBV and HCV

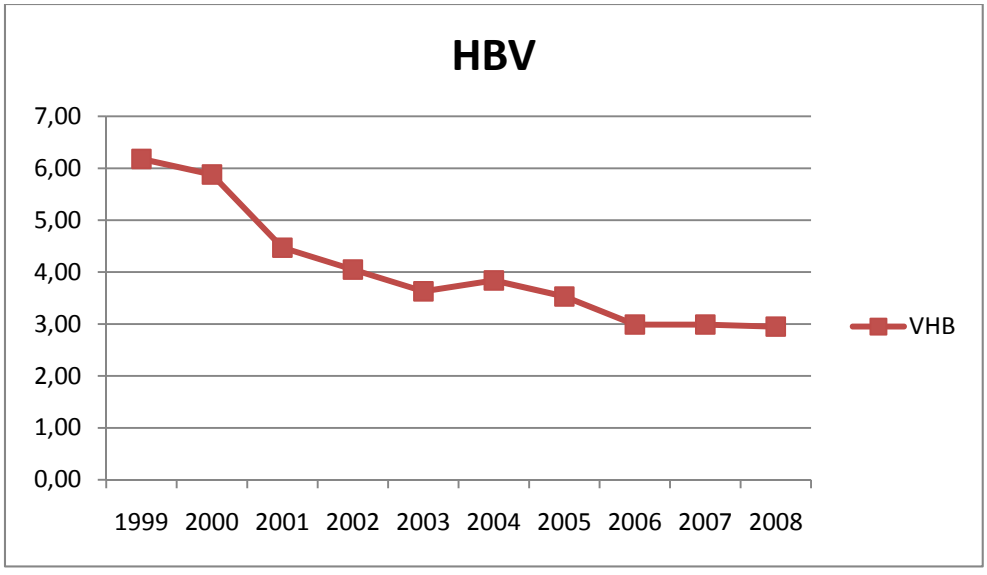
The surveillance of the Hepatitis B and C is managed by the National Institute of Public Health (NIPH) in Prague. The reporting of all infectious diseases (called EPIDAT) is obligatory for every physician, General Practitioner, doctor-specialist and also laboratory. A special form is used for notification ("red form"). All infection diseases are reporting in district under Office of Regional Public Health Service to the National Institute of Public Health in Prague and to the Ministry of Health - to the chief hygiene officer. The national reference centre for analysis of epidemiological data is under the National Institute of Public Health, based on local, regional and national level. The information system has been developed under EPI-INFO system of the WHO and CDC in Atlanta, United States (database and statistical system).

Following this investigation, restrictive and preventive measures are made in focus of infection and during outbreaks. All data are processed in National Institute of Public Health and then analysed according to the various criteria and they are a part of surveillance of these diseases. Reports with basic data (incidence according to diagnosis and region) are regulatory sent to Ministry of Health every month and also to local Office of Public Health Services.

3.3.2 HBV situation in Czech Republic

About 300 new cases (361-306) of Hepatitis B are reported in Czech Republic annually (in years 2005-2008)[142]. The secular trend is decreasing from 1983 when vaccination for professional risk groups was introduced (health workers, newborns of HBsAg positive mothers in 1989, patients under haemodialysis in 1989).

Figure 3.3.2.1 – Trends of HBV in Czech Republic (1999-2008), total number.



Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic.

[142] EPIDAT, *Notification of infectious diseases in the Czech Republic*. URL: http://www.szu.cz/publikace/data/vybrane-infekcni-nemoci-v-cr-v-letech-1998-2007-absolutne.

Czech Republic belongs to countries with low incidence and prevalence of viral Hepatitis B. According to last serologic survey from 2001 there is prevalence of HBsAg+ carrier 0.6 % in Czech Republic in the whole population and only 5.59% of persons has positive post exposure marker (antiHBc total posit)[143].

The main mode of transmission is sexual transmission and also parental drug application.

Table 3.3.2.1 – Incidence rate of HBV in Czech Republic (1999-2008), new case per 100.000 inhabitants.

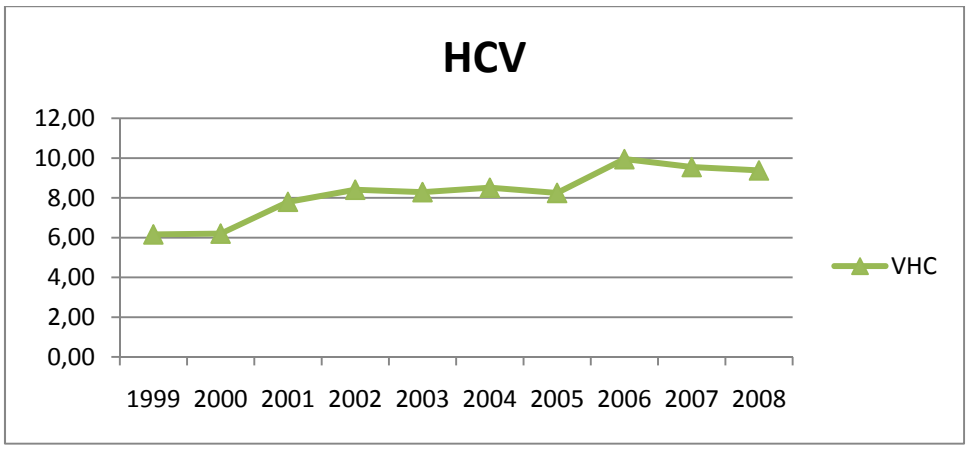
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Acute HBV	6.18	5.88	4.47	4.05	3.63	3.84	3.53	2.99	2.99	2.95

Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic..

3.3.3 HCV situation in Czech Republic.

Hepatitis C has become the most often reported Hepatitis in Czech Republic[144]. In the reporting system EPIDAT the acute and chronic HCV is notified together because to diagnose of acute HCV is very rare. **About 1000 new cases (844-1022) of HCV are reported in Czech Republic annually** (in years 2005-2008). In common population antibodies were documented at 0.2% persons only (according to serologic survey from 2001)[145].

Figure 3.3.3.1 – Trends of HCV in Czech Republic (1999-2008), total number.



Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic..

[143] Zprávy Centra Epidemilogie a Mikrobiologie, "The Bulletin of the Centre of Epidemiology and Microbiology", September 2003, 12, suppl.1, pp. 55-59.
[144] EPIDAT (2009), *Notification of infectious diseases in the Czech Republic*. URL: http://www.szu.cz/publikace/data/vybrane-infekcni-nemoci-v-cr-v-letech-1998-2007-absolutne.
[145] Centre of Epidemiology and Microbiology, *The Bulletin of the Centre of Epidemiology and Microbiology*, September 2003, 12, suppl.1, pp. 55-59.

HCV is a problem particularly for IDUs. Therefore the seroprevalence in the whole population is so low. More than 60% of IDUs are antiHCV positive[146]. The prevalence and incidence in very promiscuous population (it represents more than 20 of sexual partners) can be also higher but the sexual transmission in HCV is rare. The next most-at-risk group are patients under haemodialysis. The proportion of antiHCV positive persons is at this patients group about 2%. Laboratory test of HCV antibodies (antiHCV) has been available in Czech Republic since 1990. So that is not possible to tell something strict about HCV problems before this year. HCV is related to drug problems in Czech Republic. Drugs addiction has increased in the nineties because of unblocking frontiers and better availability of drugs.

Table 3.3.3.1 – Incidence rate of HCV in Czech Republic (1999-2008), new case per 100.000 inhabitants.

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Acute+chronic HCV	6.16	6.20	7.80	8.41	8.29	8.51	8.25	9.95	9.55	9.38

Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic.

3.3.4 HBV spreading among young people in Czech Republic.

From 1997 increasing incidence of HBV at the age group 15-24 was observed (Table 3.3.4.1). Therefore routine obligatory vaccination of infants (3 months old) and 12-years-old children in 2001 was introduced. Incidence of HBV is decreasing at the age group 15-19 years from 2006 significantly. At the age group 20-24 years incidence begins to decrease slowly - in this age group only 20-years-old young people are vaccinated yet.

Table 3.3.4.1 – Incidence rate of HBV in Czech Republic (1999-2008), new cases per 100.000 habitants, age groups 15-24.

Age group	1999	2000	2001*	2002	2003	2004	2005	2006	2007	2008
15-19	15.6	16.4	9.7	10.2	8.1	9.1	6.9	4.0	3.6	1.3
20-24	13.2	16.0	13.4	11.8	11.2	12.7	10.8	9.9	7.3	8.7

*beginning of vaccination 12-years-old-children.

Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic.

[146] National Institute of Public Health, *Annual report Czech Republic 2004: Incidence, prevalence, health impact and trends of treated drug users*, March 2005.

3.3.5 HCV spreading among young people in Czech Republic

The highest morbidity is at age groups 20-24 and 25-29 years old people (Table 3.3.5.1). In 2004, the highest prevalence of **IDUs** was at the age group **20-24 years** old (**379.8/100.000**)[147] and the highest incidence of treated drug user was at **15-19 years** old young people: **233.3/100.000**, and in 20-24 young people: 182.8/100.000.

Table 3.3.5.1 – Incidence rate of HCV in Czech Republic (1999-2008), new cases per 100.000 habitants, age groups 15-24.

Age group	1993	1994	1995	1996	1997	1998	1999	2000
15-19	1.2	2.2	5.5	8.5	9.9	14.5	22.8	19.7
20-24	3.9	4.0	3.8	6.3	7.5	15.6	18.6	19.1

Age group	2001	2002	2003	2004	2005	2006	2007	2008
15-19	23.1	19.4	16.6	16.4	11.9	14.7	20.5	10.9
20-24	28.6	28.8	31.7	27.5	29.7	35.3	34.6	29.8

Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic.

3.3.6 Country situation on HIV-AIDS. The existing Czech reporting system on HIV/AIDS

National reporting system of HIV/AIDS cases is based on data confirmed by special serological tests in national reference centre for HIV/AIDS (NRC HIV/AIDS) under the National Institute of Public Health. All samples of HIV positive persons in screening tests are sent to NRC for HIV/AIDS to confirm this result. Case as a diagnosed new HIV/AIDS case is reported as lately as it is confirmed. In this laboratory are collected and processed data of the new HIV/AIDS persons. Monthly reports are sent to all institutions concentrated in this problem, to Regional Institute of Public Health too. Data are structured as new cases (monthly) and cumulative data from October 1985.

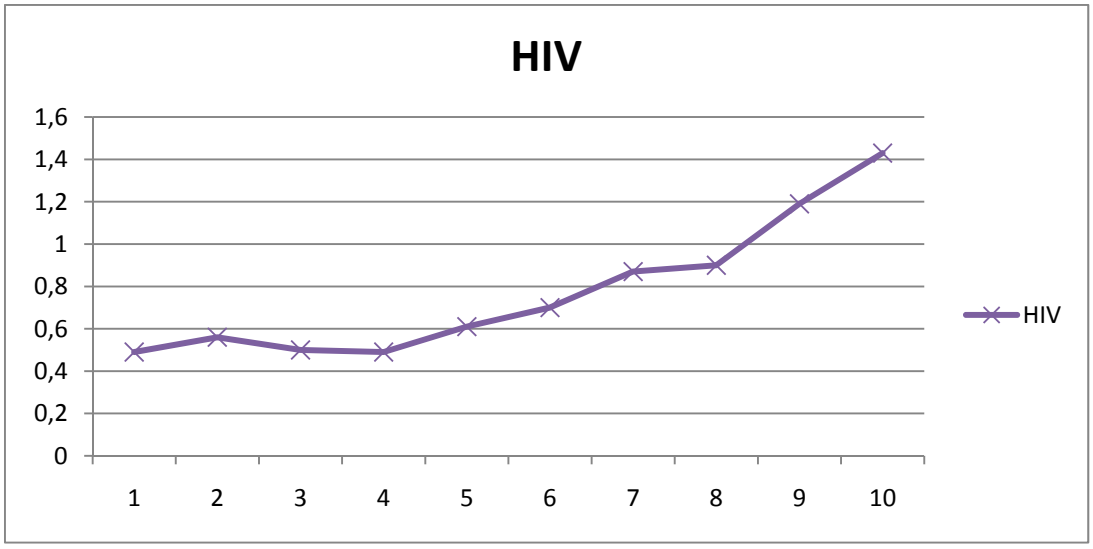
[147] National Institute of Public Health, *Annual report Czech Republic 2004: Incidence, prevalence, health impact and trends of treated drug users*, March 2005.

3.3.7 HIV/AIDS situation in Czech Republic

The first case of HIV/AIDS was diagnosed in Czech Republic in Ústí nad Labem in young African girl from Angola.

The main mode of spreading of HIV/AIDS in Czech Republic is the sexual transmission among MSM (cumulative data from October 1985 to June 2009: proportion of MSM was 55.6%. In the period from January 2009 to August 2009, it was 62 MSM (64.6%) of new cases HIV/AIDS and then heterosexual transmission, in period the period, it was 24 (25%) of new cases HIV/AIDS (cumulative data from October 1985 to June 2009 the proportion was 30.6%).

Figure 3.3.7.1 – Trends of HIV in Czech Republic (1999-2008), total number.



Source: EPIDAT (2009), Notification of infectious diseases in the Czech Republic.

It means that men are most infected (79.2%) than women. IDUs were the third most infected group: 5.6% (it represents only 62 cases of HIV/AIDS persons among IDUs in period 1985-2009). In 2009 it represented 3 (3.1%) new cases IDUs and 3 (3,1%) new cases IDUs and along with MSM/bisexuals. But the highest morbidity has been reported in 25-29 age group for a long time - 292 total number, the next 30-34 year age group - 257 persons to 31 Aug 2009[148].

Table 3.3.7.1 – Incidence rate of HIV in Czech Republic (1999-2008), new case per 100.000 inhabitants.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
HIV	0.49	0.56	0.50	0.49	0.61	0.70	0.87	0.90	1.19	1.43

Source: Data of NRC for HIV/AIDS, National Institute of Public Health, Prague. Presented in National Conference of Epidemiology, 23 September 2009.

[148] Data of NRC for HIV/AIDS, National Institute of Public Health, Prague. Presented in National Conference of Epidemiology, 23 September 2009.

3.3.8 HIV/AIDS spreading among young people

The cumulative number (1985-2009) of infected persons in the range (15-24) is 295 (188 males, 107 females)[149].

[149] *Ivi*.

3.4 Greece

3.4.1 Country situation on Hepatitis B and C. The Greek reporting system for HBV and HCV

Infectious Disease Surveillance aims at the identification of new cases and management of outbreaks, as well as monitoring incidence trends and transmission patterns of viral Hepatitis. The collected surveillance data are used to organize, develop and evaluate the prevention management.
Surveillance of Infectious Disease was established in Greece as early as 1950 by Royal Law (code ΦΕΚ 262/195), which made recording of new Infectious Disease cases mandatory, but achieved poor compliance.

In 1992, the Hellenic Center for Diseases Control and Prevention (HCDCP/KEELPNO) was established with the main aim of developing HIV and AIDS activities. The HCDCP started an initial attempt at Infectious Disease surveillance in 1998. On 19 March 2002, EU Decisions (2002/253/EC by EU Council and 2119/98/EC by EU Parliament) relating to surveillance came into force. In order to obtain comparative data and better coordination between the different EU countries, these decisions stated the case definition for 41 notifiable IDs under surveillance.

The current Infectious Diseases surveillance program in Greece was initiated in 2003 in preparation of the Olympic Games and is compliant with above EU decisions. Following Greek public law (code 3172/2003 ΦΕΚ 197), epidemiological surveillance became the responsibility of the HCDCP.

Since 2003, HCDCP assignments include:

- Preparation of a new list of diseases for the mandatory notification system;
- Preparation of a case definition for every notifiable Infectious Disease, in compliance with EU decisions;
- Preparation of a standardized notification form;
- Establishment of weekly reporting of cases (formerly done on a monthly basis);
- Set up of campaign to inform health professionals about new list of IDs, case definition and mandatory case notification.

Within the HCDCP, the Office of Viral Hepatitis consists of 2 physicians, 1 nurse and 1 administrative employee working in collaboration with a Scientific Commission of Viral Hepatitis constituted of 25 members. The objectives of the Office of Viral Hepatitis and the Scientific Commission are:

- Prevention;
- Education;
- Surveillance;
- Improvement of medical care;
- Coordination of the nationwide HepNet.Greece study;

The standardized notification form documents information on demographics, risk factors, clinical characteristics and laboratory results. Cases are notified by general practitioners, primary health care units and hospitals to the District Department of Public Health, which takes local control actions and notifies the HCDCP. In case of more serious cases, the hospital can directly notify the HCDCP. The HCDCP initiates special interventions, as needed, and cooperates with the Ministry of Health and relevant Health Authorities in order to take necessary measures, especially in case national public health may be affected. Currently the system faces difficulties caused by low compliance from physicians, who sometimes do not notify cases or provide notification forms with incomplete data. The involved health personnel often sees the notification system as an additional administrative task and/or is not aware of the value of the notification information

in the process of disease control. Surveillance of viral Hepatitis is part of the mandatory notification system in Greece. Of note, since 2003, initial diagnosis of asymptomatic HCV confirmed by anti-HCV is also notifiable. Unlike other diseases, there is currently no separate laboratory notification system for Hepatitis cases. However, including Hepatitis to the list of diseases to be notified by laboratories would help reducing underreporting by private physicians[150].

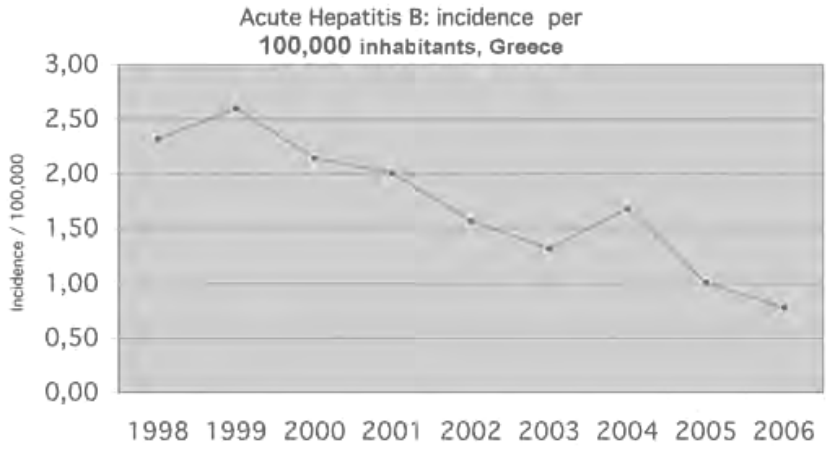
Moreover, HCDCP is responsible for the coordination of HepNet.Greece, a large nationwide retrospective-prospective study that started in 2003 and involves chronic HBV and HCV patients. The primary objective is to investigate the course and outcome of chronic HBV, HCV and HDV. Secondary targets are to obtain an indirect estimate of the incidence of chronic HBV, HCV and HDV infection from the yearly number of newly diagnosed patients; to achieve early diagnosis through better screening and surveillance; to introduce common standards of care and more effective treatment of HBV and HCV patients; and to improve collaboration between Hepatology Centers in Greece. This ongoing Hepnet. Greece study provides opportunities for planned research.

3.4.2 HBV situation in Greece

The existing published epidemiological data are difficult to be representative to the general population data, mainly because they are referred to specific populations or higher risk groups over or underestimating the problem[151]. However, available data on HBV disease reveal a diachronic reduction of the prevalence of HBV-infection, both chronic and acute, in Greece concerning the general population as well as some high risk groups. During the last decades, the profile of the Greek population has changed significantly, with several factors affecting the epidemiology of viral Hepatitis, including modes of transmission, frequent travelling and an increasing number of refugees and immigrants, in particular after 1990.

Greece is a country of intermediate HBV endemicity (>2%). During the period 1970-1980, the estimated HBsAg prevalence was more than 3-5%[152].

Figure 3.4.2.1 – Annual incidence data of reported cases of acute HBV (1998-2006).



Source: Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", Viral Hepatitis, vol.16, April.

[150] Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", *Viral Hepatitis*, vol.16, April, pp. 3-5.
[151] Pantazis, K.; Elefsiniotis, I.; Brokalaki, H. (2008), "New data concerning the Epidemiology of Hepatitis B Virus Infection in Greece", *Gastroenterology Research and Practice*, Vol.2008.
[152] Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", *Viral Hepatitis*, vol.16, April.

Following implementation of universal HBV vaccination in 1998, the HBV incidence has considerably decreased. A transient increase was noted in 2004 due to implementation of enhanced surveillance measures.Regions with highest incidences were Thrace and Macedonia (both 3.0/100.000), followed by Attica (2.3/100.000) and Thessaly (2.0/100.000). Being a foreign citizen was shown to be a risk factor directly associated with acute HBV. HBsAg prevalence already started to decline as early as the early 1980's, far before vaccination was implemented, due to improvement of the socioeconomic situation and implementation of the health care system. Solid seroprevalence data representative for the general Greek population are not available, but recent estimates for HBsAg positivity vary between 2.1% and 2.7%, depending on the study and population investigated (e.g. general population, company employees, hospitalized patients in Crete)[153].

Based on integrated data from a number of studies in the general population, blood donors and high risk groups, where a large number of individuals (N = 637.920) were screened for HBsAg over many years (1971-2001), HBsAg prevalence in Greece is estimated to be 2.1%. Epidemiological data from a coordinating center including 296.012 blood units from 41 transfusion centres found that only 0.35% of blood donors were HBsAg-positive for the period 2000-2001. Other studies reported HBsAg-seropositivity rates among volunteer blood donors of 0.40-0.85%, depending on the region studied (Crete or Epiros)[154].

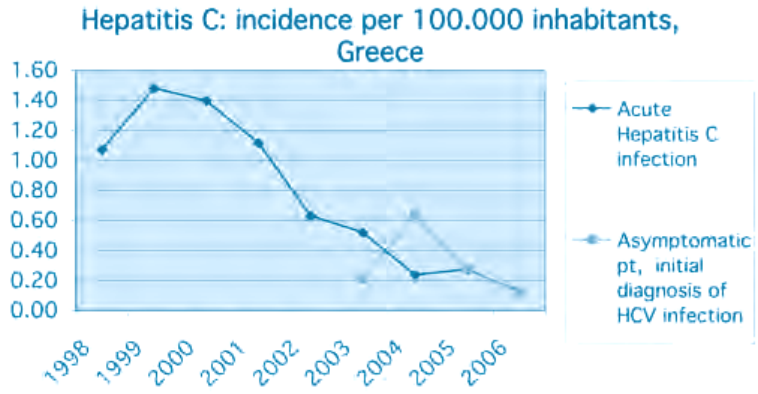
Young army recruits represent another setting providing data on HBV prevalence. In 1972, the national average of HBsAg carriage among army recruits was as high as 5.0% but after approximately 20 years this figure decreased to 1.27% in 1990, which represents a 75% reduction[155]. In agreement with these data, another study reported a 50-80% reduction in HBsAg prevalence over the period 1973-1999. It should be noted that this decline already started in the 1980's, well before the introduction of the vaccine. Moreover, vaccination coverage was low, as in 1999 only 1/3 of army recruits had anti-HBs antibodies[156].

3.4.3 HCV situation in Greece

Greece is a country of low HCV endemicity. However major regional differences have been reported. Epidemiological studies have focused on prevalence of HCV-infection in subgroups of the general population, as well as in high risk groups. Overall, HCDCP notification data indicate that HCV incidence is very low and decreasing over the last years[157].

[153] Koulentaki, M.; Spanoudakis, S.; Kantidaki, E.; Drandakis, P.; Tzagarakis, N.; Biziagos, E.; Moschandrea, J.; Kouroumalis, E. A. (1999), "Prevalence of Hepatitis B and C markers in volunteer blood donors in Crete. A 5-year study", *Journal of Viral Hepatisis*, 6, 3, pp. 243-248.
[154] Zervou, E. K.; Dalekos, G.N.; Boumba, D. S.; Tsianos E. V. (2001), "Value of anti-HBc screening of blood donors for prevention of HBV infection: results of a 3-year prospective study in Northwestern Greece", *Transfusion*, 41, 5, pp. 652-658.
[155] Papaevangelou, G. (1998), "Hepatitis B immunization programme: lessons learnt in Greece", *Vaccine*, 16 Suppl., S45-47.
[156] Stamouli, M.; Gizaris, V.; Totos, G.; Papaevangelou, G. (1999), "Decline of Hepatitis B infection in Greece", *European Journal Epidemiology*, 15, 5, pp. 447-449.
[157] Manesis, K.; Nikolopoulou, G.; Paraskevis, D., Raptopoulou, M.; Touloumi, G (2008), "Epidemiology of Hepatitis C in Greece", *Viral Hepatitis*, 16. 2, pp. 15-18.

Figure 3.4.3.1 – Annual incidence data of reported cases of acute HCV over the period 1998-2006.



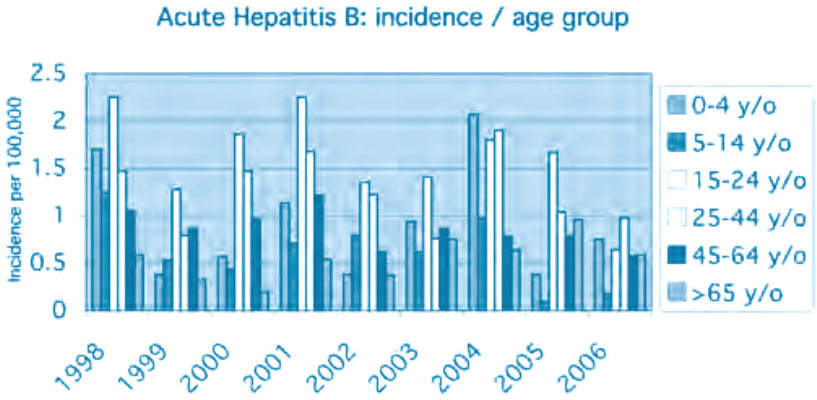
Source: Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", Viral Hepatitis, vol.16, April.

When analyzed by geographical region, the highest incidence was noted in the metropolitan region of Attica (mean annual incidence of 1.8/100.000), which is most likely attributed to the higher proportion of IDUs among inhabitants. The most important risk factor identified for HCV-infection was foreign citizenship[158].

3.4.4 HBV spreading among young people in Greece

Base on integrated data from a number of studies in the general population, HBV and HCV incidence was highest among 15-24 year-olds, followed by 25-44 year olds, over the period 1998-2006[159]. Among young people, the major decrease is recorded between 2004-2006 which may attributed in an extended vaccination campaign which conducted as part of the preparation for the 2004 Olympics. Relatively high percentage is recorded in 2006 in the smaller age group (0-4).This tension should be examined with additional data for the next years.

Figure 3.4.4.1 – Annual incidence data of reported cases of acute HBV over the period 1998-2006 by age group.



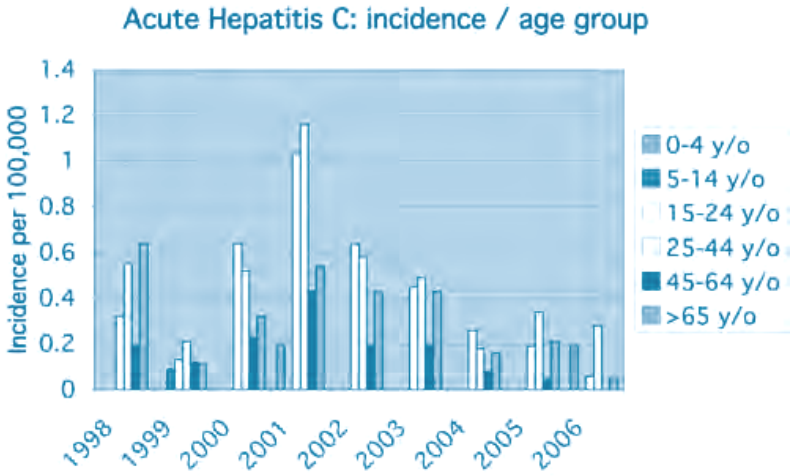
Source: Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", Viral Hepatitis, vol.16, April.

[158] Source: Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", *Viral Hepatitis*, vol.16, April.
[159] Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", *Viral Hepatitis*, vol.16, April.

3.4.5 HCV spreading among young people in Greece

As it can be seen in the following figure, over the period 1998-2006, there was a peak in Hepatitis C incidences in 2002 especially on the age groups in interested (15-24) followed by a decrease in all age groups in the following years.

Figure 3.4.5.1 – Annual incidence data of reported cases of acute HCV over the period 1998-2006 by age group.



Source: Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", Viral Hepatitis, vol.16, April.

3.4.6 Country situation on HIV-AIDS. The Greek existing reporting system on HIV/AIDS

HIV disease was mentioned in Greece in the early 1980's, while the first Aids case was officially reported/diagnosed in 1983. Four years after this incidence, the Greek government introduced a compulsory registration system for diagnosed aids-cases in the country; since 1998, the system has been extended to include the registration of HIV-infection and other sexually transmitted diseases.

In Greece all HIV cases are reported to the Hellenic Centre for Disease Control and Prevention (HCDCP/HCDCPPNO). HCDCP is an independent centre responsible for the surveillance and control of infectious diseases in Greece, located in Athens. It functions under the supervision of the Ministry of Health, and in close collaboration with all public health authorities. HCDCP was established in 1992 with the aim of developing activities on HIV/AIDS, including:

- support to specialist clinical infectious disease departments and reference laboratories;
- provision of medicines to patients;
- epidemiological studies;
- health education;
- psychosocial support.

Today, HCDCP is responsible for a wide range of activities related to infectious diseases, including public health support for immigrants, refugees and other minority groups, prevention and control for viral Hepatitis, nosocomial infection research and control measures, travel medicine consultation and issuing of guidelines. HCDCP "collects epidemiological data through the country; raises public awareness through the dissemination of information; coordinates care and treatment programs such as training health profession-

als, the support of home and hospice care as well as research programs; offers psychological support and legal counsel for programs arising from social, legal and ethical issues related to communicable diseases"[160]. Furthermore, the Department of Surveillance and Intervention within CHDCP is responsible for public health surveillance in Greece.

3.4.7 HIV/AIDS situation in Greece

According to HCDCP/KEELPNO161, the cumulative number of diagnosed HIV-infections (including AIDS cases) reported by the end of 2007 in Greece is 420 infected persons, a figure which increased by almost 2% from 2002 (396 infections reported by the end of 2002) to 2007. However, an upwards trend can be observed in the number of newly diagnosed cases during the period 2003-2006 according to the data available by KEEL. The number of newly diagnosed HIV/AIDS cases increased by almost 20% from 2003 (396 new infections reported) to 2006 (571 new infections reported). The following table provides a comparison between newly diagnosed HIV-infections (including AIDS cases) in 2002 and 2007 with gender reported in order to provide a more comprehensive picture of the current situation in Greece.

Table 3.4.7.1 – HIV-infections by year of report and gender reported in Greece by 31/10/2007.

Year of report	Males		Females		Total	Rate
	N	**%**	**N**	**%**	**N**	%
2002	297	75	99	25	396	**36**
2003	328	75.2	106	24.3	436	**39.6**
2004	357	80	86	19.3	446	**40.3**
2005	421	74.6	141	25	564	**50.8**
2006	462	80.9	109	19.1	571	**51.2**
2007	**349**	**83.1**	**71**	**16.9**	**420**	**37.5**

Source: HCDCP (2007), HIV/AIDS surveillance report in Greece, 22, October, p.11

Reporting on HIV-infections is still incomplete: for some cases, the gender was not reported while retrospective reporting is included in the estimates; KEEL mentions that "most of the data were retrospectively collected so the year of report was approximately deremined using the date of HIV report or the date of therapy initiation or event the date of AIDS report, or the death report, depending or corresponding available data of each case"[162]. Any figures on HIV-infections should therefore be interpreted with caution.

In 2007, 60 newly diagnosed cases were reported for Greece, according to data made available by HCDCP. According to "HIV/AIDS Surveillance report in Greece" the number of cases has continuously fallen since its peak in 1996 when approximately 240 new AIDS cases were diagnosed. For the year 2002, Greece reports 99 new AIDS cases (9.01%) while this number falls around 4% between 2002 and 2007 (60 new AIDS cases reported by the end of 2007). The decrease of AIDS cases during this period (1996-2007). The reduction in AIDS cases from 1996 to 2007 is to a large extent explained by the highly active antiretroviral treat-

[160] Papaevangelou, Vana; Van Damme, Pierre (2008), "Epidemiology of Hepatitis B and D in Greece", *Viral Hepatitis*, vol.16, April, p. 4.
[161] HCDCP (2007), *HIV/AIDS surveillance report in Greece*, 22, October.

[162] HCDCP (2007), *HIV/AIDS surveillance report in Greece*, 22, October, p.11

ment (HAART). Table 3.4.7.2 provides comparable data on newly diagnosed AIDS cases, by gender and year of report.

Table 3.4.7.2 – AIDS cases by year of diagnosis and gender reported in Greece by 31/10/2007.

Year of diagnosis	Males		Females		Total	Rate
	N	%	N	%	N	%
1996	193	81.8	43	18.2	236	22.04
2002	81	81.8	18	18.2	99	9.01
2003	77	81.9	17	18.1	94	8.53
2004	73	84.9	13	15.1	86	7.77
2005	74	75.5	24	24.5	98	8.83
2006	61	70.9	25	29.1	86	7.71
2007	44	73.3	16	26.7	60	5.38

Source: HCDCP (2007), HIV/AIDS surveillance report in Greece, 22, October, p.11.

With a share of 5,38% of all new cases diagnosed in 2007, men were still more affected by far than women; the share of women in newly diagnosed AIDS cases remained almost stable over the whole reporting period (2002-2007) with only exception reporting years 2004-2005 which showed the highest incidence rates by far. Outstanding was the share of men in new cases reported in 2002, with 81 men-cases per 99 newly diagnosed cases. However, this trend has constantly decreased over the whole reporting period but still remains at a high level compare.

Regard age group, the majority of reported HIV-infections were individuals 25 to 44 years old at the time of report. The most prevailing age group in males was the one between 30-34 years while the predominant group in females was the one between 25-29 years with the share of women.

HIV/AIDS spreading among young people

As it can be seen from the table below, there's a positive correlation between age and HIV-infection in adolescents and young adults both in men and women. There's a high increase in the infections percentages when we reach sexually active age groups it passed from 0.9% to 5,5% in males 20-24 year old and from 1.0% to 6.1% to females aged between 20-24 years old.

Table 3.4.7.3 – HIV-infection by age group at report and gender reported in Greece by 31/10/2007.

Age group	Males		Females		Total	
	N	%	N	%	N	%
0-12 years old	49	0.7	30	1.7	80	0.9
13-14 years old	15	0.2	3	0.2	18	0.2
15-19 years old	63	0.9	27	1.5	90	1.0
20-24 years old	407	5.5	153	8.6	563	6.1
25-29 years old	1146	15.5	379	21.4	1525	16.5

Source: HCDCP (2007), HIV/AIDS surveillance report in Greece, 22, October, p.11.

Generally the high-risk age group is the one where individuals are aged between 25-29 years old. From the other hand, the cumulative number of all diagnosed HIV infected children is relatively low: in 2007, 77 newly diagnosed AIDS cases concerned children aged 0-12 years old, while this figure remained at high rates for the age group 25-44. The data suggested that mother-to-child transmission is the main route of transmission for children under 13 years old. Moreover, the low number of infected children was probably due to the low number of infected women[163].

[163] Nikolopoulos, G.; Konte, V.; Masgala, A.; Eleni, E.; Tsantes, A.; Paraskeva, D. (2004), "Surveillance data on pediatric HIV infection and AIDS in Greece", *Eurosurveillance*, 9, 9, September.

3.5 Hungary

3.5.1 Country situation on Hepatitis B and C. The reporting system for HBV and HCV

Minister of Welfare manages and regulates the surveillance of communicable diseases. The reporting discipline is controlled by the National Public Health and Medical Officers' Service (NPHMOS), it is randomly checked how physicians fulfil the legal requirements of decrees on notification.

The notification system is partly syndrome-based (e.g. gastroenteritis, meningitis, encephalitis, Hepatitis) and partly aetiology-based. The reported syndrome-based diagnosis is modified to an aetiology-based diagnosis in the electronic database of NPHMOS, when the aetiology is confirmed by laboratory investigations. The reporting system is nationwide: all physicians (General Practitioners, specialists working in outpatient clinics, physicians working in hospitals, at emergency service, pathologists, microbiologists) should report suspected, probable or confirmed cases of diseases indicated on the list of notifiable communicable diseases (clinical case surveillance).

Excepting few communicable diseases (e.g. Varicella, Lyme disease) it is also mandatory to "report out" the disease on another paper-based report form. Through this procedure information is gained about the outcome of illness (full recovery, recovery with residual symptoms, or death), about the length of symptoms or hospital stay, and microbiological laboratory test results. Data registered in the electronic system of EFRIR are analysed on a daily, weekly, monthly and annual basis, since it can produce summary tables of disease occurrence automatically. In addition to the automatic summary table making function which can be used at all three levels of NPHMOS, EFRIR has ad hoc query and analysing functions as well. Therefore it is flexible tool which is the fundament of every day epidemiological work.

3.5.2 HBV situation in Hungary

Viral Hepatitis has been notifiable since 1950. The basis of the reports is the clinical diagnosis. Serological tests for Hepatitis A and Hepatitis B has been available only since mid of 1980's. During the last decades the epidemiological situation of viral Hepatitis has been changed significantly. The pick incidence of viral Hepatitis was observed in the middle of the 1950's. The epidemiological characteristics of viral Hepatitis is the high age-specific rates among children. Institutional (schools, day-care centres) outbreaks reflected a strong Hepatitis A predominance.

Currently the epidemiological situation of viral Hepatitis is very favourable in Hungary. As reported by the OEK[164], between 2004-2008 24% of all Hepatitis cases were caused by Hepatitis B. HBV is considered at low endemic since the HBsAg carrier rate is about 0.3%. Due to the Hepatitis B vaccination program the annual incidence of acute HBV cases in the last five years is also very low, 1 case per 100.000 population.

Universal prenatal screening of pregnant women for HBsAg was introduced in 1995 and four years later in 1999 mandatory routine immunisation of all adolescents was implemented. The highest incidence was observed among unvaccinated adults (30-39 and 40-59 year old).

3.5.3 HCV situation in Hungary

As reported by the OEK[165], between 2004-2008 12% of all Hepatitis cases were caused by Hepatitis C. Data on Hepatitis C incidence of acute cases are available only since 1998. The early average of reported cases is very low, below 0.4 %.The most effected age groups are the 40-59 year-olds, no cases among child-

[164] OEK (2009), URL: http://www.oek.hu/.
[165] OEK (2009), URL: http://www.oek.hu/.

ren has been observed. The prevalence of the anti-HCV antibodies proved to be 0.6% in the general population measured by the nationwide sero epidemiological study performed in 2006.

Potential risk factors of HCV transmission were investigated and compared to anti-HCV-negative blood donors[166]. Furthermore, the rate of anti-HCV positivity in children who had received one or more blood transfusions prior to the implementation of anti-HCV blood donor screening was evaluated. A total of 45.719 blood donors and 120 children were tested for the presence of anti-HCV antibodies by second- and third-generation enzyme immunoassays. Positive results were confirmed by a recombinant immune blot assay. Data on potential sources of HCV transmission were obtained by interviews. Among blood donors, the rate of confirmed HCV antibody-positives was 0.4% (195 of 45.719 donors). Previous surgery, transfusion, more than three pregnancies, and tattoos were significantly correlated with confirmed anti-HCV positivity. 2 of 120 children (1.7%) were confirmed anti-HCV positives. In both of them, serum HCV RNA could be detected. The prevalence of anti-HCV positive blood donors in South Hungary is low. Nosocomial infections and tattooing were found to be the most important risk factors for transmission of HCV. Because of the low prevalence of anti-HCV positive blood donors, only a small number of children, who received blood transfusions prior to the implementation of anti-HCV blood donor screening, are infected with HCV.

3.5.4 HBV, HBV spreading among young people in Hungary

According to EU[167], even in Hungary the Hepatitis B incidence has declined over the past ten years, also thanks to the active immunization that is given as an age-related vaccination in age 14 years from 1999 in Hungary. The Hungarian vaccination program is internationally recognized for its nearly 100% population coverage. In 2008, there were only 5 cases with Hepatitis B among children under 14 years of age, so there is no evidence of spreading Hepatitis B virus among children countrywide[168]. There are no data on HBV and HCV spreading among young group (15-24). There was no HCV case under 14 years of age in Hungary in 2008, so there is no evidence of significant spread of the virus among the children.

3.5.5 Country situation on HIV-AIDS. The Hungarian existing reporting system on HIV/AIDS

HIV and AIDS cases are compulsory notifiable. The surveillance system is comprehensive, passive and case based. The National Centre for Epidemiology obtains information on confirmed cases from the laboratories and also from the physicians. The National Centre for Epidemiology maintains the HIV database since 1986.

In 2008, a total of 499.452 blood samples were subjected to HIV tests, the overwhelming majority (416.044) of these being donor blood samples. In addition to screening donor blood, 83.408 HIV screenings were performed by the National Centre for Epidemiology (OEK), the regional institutes of the National Public Health and Medical Officer Service (ÁNTSZ), ÁNTSZ Laboratory Ltd, SE Clinic for Dermatology and STD-related diseases and Dermato-oncology, OEK Microbiological Research Group and a laboratory of Szent László Hospital. Samples that proved positive were verified at two locations, in the laboratory of Szent László Hospital and at the premises of OEK Microbiological Research Group. Screenings can be classified in 3 categories: voluntary, mandatory and diagnostic tests. Voluntary tests are performed anonymously or identified by name.

Within the framework of ÁNTSZ, 15 screening locations are currently available to the general public in Hungary (14 former county institutes of ÁNTSZ, plus the National Centre for Epidemiology), where HIV

[166] Müllera, Zsófia; Deáka, Judith; Horányib, Margit; Szekeresc, Éva; Nagyd, István; Ozsvárd, Zsófia; Nagya, Elisabeth; Lonovicsd, János; Gálc, György (2001), "The detection of Hepatitis C virus in South Hungary", *Virology*, 20, 1, pp. 81-83.

[167] European Centre for Disease Prevention and Control (ECDC) (2009), *ECDC Technical Report. Migrant health: Background note to the 'ECDC Report on migration and infectious diseases in the EU'.*

[168] OEK (2009), URL: http://www.oek.hu/.

screening and counselling is available free of charge. In addition, free HIV screening is available within the care network for dermatology and STDs (124 outpatient clinics are operated nationally), and at the SE's Clinic for Dermatology and STD-related diseases and Dermato-oncology, as well as civil AIDS counselling premises[169].

The doctor of the continuous care facility shall offer voluntary testing for persons identified pursuant to Paragraph c) of Subsection of Section 26 of the Health Law. HIV-infected persons enrolled in continuous care as well as persons likely to be suffering from full-blown AIDS shall be referred to 'Szent László' Hospital, Budapest, by the doctor of the continuous care facility, in order to having medical treatment initiated. In the course of delivering healthcare services, all activities related to patient care must be organized so as to fully comply with work safety and hospital hygiene regulations thereby decreasing the opportunity of infection with HIV to the smallest possible level.

3.5.6 HIV/AIDS situation in Hungary

The cumulative number of reported HIV cases was 1665 on 31st of March in 2009[170]. 575 AIDS cases have been registered so far, 298 of them died. The route of transmission is known in three fourth of the cases. 70% of them were infected by homo or bisexual, 22% of them were infected by heterosexual transmission. Only seven cases were infected through maternal transmission. Three fourth of the cases are reported in males. In 2008 145 new HIV infected clients were registered only 9 of them were females. 23 new AIDS cases have been reported by Szent László Hospital, 4 of them died in last year. There was no client infected by nosocomial or maternal transmission, however two intravenous drug users were registered as HIV infected person.

3.5.7 HIV/AIDS spreading among young people

By 2008, in Hungary only 9 people were with HIV-infection under 18 years of age, as children infected in Romania or those with haemophilic disease are grown up, or died. So there is no strong evidence in Hungary that the HIV spreads among youth under 18 years of age rapidly[171]. Data is not available for group age 15-24.

[169] Ungass (2008), *Country Progress Report Hungary*.
[170] OEK (2009), URL: http://www.oek.hu/.
[171] OEK (2009), *Annual report*, URL: http://www.oek.hu/.

3.6 Italy

3.6.1 Country situation on Hepatitis B and C. The Italian reporting system for HBV and HCV

There are two surveillance systems in Italy, one managed by the Ministry of Health, which is passive, and one by SEIEVA (Epidemiological Integrated System on Acute Viral Hepatitis) which is a system more aimed at the investigation of risk factors[172].

As for the Ministry of Health, individual notifications are collected through an experimental computerised system that links local health authorities to a national data base called SIMI (Infectious Diseases Information System), coordinated by the ISS (National Institute of Health). So far ISS receives computerised databases from 17 of the 20 Italian regions.

The surveillance of infectious diseases is primarily based on notifications sent by the physicians including immediate reporting to alert public health professionals. Monthly these data are summarised in a reported about infectious diseases, completed by each Local Health Agency (ASL)[173]. The expected information takes place through:

- The practitioner, in hospital or general, that diagnoses infectious disease and executes the notification to the responsible ASL;
- The ASL in charge of taking any preventive measures to protect public health;
- The Region of Public Health Agency in charge of supervision and coordination;
- The central bodies (Ministry of Health, National Institute, Italian National Statistical Institute, National Institute of Health) and possibly international (EU, WHO).

The SEIEVA monitors trends of the infectious diseases providing technical support for health-related environmental surveys, for investigations of epidemics and other public health problems at national, regional and local level. It works in Italy since 1985 and it is a sentinel based surveillance system for acute viral Hepatitis working in Italy. The systems are clinical and laboratory report-based and EC case definition is used for the surveillance[174].

The notification is communicated through the filling of a schedule and gathered into database. Monthly, data are sent to the Regional Coordination Center where they are submitted to further quality control, aggregate each other and sent to the central bodies (National Institute of Health, Ministry of Health, ISTAT). Sending is by post or by electronic mail and data are protected by a system of conventional cryptography. If anomalies are found at the central level, the date to correct is notified at the regional level and then at the proper ASL or district, where it is amended, so to have in the next sending the correct data. The steady sending of the information ensures alignment between the central and the peripheral archives.

3.6.2 HBV situation in Italy

As reported in many studies[175], **at the end of the 1970's Italy was a country at intermediate endemicity**. Children and young people showed HBsAg and anti-HBc prevalences of 2-5% and 12-18%, respectively, and **familiar transmission had a major role in the virus spread**. From early 1980's, there has been a progressive reduction of virus transmission due to the general improvement of hygienic standards and living conditions of the population: the reduction of mean family size; the abandon of non available syringes

[172] http://www.eurohep.net/files/surveyresults/BookItalyhepA.pdf.
[173] Ministero della Salute http://www.ministerosalute.it/malattieInfettive/paginaInternaMalattieInfettive.jsp?menu=sorveglianza&id=650&lingua=italiano.
[174] SEIEVA, *Inspection, Monitoring and Certification*; http://www.iss.it/chis/comp/cont.php?id=104&lang=2&tipo=9.
[175] Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco, Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis:twenty years of surveillance through SEIEVA in Italy and a review of the literature", *Istituto Superiore di Sanità - Rapporti ISTISAN 06/12*.

to administer parental drugs; the implementation of HBsAg screening during pregnancy and prophylaxis for the newborn of positive mothers; the vaccination of high risk groups, and the anti-AIDS campaign.

Therefore, at the end of the 1980's, HBsAg and anti-HBc prevalences in children and young people had reduced to <2% and 1-7%, respectively. The introduction in 1991 of compulsory vaccination for all infants (starting at 3 months of age) and for all 12-years-old children, further enhanced this trend. **In 2003, the routine vaccination of adolescents finished because the junction between the two age cohorts had been achieved. Nowadays, Italians born after 1979 are already vaccinated**.

During the 1990's in samples of the general population of different Italian areas repeatedly found a HBsAg prevalence <2% (with a range 0.2-1.3%) and a virtual absence of chronic infection in children[176]. Anti-HBc prevalence was usually <20% in these studies and increased with age. Immigrants are at higher risk to be missed for HBsAg screening during pregnancy, showing a need for further improvement in their access to appropriate medical care. **In 2000's, in Italy the number of reported acute HBV-infections is <2 per 100.000**, incidence rates are higher in males than in females and in North-Centre than in South-Islands and most of infections occur in people older than 24 years[177] (see table 3.6.2.1).

Table 3.6.2.1 – Incidence rates (/100.000) of reported acute viral Hepatitis B cases, by age and year (1985-2007).

Age	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04
0-14	3	2	2	2	1	1	1	1	1	1	1	0.5	0.4	0.3	0.1	0.5	0.2	0.1	0.1
15-24	35	31	22	19	17	12	10	10	6	6	5	5	4	3	2	1,5	1.3	0,9	0.7
25 ≥	9	8	5	5	4	4	3	4	4	3	3	4	3	3	2	2,5	2	2,3	2.3
Total	12	10	7	6	5	5	4	4	3	3	3	3	3	2	2	2	1.5	2	1.6

Source: SEIEVA, Tassi di incidenza (x 100.000) dell'epatite per età ed anno. SEIEVA 1985-2007, URL: http://www.iss.it/seie/docu/cont.php?id=37&lang=1&tipo=4, available on 13th October 2008.

Last data available (table 3.6.2.2), show that the spread of the virus is rather steady. Incidence for males is 2.40/100.000 whereas for females is 0.90/100.000.

[176] Bellentani, S.; Tiribelli, C.; Saccoccio, G.; Sodde, M.; Fratti, N.; De Martin; C; Christianini G. (1994), "Prevalence of chronic liver disease in the general population of Northern Italy: the Dionysos Study", in *Hepatology*, 20, pp. 1442-9; Crovari, Pietro (1995), "Epidemiology of viral Hepatitis B in Italy", in *Vaccine*, 13, Supp. 1, pp. S25-S30.

[177] Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis:twenty years of surveillance through SEIEVA in Italy and a review of the literature", *Istituto Superiore di Sanità - Rapporti ISTISAN 06/12*.

Table 3.6.2.2 – Annual incidence/100.000 per age, sex and geographic area of Acute Hepatytis B acute (2007).

AGE	NORTH AND CENTRE *			SOUTH AND ISLAND**			ITALY		
	MALES	**FEMALES**	**TOT.**	**MALES**	**FEMALES**	**TOT.**	**MALES**	**FEMALES**	**TOT.**
0-14	0.10	0.00	0.08	0.00	0.00	0.00	0.09	0.00	0.05
15-24	0.90	1.00	1.00	0.10	0.40	0.30	0.60	0.80	0.70
25+	4.60	1.00	2.70	1.10	0.50	0.80	3.60	0.90	2.20
TOT.	3.30	0.90	2.00	0.70	0.40	0.50	2.40	0.70	1.50

** Prov. Bolzano, Piemonte, Lombardia, Friuli Venezia Giulia, Veneto, Liguria, Emilia Romagna, Toscana, Umbria, Marche, Lazio, Abruzzo.*

*** Molise, Campania, Puglia, Basilicata, Calabria, Sardegna, Sicilia.*

Source: SEIEVA, Tassi annuali /100.00 per età, sesso ed area geografica delle epatiti Virali Acute. SEIEVA 2007, URL: http://www.iss.it/seie/docu/cont.php?id=37&lang=1&tipo=4, available on 13th October 2009.

Promiscuous sexual activity play a major role in the virus spread, whereas the impact of intravenous drug use is decreasing (table 3.6.3). Having a HBsAg-positive household or sexual partner was reported by 10% of cases in the period 1997-2004; approximately 40% of them were already aware to be in contact with a potential source of infection but they did not receive vaccination. Beauty treatments (piercing, tattoo, manicure, chiropody, barber shop shaving) are increasingly reported; these activities are potentially susceptible of law regulations aimed at the reduction of the risk of inter-individual blood contamination.

Table 3.6.2.3 – Frequency (%) per age groups of not mutually exclusive risk factors reported by Hepatitis B cases during the six months before disease onset, in Italy (1997-2004).

Risk factors	0-14	15-24	25-39	≥ 40	Total
	(n. 64)	**(n. 813)**	**(n. 2.713)**	**(n. 1.623)**	**(n. 5.213)**
Blood transfusion	7.4	0.4	0.6	6.7	2.6
Surgical intervention	5.4	9.3	11.6	20.1	13.9
Endoscopy	4.2	1.6	2	8.2	4
Hemodialysis	0	0,4	0.1	0.5	0.3
Hospitalization	20.7	10,4	9.8	24.4	14.7
Beauty treatment*	15.2	32.6	33.4	27	31
Dental therapy	14.6	28.4	33	27.8	30.4
Intravenous drug use	0	23.8	17.1	1.4	13
Household of IV drug users	4.6	6.2	3.5	0.7	3
≥ 2 sexual partners (last year)	0	35.6	41.3	24.7	34.9
Household of HBsAg+ carrier	18.6	17.1	9.4	9.4	10.6

* Piercing, tattooing, attendance to manicurist/chiropodist, barber shop shaving

Source: Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis: twenty years of surveillance through SEIEVA in Italy and a review of the literature", Istituto Superiore di Sanità - Rapporti ISTISAN 06/12; p. 13.

3.6.3 HCV situation in Italy

In Italy, no study has been carried out in a sample really representative of the whole Italian population. HCV prevalence estimates in the general population have been obtained by SEIEVA Collaborative Group headed by prof. Alfonso Mele[178] through seroprevalence studies carried out in different areas of the country. Authors showed that the anti HCV prevalence ranges from 3% to 26%, marking a progressive increase with age (indicated increase in subjects born before 1950) and a trend towards higher rates in Southern regions and major Islands (Sicily and Sardinia) than in central and Northern regions. Therefore, in Italy the infection seems to show a different epidemiological pattern compared to other Western countries. In fact, in these latter the prevalence of HCV-infection is higher in young adults than in older ones, while the opposite seems true in Italy suggesting a cohort effect. The study shows that in Italy the incidence peaked in the 1950's and in the 1960's, principally due to the large use of unsafe therapeutic injection with glass syringes, whereas, for example, in the USA the peak of incidence occurred in 1980's, mainly due to intravenous drug use.

Even though the incidence of HCV-infection is very difficult to establish, because acute Hepatitis C is very often asymptomatic and available assays do not distinguish acute from chronic or resolved infection, in a study carried out during 1999–2004[179] symptomatic disease was observed in 148 (68%) of 214 patients, a total of 73 patients (36%) showed spontaneous resolution of illness, and 130 (64%) became chronic HCV carriers. The percentage of subjects with self-limiting acute Hepatitis C was 41% for symptomatic patients but 26% for asymptomatic patients.

Another study performed by prof. Mele and his colleagues, referring to the SEIEVA data, showed that since 1993, about 98% of notified non-A/non-B Hepatitis cases have been tested for anti-HCV, with a positive rate of 77%. In 2004, the incidence rate of HCV positive non-A/non-B Hepatitis was 0.5/100.000 (see Table 3.6.3.1). The estimated cases-fatality rate of acute Hepatitis C reported in the period 1997-2004, has been 0.23%.

Table 3.6.3.1 – Incidence rates /100.000 of reported acute viral Hepatitis C cases, by age and year.

Age	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04
0-14	3	2	2	2	1	1	1	1	1	1	1	0.5	0.4	0.3	0.1	0.5	0.2	0.1	0.1
15-24	35	31	22	19	17	12	10	10	6	6	5	5	4	3	2	1.5	1.3	0.9	0.7
25 ≥	9	8	5	5	4	4	3	4	4	3	3	4	3	3	2	2.5	2	2.3	2.3
Total	12	10	7	6	5	5	4	4	3	3	3	3	3	2	2	2	1.5	2	1.6

Source: Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis: twenty years of surveillance through SEIEVA in Italy and a review of the literature", Istituto Superiore di Sanità - Rapporti ISTISAN 06/12; p. 5.

The frequency of not mutually exclusive risk factors reported by cases of acute Hepatitis C notified to SEIEVA from 1997 to 2004 is shown in table 3.6.3.2. Intravenous drug use, beauty treatment, hospitaliza-

[178] Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis:twenty years of surveillance through SEIEVA in Italy and a review of the literature", *Istituto Superiore di Sanità - Rapporti ISTISAN 06/12*.

[179] Santantonio, T.; Medda, E., Ferrari, C., Fabris, P.; Cariti, G.; Massari, M.; Babudieri, S.; Toti, M.; Francavilla, R.; Ancarani, F.; Antonucci, G.; Scotto, G.; Di Marco, V.; Pastore, G.; and Stroffolini, T. (2006), "Risk Factors and Outcome among a Large Patient Cohort with Community-Acquired Acute Hepatitis C in Italy", *Clinical Infectious Diseases*, 43, pp. 1154–1159,

tion, surgical intervention, dental therapy and having more than 2 sexual partners were, in decreasing order, the most frequently reported risk factors.

Table 3.6.3.2 – Frequency (%) per age groups of not mutually exclusive risk factors reported by Hepatitis C cases during the six months before disease onset, in Italy (1997-2004).

Risk factors	0-14	15-24	25-39	≥ 40	Total
	(n. 18)	**(n. 349)**	**(n. 646)**	**(n.668)**	**(n. 1.681)**
Blood transfusion	18.7	1.3	1.1	12.5	5.9
Surgical intervention	31.3	13.8	17	35.2	23.8
Endoscopy	14.3	2.6	4.7	16.6	9
Hemodialysis	6.2	0.9	0.3	6.3	2.9
Hospitalization	43.8	14.4	16	42.7	26.4
Beauty treatment*	12.5	36.4	30.5	20.5	27.6
Dental therapy	6.7	28.7	25.8	19.6	23.8
Intravenous drug use	13.3	60.9	46	3	31.9
Household of IV drug users	6.2	10.3	10.8	0.8	6.6
≥ 2 sexual partners (last year)	11.1	35.2	26.7	6.7	20.9
Household of HBsAg+ carrier	28.6	15.6	18.1	8.3	13.5

* Piercing, tattooing, attendance to manicurist/chiropodist, barber shop shaving

Source: Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis: twenty years of surveillance through SEIEVA in Italy and a review of the literature", Istituto Superiore di Sanità - Rapporti ISTISAN 06/12.

3.6.4 HBV and HCV spreading among young people in Italy

The epidemiology of Hepatitis B Virus (HBV) infection has widely changed over the past three decades in Italy especially among young thanks to the introduction in 1991 of the compulsory vaccination by law against HBV for all newborns starting at 3 months of age and for all 12-year-old subjects. In 1991, the incidence among young people (aged 15-24) was 12.0/100.000. In 2007, the incidence was decreased to 0.7/100.000.

Starting from 1993, the HCV incidence among young people is decreased appreciably. In a decade the incidence rate is changed from 3.5 in 1993 to 0.3 in 2004, remaining stable during the following years. A study carried out during the period 1997-2004[180] shows that **the main infection mode of HCV among young people is the intravenous drug use (60%)**. The others two main infection modes are beauty treatment (piercing, attendance to manicurist, chiropodist, barber shop shaving) with 36,4% and sexual intercourse with 35.2%.

3.6.5 Country situation on HIV-AIDS. The existing Italian reporting system on HIV/AIDS

In Italy, the HIV/AIDS case identifications take place at the centres where is possible to access to the HIV testing. The test is on voluntary basis and free of charge.

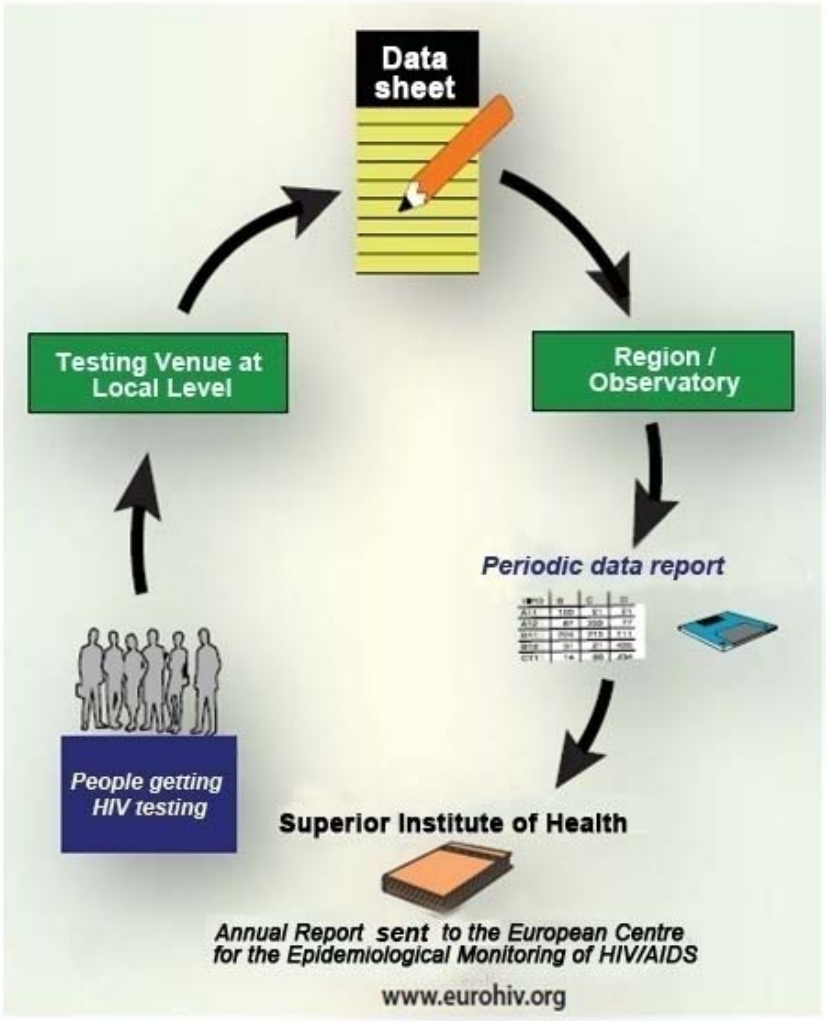
As showed in figure 3.6.5.1, the sending of notifications are organized in two steps[181]:

[180] Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis: twenty years of surveillance through SEIEVA in Italy and a review of the literature", *Istituto Superiore di Sanità - Rapporti ISTISAN 06/12*.

[181] Istituto Superiore di Sanità (2005), *Notiziario dell'Istituto Superiore di Sanità*, vol. 18, n. 6, Suppl. 1, giugno.

1) The single center identifies HIV cases and reports notifications to the Regional Coordination Center;
2) The Regional Coordination Center reports notifications to the COA (Anti-AIDS Operative Centre) on annual basis, in the form of anonymous aggregated data.

Figure 3.6.5.1 - Data flow of the HIV Surveillance system



Source: Istituto Superiore di Sanità (2005); Notiziario dell'Istituto Superiore di Sanità, vol. 18, n. 6, Suppl. 1, June.

In 2007, only six Italian regions have already established a surveillance system: Lazio (from 1985), Veneto (from 1988), Friuli-Venezia Giulia (from 1985), Piemonte (from 1999), Liguria (from 2001), Puglia (from 2007). Even the provinces of Modena (from 1985), Trento (from 1985), Bolzano (from 1985), Sassari (from 1987), Rimini (from 2002), and Catania (from 2007) have collected data.

Starting from 2008, the mandatory reporting is for both HIV cases and AIDS case infections.

3.6.6 HIV/AIDS situation in Italy

In the period 1985-2007, in the regions and provinces participating in the data collection182 have been reported 40.676 new HIV-infection cases (28.760 males, 11.902 females, 14 sex unknown).

The maximum incidence of the new HIV-infections was in 1987 (up 25/100.000). Then the incidence started to decrease till to stop in 1998 under 10/100.000). Also the proportion between males and females has changed, the females/males proportion was 3.5 in 1985, while in 2007 was 2.5.

The report of the National Institute of Health, released in 2009, shows that the target population most at risk of contracting the virus has changed over the decades. If at the beginning of the discovery of the disease, in the years 1980's-1990's, the main source of infection was drug abuse, in 2007 the proportion of drug addicted people has decreased to 8.6% (from 69.0% in 1985). Instead, infections due to sexual transmission (heterosexual and homosexual) have increased to 73% (13.3% in 1985).

In **2007**, from the regions and provinces involved in the survey were reported **1679 new diagnoses of HIV-infection** in residents, with an **incidence of 6.0 per 100.000 residents**. The lower incidence was observed in Puglia, the highest in the province of Rimini (figure 3.6.6.1)[183].

Figure 3.6.6.1 – Annual incidence rate per 100.000 residents of the new HIV-infections reported in 2007.

Source: Istituto Superiore della Sanità (2009), Supplemento del notiziario dell'Istituto Superiore di Sanità, 22, 3, 1.

[182] Regions involved in the survey are: Lazio, Veneto, Friuli-Venezia Giulia, Piemonte, Liguria, Puglia. Also some provinces have been involved in the survey: Modena, Trento, Bolzano, Sassari, Rimini e Catania.
[183] Istituto Superiore della Sanità (2009), *Supplemento del notiziario dell'Istituto Superiore di Sanità*, 22, 3, 1.

From 1982, year of the first AIDS notification in Italy, by 31 December 2008, cumulative AIDS reported cases were 60.346, which 46.692 (75,7%) were males. In 2008 new AIDS reported cases were 1.238, which 261 of diagnosis related to previous years. In table 3.6.6.1 are reported data from 1999 to 2008.

Table 3.6.6.1 – Annual spread (1999-2008) of AIDS-infection cases by region of residence.

Region	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Lombardia	4219	4475	4706	4937	5166	5364	5566	5675	5829	5996
Lazio	2193	2268	2376	2486	2581	2665	2730	2776	2862	2906
Emilia-Romagna	1211	1327	1389	1450	1536	1598	1629	1696	1747	1820
Toscana	887	933	985	1048	1101	1155	1182	1238	1313	1386
Piemonte	884	945	999	1044	1069	1124	1165	1200	1211	1257
Sicilia	761	812	856	876	920	944	971	992	1.005	1035
Campania	735	790	820	864	891	915	941	960	986	1019
Veneto	750	788	821	853	883	898	908	939	968	1011
Liguria	752	776	798	820	856	885	894	943	941	971
Puglia	632	660	677	708	748	760	788	808	826	854
Sardegna	482	504	524	548	550	548	558	564	560	579
Marche	247	273	287	302	315	346	355	379	391	405
Abruzzo	146	146	155	172	181	188	201	210	231	241
Umbria	133	149	157	168	182	187	200	217	228	231
Calabria	139	142	159	169	183	188	194	205	206	211
Friuli-Venezia Giulia	143	154	154	161	167	178	181	181	190	201
Trento	121	123	124	130	132	132	136	137	143	145
Bolzano	79	88	91	91	97	102	103	112	123	121
Basilicata	47	46	46	47	51	54	57	62	61	69
Molise	10	14	14	16	17	18	21	26	29	31
Val d'Aosta	23	23	25	25	28	27	27	26	27	29
Foreigners	190	202	222	245	271	287	319	349	377	384
Unknown	352	391	419	435	455	485	529	547	559	604
Total	**15.136**	**16.029**	**16.804**	**17.595**	**18.380**	**19.048**	**19.655**	**20.242**	**20.813**	**21.506**

Source: ISS (2009), Supplemento del notiziario dell'Istituto Superiore di Sanità, 22, 3, 1.

In Italy, there's no recent national-based data on AIDS spread among immigrants. Data available related to 2003 showed that among 40.000 cases of AIDS identified in Italy, 2.800 were represented by foreign people, the percentage of AIDS cases among foreign people increasing from 3% in 1992 to 15% in 2003. Nevertheless, since 1996, although the immigrant population has been significantly increasing, the

number of AIDS diagnosis among male immigrants (>18 years old) has decreased, and it has kept stable among women[184].

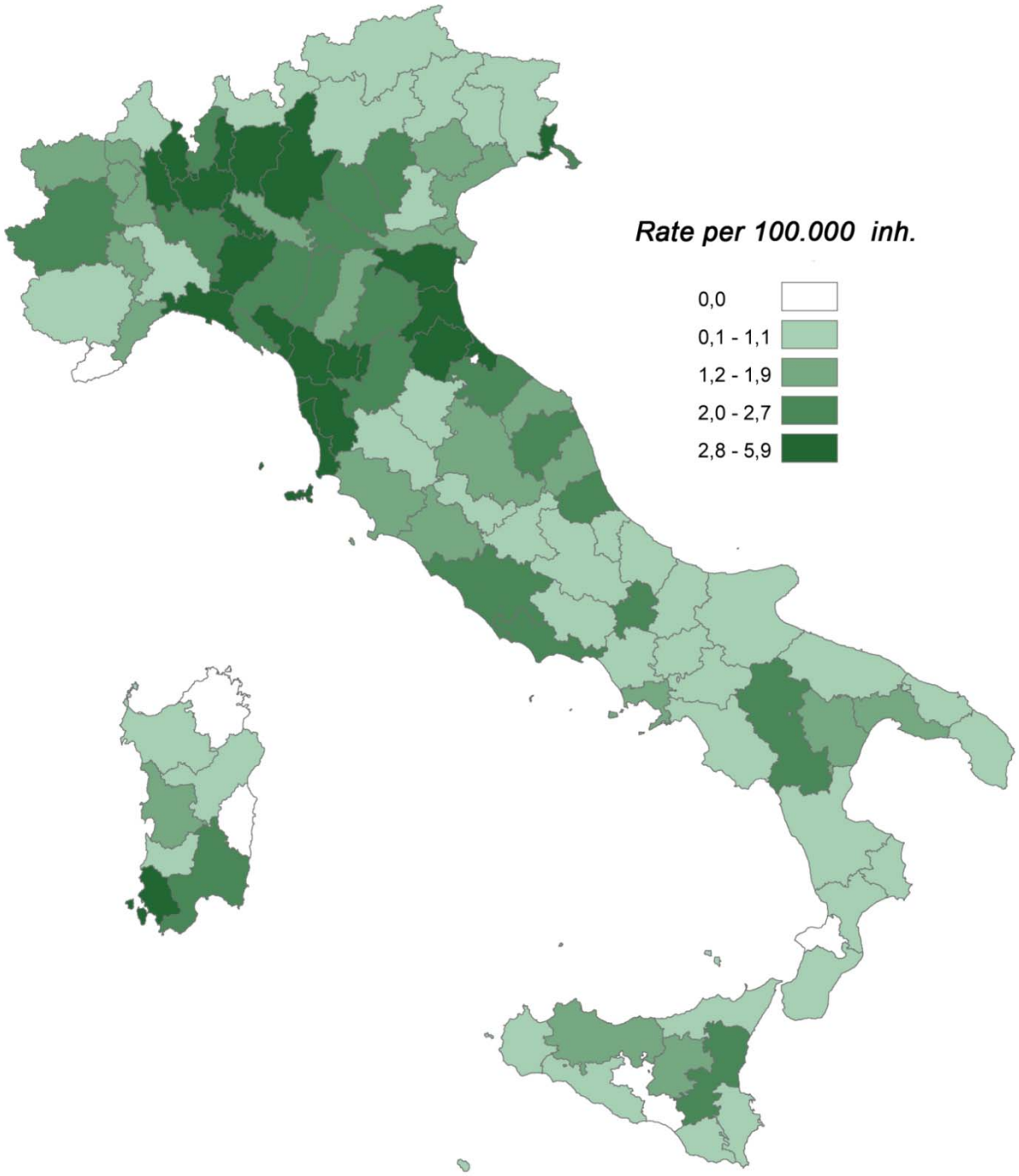
Table 3.6.6.2 – Percentage rate (%) of AIDS cases by age and sex in 1990, 1995, 2005 e in the total of the cases.

	Males			Females			Males	Females	Total
Year of notification	**1990**	**1995**	**2005**	**1990**	**1995**	**2005**	**Total (1982-2007)**		
	N. 2552	**N. 4277**	**N. 1133**	**N. 583**	**N. 1376**	**N. 380**	**N. 46.692**	**N. 13.654**	**N. 60.346**
Age									
0	0.5	0.3	0	1.7	0.9	0.3	0.3	1	0.4
14	0.4	0.3	0	2.1	1	0	0.3	1	0.5
59	0.2	0.4	0	0.9	0.7	0.3	0.2	0.5	0.3
10-12	0.1	0.1	0	0.2	0.1	0.3	0.1	0.1	0.1
13-14	0.2	0	0	0	0	0.3	0.1	0.1	0.1
15-19	0.4	0	0.4	0.2	0.2	1.8	0.2	0.5	0.3
20-24	6.1	1.7	1.3	15.3	4	2.9	3.3	6.7	4.1
25-29	34.1	12.9	4.8	40.1	22.4	8.4	17	23.8	18.5
30-34	28.7	38.4	11.7	22.8	39.4	17.9	27.7	28.3	27.8
35-39	13.9	23.7	21.6	7.2	18.1	24.2	21	18.3	20.4
40-49	10.1	14.5	40.8	5.7	8.9	30.8	19.4	13.5	18.1
50-59	3.9	5.1	12.5	2.2	2.5	9.5	7.2	3.7	6.4
>60	1.4	2.6	7	1.7	1.7	3.4	3.4	2.3	3.2

Regions involved in the survey are: Lazio, Veneto, Friuli-Venezia Giulia, Piemonte, Liguria, Puglia. Also some provinces have been involved in the survey: Modena, Trento, Bolzano, Sassari, Rimini e Catania.
Source: Aids Operative Centre (COA) (2008), Aggiornamento delle nuove diagnosi di infezioni da HIV e dei casi di AIDS in Italia.

[184] Cacciani L, Rosano A, Boros S, Colucci A, Camoni L, Suligoi B, Rezza G, Baglio G, *Andamento dei casi di AIDS diagnosticati in Italia tra gli stranieri (1992-2003)*, IX Consensus Conference on Migration, organized by the Italian Society of Migration Medicine (SIMM), Palermo 27-30 Aprile 2006.

Figure 3.6.6.2 – AIDS Incidence rate by province of residence (per 100.000 inh.) for cases reported in 2008.



Source: COA (2008), Aggiornamento delle nuove diagnosi di infezioni da HIV e dei casi di AIDS in Italia; p. 34.

Table 3.6.6.3 – AIDS cases spread from the beginning of the epidemic disease, by province reporting and residence, and by incidence rate in 2008 by province of residence.

Province	Notifications	Residence	Incidence rate	Province	Notifications	Residence	Incidence rate
Alessandria	367	424	0.9	Siena	155	149	0.8
Asti	91	94	1.4	Perugia	427	371	1.5
Biella	262	287	1.6	Terni	162	137	0.9
Cuneo	240	243	0.5	Ancona	584	304	1.7
Novara	494	502	3.6	Ascoli Piceno	190	301	1.6
Torino	2240	2037	2	Macerata	105	162	2.2
Verbania	186	267	0.6	Pesaro e Urbino	169	268	2.1
Vercelli	142	142	1.7	Frosinone	251	160	0.6
Aosta	88	83	1.6	Latina	489	416	2
Bergamo	1517	1446	3.7	Rieti	125	62	0.6
Brescia	2535	2362	3.4	Roma	7214	6969	2.2
Como	752	759	2.2	Viterbo	301	276	1.3
Cremona	436	501	1.4	Chieti	85	106	0.8
Lecco	500	416	4.8	L'Aquila	107	110	1
Lodi	316	346	5.9	Pescara	219	154	0.9
Mantova	370	398	2.7	Teramo	133	157	2.6
Milano	8352	9043	3.6	Campobasso	60	41	0.9
Pavia	1406	813	2.4	Isernia	2	20	2.2
Sondrio	83	132	1.1	Avellino	38	59	0.5
Varese	1878	1770	3.4	Benevento	19	43	1
Bolzano	287	266	1	Caserta	105	294	1.1
Trento	326	333	0.6	Napoli	1863	1586	1.3
Belluno	57	83	0.9	Salerno	206	270	0.8
Padova	936	659	0.4	Bari	1055	871	1.1
Rovigo	109	172	1.2	Brindisi	149	232	1
Treviso	404	392	1.6	Foggia	416	401	0.1
Venezia	418	587	1.9	Lecce	261	336	1
Verona	805	649	2.2	Taranto	321	437	1.6
Vicenza	733	805	2.2	Matera	17	53	1.5
Gorizia	21	44	2.8	Potenza	95	133	2.6
Pordenone	417	183	1	Catanzaro	239	180	0.5
Trieste	187	103	2.1	Cosenza	67	133	0.3
Udine	98	160	0.9	Crotone	66	111	0.6
Genova	2054	1928	5	Reggio Calabria	73	134	0.4
Imperia	349	386	0	Vibo Valentia	36	40	0
La Spezia	227	220	2.7	Agrigento	1	118	0.4
Savona	423	417	1.8	Caltanissetta	172	115	0
Bologna	1652	1525	2.6	Catania	696	582	2.4
Ferrara	457	484	3.9	Enna	25	45	1.7
Forlì	404	569	3.7	Messina	228	258	0.6
Modena	730	685	1.5	Palermo	1209	1051	1.5
Parma	472	421	2.1	Ragusa	69	69	1

Province	Notifications	Residence	Incidence rate	Province	Notifications	Residence	Incidence rate
Piacenza	341	347	3.6	Siracusa	113	174	1
Ravenna	1154	864	4	Trapani	39	201	1.1
Reggio Emilia	512	461	2.5	Cagliari	1266	1083	2.5
Rimini	690	480	4.7	Nuoro	65	55	0.6
Arezzo	177	156	0.6	Oristano	2	53	1.2
Firenze	1225	1159	2.7	Sassari	411	305	0.6
Grosseto	259	318	1.8	Olbia-Tempio	2	110	0
Livorno	452	501	4.4	Ogliastra	-	10	0
Lucca	202	405	4.1	Me. Campidano	-	88	1
Massa Carrara	272	297	4.4	Carbonia-Iglesias	-	73	3.8
Pisa	737	312	3.2	Foreners	-	559	-
Pistoia	122	257	3.5	Unknown	-	1043	-
Prato	280	185	4.1	Total	60346	60346	-

Source: Aids Operative Centre (2008), Aggiornamento delle nuove diagnosi di infezioni da HIV e AIDS in Italia.

3.6.7 HIV/AIDS spreading among young people

In the last twenty years, in Italy the HIV/AIDS spreading among young people (aged 15-24) has widely varied. Data available during this period show **young males infected by AIDS were 6.5% of the whole infected population, whereas in the 2005 they were 1.5%**. Among **young females** the change has been more marked, indeed they **were 15,5% of the whole infected population, whereas in 2005 they were only 4.7%**[185].

[185] COA (2008), *Aggiornamento delle nuove diagnosi di infezioni da HIV e dei casi di AIDS in Italia,* p. 34.

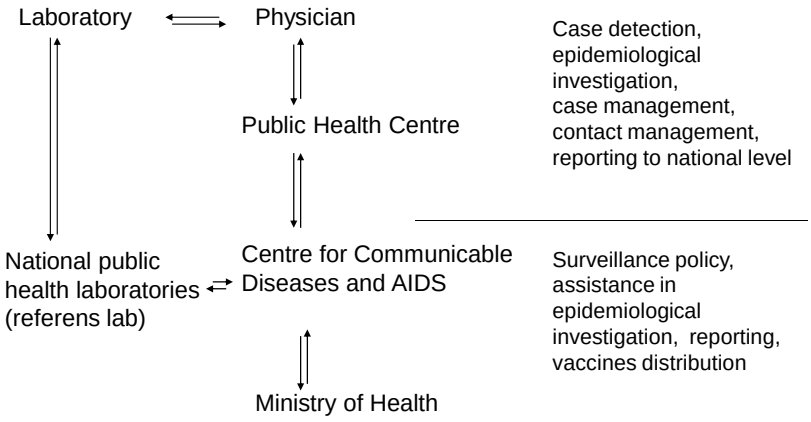
3.7 Lithuania

3.7.1 Country situation on Hepatitis B and C. The reporting system for HBV and HCV

The main responsibility of communicable disease surveillance, prevention and control relies on the Ministry of Health. Communicable disease control has a relatively long tradition in Lithuania and is organized by Centre for Communicable disease and AIDS at the national level where the coordination, organization and methodical guidelines for surveillance, prevention and control takes place. Communicable diseases surveillance and control at regional level are performed by Public Health Centres under State Public Health Service. Epidemiological surveillance of communicable diseases in Lithuania is carried out by the Centre for Communicable Diseases and AIDS. In administrative regions this function is performed by 10 Public Health Centres.

The system of notification and reporting of communicable disease cases is set up in the Health minister's order. The clinicians inform the territorial public health institution (regional Public Health Centres and their local departments) about suspected, probable or confirmed cases within 12 hours by phone, and must send a special notification form, called “Urgent report” within 72 hours. When diagnosis is changed the clinician must inform the territorial public healthcare institution within 12 hours. The Public Health Centre records all the notifications in individual form. All detected cases (probable or confirmed) in the aggregated form are reported monthly to the national level (Centre for Communicable disease and AIDS) and recorded at the State register for communicable diseases. Public Health Centres must immediately inform Centre for Communicable Diseases and AIDS about outbreaks or cases of some communicable diseases (according to the published list). Centre for Communicable disease and AIDS sends this information as soon as possible to the Ministry of Health.

Figure 3.7.1.1 – Data-flow into the national surveillance system.



Source: Center For Communicable Diseases And AIDS, URL: http://www.ulac.lt/en.index.php.

The individual data at the regional level are registered at the computerised surveillance system called ULISAS. The first computerised surveillance programmes in the counties were implemented in 2004 (2 counties). The system has been implemented in the other counties gradually since 2006 and all the counties started using this system in 2008. The computerised individual data collection was still missing at the national level, but according to the Health Minister's order on the 1 January 2010, an individual notification system from local to the national level for communicable disease and their agents will start. The computerised national surveillance system are bases in Centre for Communicable disease and AIDS. This will implement centralised computerised system nationally, allowing real time analysis and interpretation of data, an early detection of outbreaks, etc. In the system data from laboratory will be consolidated.

According to the data available, analysis of surveillance data is performed continuously (urgent, monthly, yearly) at the regional/local level and monthly/yearly at the national level. Regional level has individual data and is able to perform more detailed analysis according the needs. Computerised surveillance systems (at the local level) is also used for data as well as other programmes (EpiInfo, SPSS, etc.). At the national level analysis of monthly aggregated data is performed by age group, gender, municipality. More specific data are analysed yearly: by age groups, risk groups, risk factors, way of transmission.

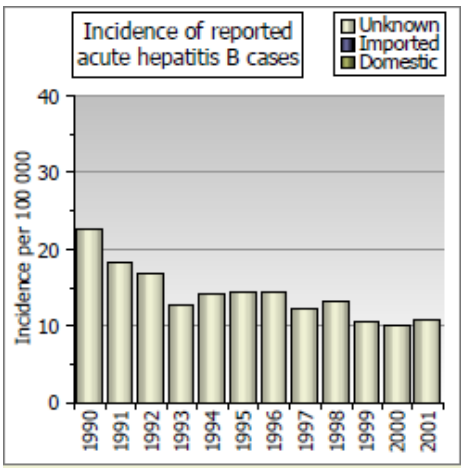
The national communicable disease registration data are published in the aggregated form at the webpage of the Centre for Communicable Disease and AIDS monthly. An electronic bulletin "Epidemiology news" ("Epidemiologijos Žinios") in Lithuanian language is published quarterly at the webpage of Centre for communicable disease and AIDS (http://www.ulac.lt). It includes information on different events in the communicable disease area, the most interesting outbreak reports, analysis of surveillance data, other information, relevant for the specialists working in the communicable disease prevention and control area.

The work, performed by the State Public Health Service and institutions accountable to the Service, is presented annually in Lithuanian language available as a hard copy and at the webpage. It includes analysis of all activities performed, including communicable disease prevention and control area.

3.7.2 HBV and HCV situation in Lithuania

Starting from 1990, the spread of HBV is decreased appreciably (Figure 3.7.2.1), even if the introduction of the HBV vaccination schedule for newborns was introduced only in 1998.

Figure 3.7.2.1 – Incidence of reported acute Hepatitis B cases in Lithuania (1990-2001).



Source: Bakasenas, V.; Usonis, V. (2003), Surveillance, epidemiology and prevention of Hepatitis B in Lithuania Results of the EUROHEP.NET feasibility survey;
URL: http://www.eurohep.net/files/surveyresults/BookLithuaniahepB.pdf, on 2nd September 2009.

In 2008, HBV case were 90 cases with an incidence 2.65/100.000[186].

A study carried out in 1991-1992 showed that Hepatitis C virus was widely spread in general population and in other groups analysed for anti-HCV: 4.0% of first time blood donors, 0.8% of students, 85.4% of commercial blood plasma donors, 87.5% of hemodialysis unit patients and 0% of staff members[187]. Nowadays, the HCV spread is decreased. According to the data on Hepatitis published by the Centre for Communicable Disease and AIDS[188], new acute HCV reported cases in 2008 were 43 cases, incidence 1.36/100.000.

3.7.3 HBV spreading among young people in Lithuania

According to the data released by the Centre for Communicable Disease Prevention And Control of Lithuania, the number of children under 15 years living with HBV in 2008 were 2, whereas the number of young persons (ages 18-24) living with HBV in 2008 were 19. The incidence for woman age 18-24 was 7.3/100.000 and for men (18-24) was 7.0/100.00 in 2008. The percentage of cases aged 18-24 years old of HBV was 21.1%.

3.7.4 HCV spreading among young people in Lithuania

In 2008, the number of young persons (ages 18-24) living with HCV was 5. Among young women (age group 18-24) the incidence was 0.60/100.000 and the percentage of cases aged 18-24 was 11%[189].

3.7.5 Country situation on HIV-AIDS. The Lithuanian existing reporting system on HIV/AIDS

In 1991, the Lithuanian Republic Parliament adopted the National Health Care Concept of Lithuania. In 1998 the Lithuanian Health Programme was adopted. Following main principles underlined in the WHO Health for All strategy, this programme underlined main directions of HIV and other communicable disease in Lithuania. Report of the annual data of HIV/AIDS and STI surveillance is performed by the Communicable disease and AIDS Centre and distributed as a hard copy to the stakeholders once per year (in Lithuanian language) and available at the webpage of Centre for Communicable disease and AIDS (http://www.ulac.lt).

The Centre for Communicable disease and AIDS is in charge for national HIV/AIDS/STI epidemiological surveillance. The notification system adapted for the new HIV or AIDS cases is the same as for newly diagnosed STIs.

3.7.6 HIV/AIDS situation in Lithuania

Data of Center For Communicable Disease Prevention And Control of Lithuania reported that, in 2008, HIV incidence amounted to 2.7 cases per 100.000 and HIV incidence rate remained stable over the last five years (2004-2008): 3.9 cases per 100.000 in 2004. Throughout entire HIV registration period (from 1988 to 1 January 2009) there were 1401 HIV cases diagnosed in Lithuania, 1183 of whom were men and 218 women. During the last five years the proportion of female cases increased: in 2004, M/F ratio of cases was 5/1 and, in 2008, it was 2/1.

Affecting different HIV risk groups, HIV epidemic in Lithuania evolved through 3 stages: the first cases (from 1988 to 1996) were registered in the community of MSM and among seafarers who infected

[186] Center for Communicable Disease Prevention And Control of Lithuania, URL: *www.ulpkc.lt*.
[187] Ambrozaitis, A; Zagminas, K; Bajoriuniene, A; Galinaitiene, A: Caplinskas (1993), "Prevalence of viral Hepatitis C in Lithuania", *International Conference on AIDS*, 9, 345.
[188] Center for Communicable Disease Prevention And Control of Lithuania, URL: *www.ulpkc.lt*.
[189] Center for Communicable Disease Prevention And Control of Lithuania, URL: www.ulpkc.lt.

through heterosexual contact, then (from 1997 to 2003) infection affected IDUs and, during the last period (from 2004 to 2008), infection was spreading more rapidly heterosexually in the general population[190].

Data of Center For Communicable Disease Prevention And Control of Lithuania showed that the cumulative number of HIV cases by mode of transmission in 20 years (1988-2008) period were: 73.4% (N = 1028) cases for IDUs; 13.1% (N = 184) for heterosexual contact; 6.6% (N = 92) homo-contact; 0.07% (N= 1) for perinatal; 6.8% (N = 96) for unknown. HIV cases were reported in 49 municipalities, the HIV prevalence in Lithuania in 2008 was 37.07 cases per 100.000. The highest HIV prevalence rate was in Klaipėda (192 cases /100.000), Alytus, Mazeikiai and Siauliai. In total, 206 cases of AIDS were diagnosed. In 2008, AIDS incidence rate amounted to 0.8/100.000. Annual number of AIDS cases over the last 5 years (2004-2008) doubled: 21 cases of AIDS were reported in 2004, and as many as 55 cases in 2008.

3.7.7 HIV/AIDS spreading among young people

In Lithuania, first HIV-infection case among youth aged 15-24 was diagnosed in 1989. Data released by of the Center For Communicable Disease Prevention And Control of Lithuania proved during 1988-2008 a total of 283 HIV-infection identified cases, among them 58 were women and 225 were men. The majority of this age group people (83%) were HIV infected by using intravenous drugs; (8.5%) having heterosexual relations; 4.6% having homosexual relations; in 3.9% transmitting way wasn't identified. In this age group 20 new cases are diagnosed each year in average, except 2002, when was enclosed HIV explosion in the Alytus correctional settings. The last years' data showed that the HIV spreading in this age group remains stable. Totally 28 AIDS cases in this age group were diagnosed and 10 are died from AIDS.

[190] Center for Communicable Disease Prevention And Control of Lithuania, URL: www.ulpkc.lt.

3.8 Malta

3.8.1 Country situation on Hepatitis B and C. The reporting system for HBV, HCV

In accordance with the Public Health Act, new HBV, HCV and HIV/AIDS cases are notifiable. The attending physician who or laboratories that come across cases are obliged to notify the Superintendent of Public Health. Cases are then investigated by the Infectious Disease Prevention & Control Unit in collaboration with the reporting clinician. In Malta, there is full collaboration with laboratories where positive cases are reported.

3.8.2 HBV situation in Malta

All children are required to be immunised against Hepatitis B[191]. This is covered by the Prevention of Disease Ordinance. Babies are immunised at 15 months (first dose), 16 months (second dose) and at 21 months (third dose). Children receive then given a final dose at 9 years of age. In each case, an inactivated viral antigen vaccine is given. An Immunisation Unit co-ordinates all the immunisation activities. The Unit offers free immunisation to children at all ages as well as immunistaion against a fee to other persons requesting it. It follows closely all babies from birth and acts as a Regulator for the Immunisation legislation. Parents or carers of babies are reminded to take their children to be immunised, and in the case of non compliance, legal action is taken. Children may be immunised at the Immunisation Centre where the service is free of charge, or at a private General Practitioner against payment. People working in increased risk jobs are given free vaccination against Hepatitis B. These include the Police and the Armed Forces, people working in hospitals, laboratories and institutions.

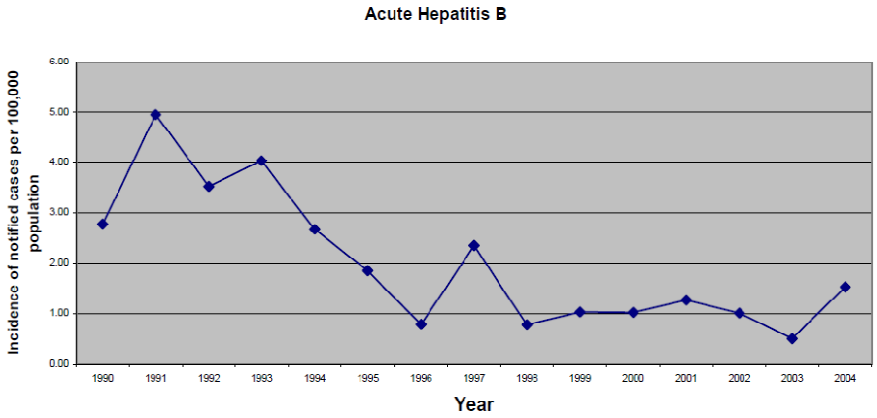
The lack of knowledge about Hepatitis in general often leads to misunderstandings in vaccination against Hepatitis B virus. In a study published in 1994[192], it was found that only 59.2% of intravenous drug users received the full course of vaccination, while 36.7% did not receive the vaccination and 4.1% were not sure of being vaccinated or not.

The Health Promotion Unit is responsible for creating and implementing Health Promotion and Education interventions but is being limited by constraints in openly discussing preventive measures, for example promoting use of condoms. The ABC model for sexual health education is encouraged, but messages are often seen as being covert in this regard[193].

In the last years, the reported incidence rate of acute Hepatitis B over recent years in Malta is down going.

[191] National immunization Service (2006), *Annual Report*.
[192] Camilleri, M. (1994), *Hepatitis C virus: Another challenge for addicts and carers*, MSc Dissertation.
[193] Department of Health Promotion & Disease Prevention (2008), *Annual Report.*

Figure 3.8.2.1 – Reported incidence of sporadic Hepatitis B cases in Malta (1990-2004).



Source: Committee on Communicable Disease Control Strategy on behalf of the Health Division (2004), Communicable Disease Control Strategy in Malta.

In 2002, the age group with highest incidence was 25-50 years.

Table 3.8.2.1 – Prevalence of Hepatitis B according to age groups in Malta in 2002.

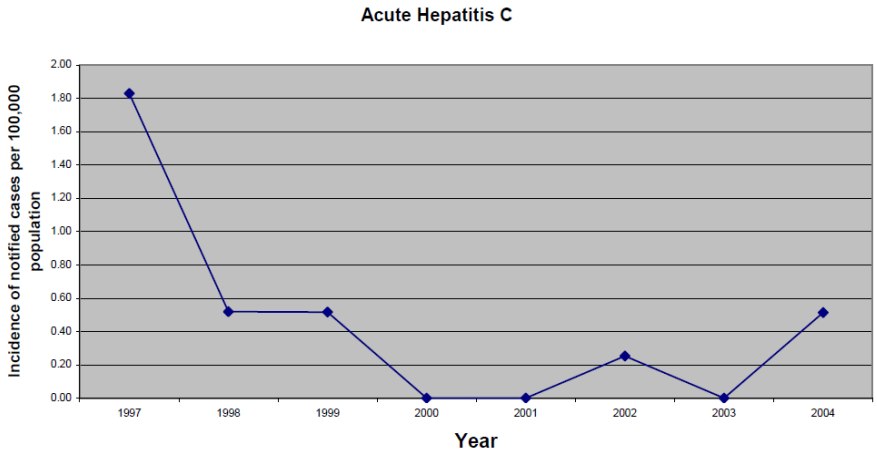
Age Group	Prevalence	95% Confidence Limits
0-24 years	0.4%	(0-1%)
25-50 years	1.9%	(0.2-3.4%)
>50 years	0.5%	(0-15%)

Source: Committee on Communicable Disease Control Strategy on behalf of the Health Division (2004), Communicable Disease Control Strategy in Malta.

3.8.3 HCV situation in Malta

In the last years, the reported incidence of acute Hepatitis C is on the decline.

Figure 3.8.3.1 – Reported incidence of sporadic Hepatitis C cases in Malta (1990-2004).



Source: Committee on Communicable Disease Control Strategy on behalf of the Health Division (2004), Communicable Disease Control Strategy in Malta.

The highest prevalence rate of Hepatitis C in Malta is clearly in intravenous drug users, in particular those who at sometimes or other have been in prison[194]. The incidence of Hepatitis C increases with increasing months spent in prison. Hepatitis C is found predominately in the south of the island, which is comparable to the incidence of IDUs. Intravenous drug users may attend a Detoxification centre where they are given methadone free of charge. There are currently approximately 800 drug users who attend the Centre regularly. The highest proportion of users of the Detoxification Centre come from the Southern Harbour district (39.49%). This is in proportion to the estimated distribution of drug users in the island. With regards sexual transmission, condom use is still very low among drug users but again the rate is similar to condom use in the general population. A high proportion of intravenous drug users report having 5 or more sexual partners. However, only 19.39% use condoms increasing the risk of sexual transmitted infections. The proportion of sharing needles in the age groups of 26-32 years and 33-60 years are 31.4% and 27.5%, respectively. A program of free distribution of needles and syringes to intravenous drug users exists and it is estimated that 145.000 syringes were given out in the first six months of 2009. In 2008, 280.000 syringes were distributed. It is observed that a higher proportion of males have Hepatitis C when compared to females.

There is a grave lack of information on Hepatitis C in the entire population. This is a result of various issues, namely, the lack of sexual health education in schools, the fact that sexual health is not discussed openly socially or within families, and the unwillingness of the Church towards the promotion of the use of condoms.

3.8.4 HBV and HCV spreading among young people in Malta

In 2002, the prevalence among under 24 years old was 0.4%[195] and nowadays the prevalent rate of Hepatitis B in Malta is estimated under 1%[196]. There are no updated data on HBV and HCV among young people.

3.8.5 Country situation on HIV-AIDS. The Maltese existing reporting system on HIV/AIDS

In accordance with the Public Health Act, HIV/AIDS became a notifiable disease in 2004. The attending physician who or laboratories that come across cases are obliged to notify the Superintendent of Public Health. Cases are then investigated by the Infectious Disease Prevention & Control Unit in collaboration with the reporting clinician. In Malta, there is full collaboration with laboratories where positive cases are reported.

3.8.6 HIV/AIDS situation in Malta

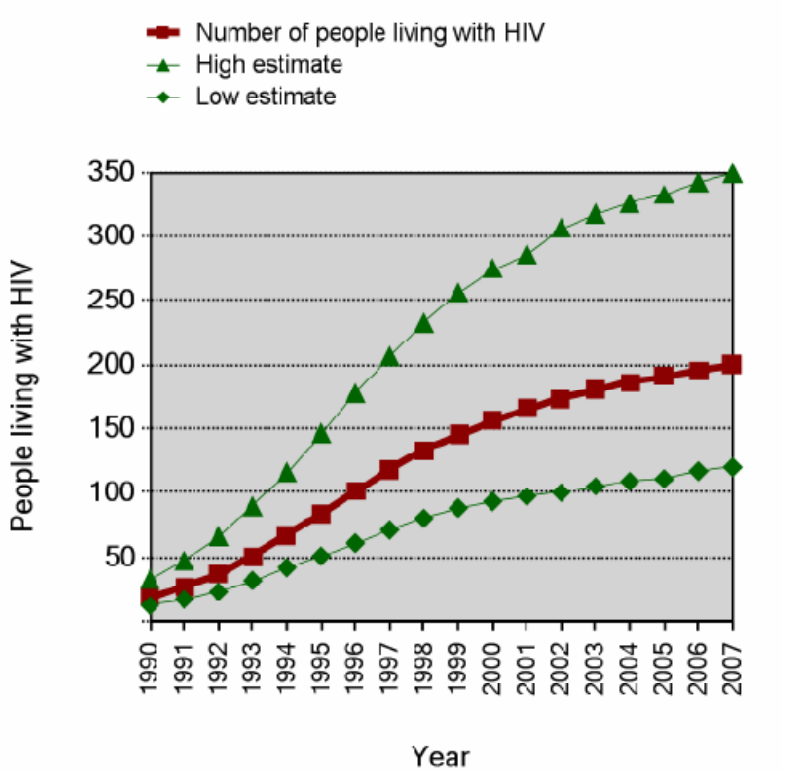
The first cases of HIV/AIDS reported were in haemophiliacs in the late 1980's at a time when patients were still receiving blood products from untested sources[197]. Since reliable data on HIV cases started being collected in January 2004 and up to the end of 2006, the Annual Report of the Ministry of Health (2008) had reported a cumulative total of 65 HIV cases. It is reported that 68 infected individuals had developed AIDS, and at the end of 2006 a total of 56 deaths among AIDS cases were registered. Reporting of AIDS cases includes only Maltese residents. In the year 2006, Malta reported 29 new HIV cases, 4 AIDS cases and 5 deaths among AIDS cases. Of the 65 HIV cases reported to date, 33 were infected through heterosexual contact, 17 through men who have sex with men and 4 through injecting drug use. In total, 10.601

[194] Ministry of Health (2008); *Annual Report*.
[195] Committee on Communicable Disease Control Strategy on behalf of the Health Division (2004), *Communicable Disease Control Strategy in Malta.*
[196] Ministry of Health (2008), *Annual Report.*
[197] Ministry of Health (2008), *Annual Report.*

people were tested for HIV in 2006. HIV testing is mandatory for Maltese blood donors, Sexually Transmitted Infections patients and Intravenous Drug Users at treatment centres. A majority of the prevalence data is derived from these testing programmes. Testing is systematically carried out in pregnant women, before adoption and among prisoners. Testing is free of charge and offered at all family-doctors and at 9 HIV health centres. Anonymous contact tracing is carried out in all HIV cases. Data on diagnosed HIV cases are reported to a national database. In 2006, 100 HIV/AIDS patients received medical treatment for their condition. The number of patients receiving HAART increased from 33 in 2002 to 65 in June 2007. Among those tested for co-infections with Hepatitis B and C (95 cases in total) in 2006, five were HIV/HBV co-infected and four were HIV/HCV co-infected[198].

There are a number of underlying issues that are related to the three cases and are relevant to the understanding of the situation in Malta. I will list them here as together, they present the current needs for Malta with regards Sexually Transmitted Infections in general, and HBV, HCV and HIV in particular.

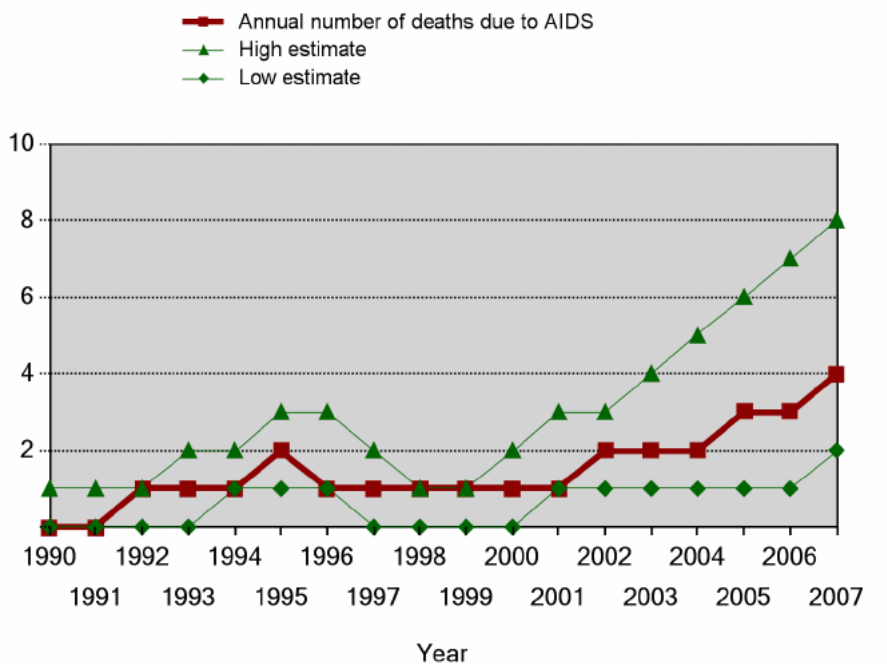
Figure 3.8.6.1 – Number of people living with HIV (1990-2007).



Source: UNAIDS (2008), Malta. Update 2008. Epidemiological Fact Sheet on HIV and AIDS Core data on epidemiology and response, p.4.

[198]World Health Organization Regional Office for Europe, *Malta HIV/AIDS country profile*; URL: http://www.euro.who.int/aids/ctryinfo/overview/20060118_29.

Figure 3.8.6.2 – Estimated number of death due to AIDS 1990-2007.



Source: UNAIDS (2008), Malta. Update 2008. Epidemiological Fact Sheet on HIV and AIDS Core data on epidemiology and response, p.4.

3.8.7 HIV/AIDS spreading among young people

HIV spreading among young people is low. According to the "2008 Report of the Global AIDS Epidemic" published by UNAIDS, the prevalence is about 0.1%.

3.9 Poland

3.9.1 Country situation on Hepatitis B and C. The reporting system for HBV, HCV

The routine HBV/HCV monitoring system is based on the mandatory notification of Hepatitis infections referring to the Infectious Diseases and Infections Act and dispositions followed by the act. At a national level, surveillance system is undertaken by Department of Epidemiology of the National Institute of Public Health-National Institute of Hygiene (NIZP-PZH), on behalf of the Chief Sanitary Inspectorate (GIS)[199].

HBV and HCV notification is compulsory for all attending physicians, who complete standardized forms and send them to the Regional Sanitary Inspectorate Departments (WSSE). Epidemiologists at the WSSE review the cases to ensure that case met definition criteria and collect additional information if needed. Subsequently the WSSE send the forms to the Department of Epidemiology of the National Institute of Hygiene. The information on national incidence of Hepatitis B virus between 2004-2009 was published in the "Epidemiological Review" (*Przeglad Epidemiologiczny*).

HBV/HCV reports include personal identifiers: name (or only the initials), date of birth (or age), gender, address (or administrative region) and, recently, personal identification number. The Department of Epidemiology at PZH-NIZP maintains a registry of Hepatitis cases.

3.9.2 HBV situation in Poland

First notification of viral Hepatitis in Poland begun in 1951. From 1979 Hepatitis B virus was reported separately, based on Hepatitis B surface antigen (HBsAg), seldom on HBcAg. This simple notification system was used to generate data on incidence of Hepatitis B and other types of viral Hepatitis infection. Deaths caused by viral Hepatitis infection are collected from 1959, until 1996 were registered under common name of Hepatitis deaths[200].

Based on the National Institute of Hygiene data, the prevalence of HBsAg in Polish residents is estimated at about 1-1.5% of all population. About 380.000-500.000 HBV-infected patients potentially need specialist medical care. Moreover, the percentage of HBcAb-positive persons ranged from 7.5% to 40% in Polish seroepidemiotogicat studies[201].

The frequency of serological markers of HBV-infection varies and depends on the age of the subjects investigated and their membership of different HBV risk groups. In Poland Hepatitis B is still generally a nosocomial infection. It has been estimated that more than 60% of Hepatitis B cases in adults and more than 80% in children were nosocomial or occupational infections acquired in hospitals or other medical institutions[202].

In 2007 in Poland there were registered 1454 of new cases of viral Hepatitis B (incidence ratio 3.81 per 100.000 population). Among those 60 cases were mixed B+C Hepatitis infections. Compared with 2006 incidence declined by 14.1%. The highest incidence was noted in following provinces: lodzkie (7.26/100.000 population), opolskie (5.77/100.000), lubelskie and wielkopolskie (5.26/100.000). There were 364 acute cases (incidence ratio 0.95 per 100.000 population) which contributes 25% of total registered cases. Acute infection is observe to decline by 20% comparing with 2005 and 2006. **Chronic Hepatitis B incidence in 2007 was the highest in 15-39 age group**, with the pick between 15-24 years of age (4.55/100.000 population). In contrast acute Hepatitis B incidence demonstrated two peaks: at age 25-29 (1.49/100.000) and at the age of 65 and over. Acute Hepatitis was over two times more frequent among

[199] www.pzh.gov.pl/epimeld.
[200] Magdzik, W. (2006), "Hepatitis C. The most important epidemiological aspects", *Przeglad Epidemiologiczny,* 60, pp. 751-757. (article in polish)
[201] *Gładysz A, Serafinska S, Rymer W. Epidemiologia wirusowych zapaleń watroby A, B i C. In: Polanski J (editor), Hepatologia Kompendium, Medycyna po Dyplomie (Medical Tribune Group, Warszawa, 2004) pp. 57-60. Book in Polish.*
[202] Magdzik W. (2000), "Hepatitis B epidemiology in Poland, Central and Eastern Europe and the newly independent states", *Vaccine*, 18, Suppl. 1, pp. 13-16.

men than women (incidence 1.3/100.000 and 0.63/100.000 respectively) and more frequent in urban than rural areas (incidence 1.01/100.000 and 0.87/100.000 respectively). In 2007 97.8% of acute Hepatitis B and 67.8% of chronic cases were hospitalized. 72 people died of Hepatitis B, including 15 of acute Hepatitis[203].

3.9.3 HCV situation in Poland

The specific data on HCV prevalence in the general population in Poland is lacking since no population-based study was carried out. According to WHO estimates, in 1999 about 1.4% of general Polish population could be infected with HCV, which means about 560.000 persons in the whole country204. At the same time, statistics of the National Institute of Hygiene in Warsaw registered about 13.000 infections in the years 1997-2003[205]. It is clear that most people with HCV-infection in Poland are unaware of their status, even if we assume under-reporting by medical and laboratory services. In 1997, Hepatitis C became a statutorily noticeable disease in Poland. Only a few notable studies on the prevalence of HCV-infection have been conducted in Poland mostly done on selected and vulnerable population.

One of the wide population study proved the prevalence of HCV-infection markers in an unselected population of Polish subjects was performed in 2000[206]. Serum samples of 2.561 subjects (765 men and 1.796 women), with a mean age of 43 years (range 1-88 years), were collected and assessed. IgG anti-HCV and HCV-RNA was then performed on anti-HCV IgG-positive samples. The presence of anti-HCV IgG was detected in a total of 48 cases (1.9%). Prevalence was significantly higher in men (2.3%) than in women (1.7%) ($p = 0.0057$), but was not significantly related to the subject's age ($p = 0.51$) or domicile ($p = 0.35$). The presence of HCV-RNA was detected in 31 (65%) anti-HCV–positive cases tested, with no significant relationship to either the age ($p = 0.15$), domicile ($p = 0.24$), or gender ($p = 0.79$) of the subjects.

Another study assessed the epidemiology of Hepatitis C virus in Poland[207]; anti-HCV was studied in patients with acute and chronic non-A, non-B Hepatitis, in healthy adults, and in subjects at risk. Anti-HCV prevalence was 2% in 152 blood donors, 78% in 95 parenteral drug addicts, 21% in 112 alcoholics, and 86% in 42 patients in this population. Among 34 prospectively followed patients with acute non-A, non-B Hepatitis, 17 (50%) developed anti-HCV. It seems that HCV-infection is responsible for the majority of this Hepatitis in Poland and is common in parenteral drug abusers and alcoholics.

Global prevalence study conducted globally estimated of prevalence of HCV-infection among injecting drug users. It estimated that prevalence of anti-HCV among IDUs was about 90%[208].
In 2007 the number of newly detected HCV-infections (acute and chronic cases) reported was 10.242 (rate of detecting 26.9 per 100.000 population).

Acute Hepatitis C incidence in 2007 was the highest in 50-54 age group (11.63/100.000 population).

3.9.4 HBV spreading among young people in Poland

From 2004 incidence rates of Hepatitis B infections among young people between 15-24 years of age were higher than for the total population, the highest in the older (20-24) age group. Nevertheless, from the year 2006 decreasing number of new infections in the total population has been observed. Acute Hepatitis B was registered in 222 people aged 15-24 between 2005-2008. The incidence rate was three times higher in the older (20-24) age group but comparable to this indicator in total population (0.57 vs.

[203] Rosińska, M.; Czarkowski, M. P. (2009), "Wirusowe zapalenie wątroby typu B w Polsce w 2007 roku", *Przeglad Epidemiologiczny*; 63, pp. 245-250.
[204] World Health Organization (1999), *Weekly Epidemiological Record*, 74, pp. 421-428. URL: http://www.who.int/docstore/wer/pdf/1999/wer7449.pdf, on 10th September 2009.
[205] Polish Institute of Public Health Polish Institute of Hygiene (2004); *Infectious diseases and poisonings in Poland. Annual report*, URL: http://www.pzh.gov.pl/oldpage/epimeld/index_p.html, on 12th September 2009.
[206] Bielawski, K. (2000), "HCV Infection in Poland", *Archives of Medical Research*, 31, 5, pp. 532-535.
[207] Laskus, T.; Radkowski, M.; Lupa, E. (1991), "Hepatitis C Virus Antibody in Poland", *Scandinavian Journal Of Infectious Disease,* 23, 3, pp. 385-386.
[208] Aceijas, C.; Rhodes, T. (2007), "Global estimates of prevalence of HCV infection among injecting drug users", *International Journal of Drug Policy*, 18, pp. 352–358.

0.69 per 100.000 population). The highest pick of chronic HBV-infections was observed between 15-19 years of age (5.25 per 100.000 population). Chronic Hepatitis B incidence in 2007 was the highest in 15-39 age group, with the pick between 15-24 years of age (4.55 per 100.000 population). In contrast acute Hepatitis B incidence demonstrated two peaks: at age 25-29 (1.49/100.000) and at the age of 65 and over[209].

3.9.4 HCV spreading among young people in Poland

In 2007, for the age group of 15-19 and 20-24 incidence rate was 6.48 and 7.37 per 100.000 respectively; 132 people died of Hepatitis C, including 4 of acute Hepatitis[210].

3.9.5 Country situation on HIV-AIDS. The Polish existing reporting system on HIV/AIDS.

The surveillance system comprises reporting of newly diagnosed HIV-infections as well as the incident AIDS cases. The routine HIV/AIDS monitoring system is based on the mandatory notification of HIV-infections, AIDS cases and deaths due to AIDS. At a national level, surveillance system is undertaken by Department of Epidemiology of the National Institute of Public Health - National Institute of Hygiene, on behalf of the Chief Sanitary Inspectorate.

HIV-infection, AIDS case and death notification is compulsory for all attending physicians, who complete standardized case report forms and send them to the Regional Sanitary Inspectorate Departments (WSSE). Epidemiologists at the WSSE review the cases to ensure that case met definition criteria and collect additional information if needed. Afterward the WSSE send the forms to the Department of Epidemiology of the National Institute of Hygiene. The laboratories performing confirmatory HIV tests report newly diagnosed HIV-infections directly to the Department of Epidemiology. HIV/AIDS reports include personal identifiers: name (or only the initials), date of birth (or age), gender, address (or administrative region) and, recently, personal identification number, as well as the presumed mode of transmission. For cases of AIDS, data on indicator diseases and vital status are also required. The Department of Epidemiology at the National Institute of Health maintains a registry of HIV/AIDS cases. All newly reported cases are compared with the registry to avoid double registration; the case classification is once again validated. The system registers all HIV-infections diagnosed with definite methods and all confirmed AIDS cases according to the 1987 European case definition, taking into account the 1993 correction and the 1995 case definition for children. Each AIDS case must be linked to a record in the HIV registry.

3.9.6 HIV/AIDS situation in Poland

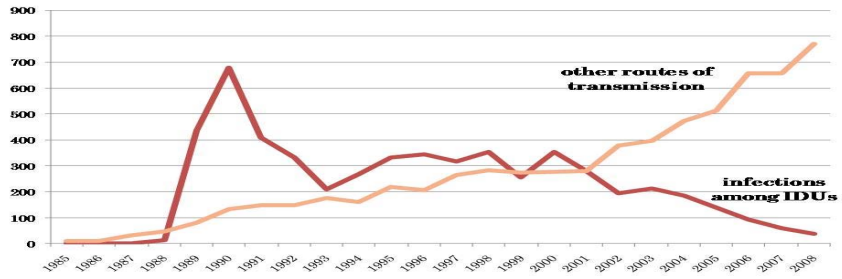
The first HIV case was discovered in Poland in the year 1985, and the first AIDS case in 1986. Since that time to the end of 2008, the total of 12.068 Poles were diagnosed HIV-positive, 2189 people developed AIDS, and 962 people died of problems related to AIDS[211]. In the year 2008, in Poland there were 809 newly registered HIV-infections, including 602 men (74%) and 154 women (19%). In case of 53 people, there was no data on their sex. At the same time, AIDS was diagnosed in 162 people, including 127 men (79%) and 34 women (21%). According to the estimations, only 30% of people living with HIV in Poland are aware of their serological status. It means that 2/3 of them are unaware of their infection and are not included in the statistics.

In the first years of the epidemic in Poland, the main route of HIV transmission was the intravenous use of psychoactive substances, as well as homosexual contacts between men. Since 2001, a change of epi-

[209] Rosińska, M.; Czarkowski, M. P. (2009), "Wirusowe zapalenie wątroby typu B w Polsce w 2007 roku", *Przeglad Epidemiologiczny*; 63, pp. 245-250.
[210] Laskus, I.; Rosińska, M. (2009), "Wirusowe zapalenie wątroby typu C w Polsce w 2007 roku", *Przeglad Epidemiologiczny*, 63, pp. 251-254.
[211] Polish Institute of Public Health - Polish Institute of Hygiene (2008), *Infectious diseases and poisonings in Poland. Annual report*, URL: http://www.pzh.gov.pl/oldpage/epimeld/index_p.html, on 12th September 2009.

demiological trends may be observed. More and more infections affect heterosexual people who have never used nor abused intravenous drugs. These people contract HIV through risky sexual intercourses, often accompanied by the use of psychoactive substances. According to the information collected in VCT centres, there is an alarming increase of the number of infections in the population of men who have sex with men.

Figure 3.9.6.1 – Main routes of transmission in Poland (1985-2008).



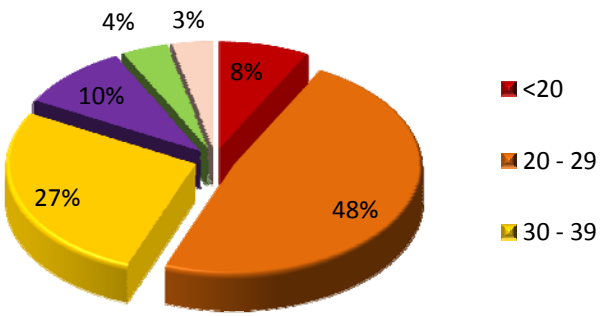
Source: Polish Institute of Public Health - Polish Institute of Hygiene (2008), Infectious diseases and poisonings in Poland. Annual report.

Since the beginning of the epidemic, cases of both AIDS and HIV have mainly been registered in big urban areas. The major rates of infections are in the following province: dolnośląskie, warmińsko-mazurskie and mazowieckie Voivodship.

In 2008, 85% of the total number of HIV-infections collected by the National Institute of Hygiene were cases with an unknown route of transmission. This fact may be related to the increasing number of infections contracted through risky sexual behaviour.

The same as in many other countries, in Poland HIV very often affects young people. 56% of HIV-infected people are younger than 29 years, including 8% who in the moment of infection were younger than 21 years. The most numerous group (approx. 75%) among people living with HIV/AIDS in Poland are in reproductive age (20-49). HIV-infections presented by age groups are shown in the graph below.

Figure 3.9.6.2 – HIV-infections in Poland by age (1985 – 2008).



Source: Polish Institute of Public Health - Polish Institute of Hygiene (2008), Infectious diseases and poisonings in Poland. Annual report.

The presented above data shows a relatively stable HIV/AIDS epidemiological situation in Poland. Taking into account a rapidly growing number of HIV-infections in Central and Eastern European countries, we should assume that there is a potential risk of a fast spread of the epidemics in the region, what may have a direct impact on the situation in Poland.

3.9.7 Treatment and care offered for people living with HIV/AIDS.

People living with HIV/AIDS (PLWHA) have access to a free of charge, specialist treatment since 1996. Poland gives to the seropositive patients the possibility of benefiting from all the range of the latest ARV medicines and specialist diagnostic procedures. At present about 4400 people are on ARV treatment, including 140 children. In the treatment are included all the patients who comply with the medical criteria, so the accessibility of this treatment in Poland can be evaluated as very good. According to the WHO data, the ARV treatment accessibility indicator remains in the country on the average European level and is at 77% (2006). Every type of ARV medicines used in the world is available in Poland. Professional medical care also includes education of patients in order to achieve the best level of adherence. None of the social groups is discriminated against in terms of the access to the ARV treatment. Also people who are not insured or incarcerated and homeless do receive free of charge ARV treatment.

A big success in elevating the reproductive health standards in the country is a decline of the vertical transmission rate, which among women taken into prophylactic procedures is less 1%. The vertical transmission prophylaxis has been carried out in Poland since 1994. During a one-year period about 120 HIV-infected pregnant women and their newborn children receive ARV treatment.

In the case when a HIV-infected woman has consciously decided to become a mother, during the pregnancy the Mother and Child Institute gives her a specialist care. A standard procedure is to ensure her ARV treatment as a vertical transmission prophylaxis. Every time more couples with different serological statuses who want to have children have the possibility to take part in a pilot program of artificial insemination by the purified spermatozoa method. It gives a possibility to a healthy woman whose partner is seropositive to become a mother. The Polish experience in this aspect gives an opportunity to transmit this kind of activities to other countries, especially in Eastern Europe, where the range of the problem is much bigger.

3.9.8 HIV/AIDS spreading among young people

In Poland, HIV mainly affects young people. 48% of HIV-infected people are younger than 29 years, and out this group, 8% who in the moment of infection were younger than 20 years of age. Statistically, every day, three people learn that they are seropositive. These are usually infections which could have been avoided if an appropriate prevention had been implemented. Meanwhile, more and more heterosexuals who have never used intravenous drugs become infected. These people infect themselves through risky sexual intercourse, often combined with the use of psychoactive substances. Teenagers constitute the major group of people who become sexually active (16.8% of girls and 27.3% of boys before turning 15 years old have already had their first sexual contact), what brings a risk of HIV transmission. Another important risky behaviour in this population is body piercing done with unsterile equipment[212].

Sexologists are warning that there is a sex fashion among teenagers: they are having an exhibitionist contacts with multiple partners. These contacts are easier now thanks to the Internet and mobile phones. According to the estimates, over 1,8 mln of Poles talk about sex on the Internet, and 1,2 mln out of this group meets their chat partners in person. In the majority of cases they are young people. Teenagers

[212] Polish Institute of Public Health - Polish Institute of Hygiene (2008), *Infectious diseases and poisonings in Poland. Annual report*, URL: http://www.pzh.gov.pl/oldpage/epimeld/index_p.html, on 12th September 2009.

declare that their sexual life should start as a consequence of love (78.6%)213 source, but at the same time 40% reckons that sex without love is possible. 27% of youths who had already initiated their sexual life, admitted to have had a one night stand with an unknown partner, and 23% that below the effects of alcohol they have lost control and were not aware if they didn't have sexual intercourse then214. Young people are more afraid about their parents reaction when they learn that their children are having sex than about contracting HIV or other sexually transmitted infections (25% is afraid of parents, 17% - HIV, 13% - STIs). At the same time, young people don't know how to talk to their partners about their sexuality, or about their fears or condom use.

[213] Center for Social Policy of Dolnośląskie (2008).
[214] Public Opinion Research Centre (2008). Target group: young people aged 13-21.

3.10 Romania

3.10.1 Country situation on Hepatitis B and C. The reporting system for HBV, HCV

In Romania a national surveillance network for communicable diseases (including Hepatitis) is coordinated by the Ministry of Health. In this framework the surveillance is realized by the District Public Health Directorates and by certain National Institutes under Ministry of Health supervision.

Acute HBV and HCV viral Hepatitis cases are reported by the attending physician (infectious disease specialist) to the Public Health Authority which insert all data in the local database and then assemble them in the register of the National Institute of Public Health from where the data is transmitted to the National Center of Communicable Diseases Prevention and Control.

3.10.2 HBV situation in Romania

Romania has a history of high incidence of Hepatitis B, especially in children. Between 1990 and 2002, it reported a yearly incidence of 10-50 HBV-infections per 100.000 population[215].

The incidence has decreased from 43/100.000 in 1989 to 8.5/100.000 in 2004. The decrease has been most prominent in children under 15, dropping from 81 to 11 per 100.000 population and year[216].
In a study conducted in Bucharest in 1990, the prevalence was high in all age groups, with 47% of adults and 40% of children aged 0-16 years positive for at least one HBV marker (HBsAg and/or anti-HBc). Among infants (children under three years of age) living in orphanages, the prevalence of at least one HBV marker (HBsAg and/or anti-HBc) was 55%, and 8% of pregnant women were found to be HBsAg-positive[217].

A different study reported a prevalence of HBV-infection (determined as HBsAg positivity) of 3.8% among pregnant women in north western Romania[218]. Rates were higher in the southern part of the country were a study showed that 32% of pregnant women admitted to give birth had evidence of past or current HBV-infection (determined by presence of either anti-HBc or HBsAg)[219].

Since 2003, Romania has had a Hepatitis B incidence in the range of 0-10 cases per 100.000. It is currently an intermediate prevalence country for chronic HBV-infection with 2 to 7% of the population HBsAg-positive[220].

In the 1990's the most effective route of infection was transmission from infected mothers to newborns, both perinatal and during early childhood. Other possible forms of transmission included contaminated blood products and tissues, child-to-child transmission, re-use of contaminated needles and syringes, and unprotected sexual contact. The following preventive measures have been taken in Romania since 1990's to control the high incidence and prevalence of HBV-infection:

- Since 1991, single-use syringes were introduced for immunisation programmes and in all healthcare settings in Romania. By the late 1990's, single-use syringes and needles were reported to be the standard for all injection[221].

[215] World Health Organization regional Office for Europe, *Centralized information system for infectious diseases. Hepatitis B. HepB incidence euroregion 1990-2004*; URL: http://data.euro.who.int/CISID/DOC/HepB/HepB_incidence_euroregion_1990-2004.pps.
[216] Pitigoi, D.; Rafila, A.; Pistol, A.; Arama, V.; Molagic, V.; Streinu-Cercel, A. (2008); "Trends in Hepatitis B incidence in Romania, 1989-2005", *Eurosurveillance.*
[217] Paquet, C.; Babes, V.T.; Drucker, J.; Senemaud, B.; Dobrescu, A. (1993), "Viral Hepatitis in Bucharest", *Bulletin of the World Health Organization*, , 71, 6, pp. 781-786.
[218] Molnar, G.B.; Leentvaar-Kuijpers, A.; Hausman, B. A. (1995), "Prevalence of HBsAg among parturient pregnant women in northwestern Romania", *European Journal Public Health*, 5, pp. 223-225.
[219] Balan, A.; Beldescu, N.; Popa, R. (1998), "The prevalence of viral Hepatitis B in pregnant women in an area of southern Romania", *Bacteriologia, Virusologia, Parazitologia, Epidemiologia*, 43, 4, Oct-Dec, pp. 254-60.
[220] Centers for Disease Control and Prevention (2008), "Travelers' Health: Yellow Book Chapter 4 – Prevention of Specific Infectious Diseases: Hepatitis, Viral, Type B", *CDC Health Information for International Travel*.

- Since 1995, The HBV vaccine was introduced into the routine immunisation schedule for newborns (the first dose of HBV vaccine is given 24 hours after birth, with second and third doses at two and six months of age (0-2-6)[222].
- Since 1999, HBV vaccination was expanded to include nine-year-old children (born before vaccine introduction in the Extended Programme of Immunisation (EPI) in 1995, and to medical students.
- Since 2002, a combined vaccine against HBV and diphtheria, tetanus, and pertussis (DTP-HBV) has been used for the second and third doses). For schoolchildren, teenagers and health care workers, a standard vaccination schedule of three doses (0-1-6 month) has been used.
- Since 2004, HBV vaccination was expanded to include to 18-year-olds (born before vaccine introduction in the EPI.
- By 2005, a vaccination coverage of over 95% had been reached and was reflected in an almost complete disappearance of new Hepatitis B cases registered in children. Analysis of the development by district indicates that the immunisation programme has been implemented effectively in all parts of Romania, with all districts having reduced the Hepatitis B incidence to below 11.7 per 100.000 population by 2004.

The frequency of asymptomatic Hepatitis cases has important public health consequences concerning the transmission route and the effective prophylactic measures. Surveillance data collected by the Romanian Ministry of Health during 1997-1998 indicated that acute HBV-infection was associated with receiving injections among children younger than 5 years[223]. In Romania, injection was frequently used to administer medications[224]. Shortage of infection-control supplies, including puncture-proof sharps containers, disinfecting solutions, and single-use gloves, has been identified in Romania as one possible explanation for HBV transmission in hospitals and orphanages[225]. Also, in outpatient clinics, it has been suggested that sterile equipment might have become contaminated with blood before use (e.g. blood specimens were collected in open wide-mouthed vials that were handled and placed on tables where injections were prepared, needles were placed in multidose vials to serve as access ports, and finger lacerations were left uncovered before preparing or administering injections). The high endemicity level of HBV-infection in Romania can be attributed to all these practices[226].

Nowadays, with 2 million of its 22 million people infected with a form of Hepatitis B or C, Romania has one of the Europe's highest burdens of the disease. An estimated 1.5 million Romanians carry a form of Hepatitis but do not know they are infected[227]. 5-6 % of those with Hepatitis B or C will develop chronic Hepatitis. Of these, 20% will develop cirrhosis. About 20% of cirrhosis patients will develop liver cancer. Romania's health care system has the resources to treat only 6-8 percent of those infected, only the most serious cases can qualify for state-subsidized care, yet "the serious cases have the least chances of getting cured. Treatment can cost thousands of euro; the average Romanian's salary is less than 350 Lei ($460 US) per month[228].

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[221] Centers for Disease Control and Prevention (2001), "Injection practices among nurses – Valcea, Romania 1998", *Morbidity and Mortality Weekly Report*, 2, 50, 4, pp. 59-61, URL: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5004a3.htm.

[222] Pitigoi, D.; Rafila, A.; Pistol, A.; Arama, V.; Molagic, V.; Streinu-Cercel Trends, A. (2008), "Trends in Hepatitis B incidence in Romania, 1989-2005", *Eurosurveillance.*

[223] Hutin, Y. J. F.; Craciun, D.; Nedelcu, I. N.; Mast, E. E.; Alter, M. J.; Margolis, H. S. (1998), "Using surveillance data to monitor key aspects of the epidemiology of Hepatitis B virus (HBV) infection in Romania", *36th Annual Meeting of the Infectious Disease Society of America*, November 12-15, Denver, Colorado.

[224] Centers for Disease Control and Prevention (1999), "Romania. Frequency of vaccine-related and therapeutic injections – Romania", *Morbidity and Mortality Weekly Report*; 48, pp. 271-274.

[225] Centers for Disease Control and Prevention (2001), "Injection practices among nurses – Valcea, Romania 1998", *Morbidity and Mortality Weekly Report*, 2, 50, 4, pp. 59-61, URL: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5004a3.htm.

[226] Ruta, S. M.; Matusa, R. F.; Sultana, C.; Manolescu, L; Kozinetz, C. A.; Kline, M. W.; Cernescu, C. (2005), "High Prevalence of Hepatitis B Virus Markers in Romanian Adolescents With Human Immunodeficiency Virus Infection", *Medscape General Medecine*, 7, 1, pp. 68.

[227] Centers for Disease Control and Prevention (2007), *HIV/Hepatitis/STD/TB Prevention News Update - Romania Suffering Europe's Highest Hepatitis Rate*, February 26.

[228] Report of the National Conference for Liver Diseases, Bucharest, September 2006.

According to the latest data available from the Romanian National Surveillance System, in 2007 there were 927 confirmed cases of Hepatitis B infection in Romania and a notification rate per 100.000 population of 4.3 (aggregated data report). The highest rates among European young people aged 15–24 years were reported in Iceland (13 per 100.000), Romania (11 per 100.000) and Denmark (6.8 per 100.000)[229].

Despite the encouraging development regarding HBV-infection control in Romania, many actions should still be taken, in particular a more efficient approach to increase the vaccination coverage in hard-to-reach groups of population (e.g. Roma) who often suffer from new Hepatitis B cases.

A substantial percentage of HIV-infected Romanian adolescents have evidence of past or present HBV-infection (78.3% of HIV-infected adolescents vs. 31.7% of HIV-uninfected controls (P < .0001). In addition, the co-infection with HDV in chronic HBsAg carriers was present in 5.6% of HIV-infected adolescents but in none of the HIV-uninfected controls. The HIV transmission efficiency through unsafe medical injections in Romanian orphanages was estimated at 2% to 7%; the transmission efficiency for HBV is probably about 10-fold greater[230].

3.10.3 HCV situation in Romania

At the global level, Romania is situated in an intermediate risk area, with a prevalence of 4.9% of anti-HCV antibodies, but referring to the European space, Romania has a high prevalence of the infection. Although HCV-infection is a major public health problem in Romania, its prevalence in the general population and its routes of transmission are largely unknown. Before 1993, data on the prevalence of viral Hepatitis in Romania were scarce. In 1994, a 4.9% HCV prevalence was reported in the general population in three counties in North-Western Transylvania[231] (G. Molnar, S. Popa, L. Jebeleanu and C. Damian, Studiul prevalentei markerilor serici ai infectiei cu virusurile hepatitelor in anamneza epidemiologica a populatiei, Bacteriol Virusol Parazitol Epidemiol 30 (1994), pp. 141–149). In a multicentre study, on the ethiolgical profile of chronic Hepatitis and liver cirrhosis in Romania, HCV-infection was considered responsible for 64% of chronic Hepatitis and 59% of liver cirrhosis[232].

In a study conducted in 2003-2004, the prevalence of Hepatitis infections in general population from Romania was: 4.8% for HCV-infection, 16.4% HBV-infection, and 1.9% in HCV- HBV co-infections[233]. In 2005, HCV-infection was found to be responsible of 27.5% of end-stage liver disease in patients awaiting liver transplantation[234].

Genotype 1b was reported to be the most prevalent in Romania[235], some studies indicate that genotype 1b HCV accounts for 77.7% percent of HCV-infections among Romanian patients, while genotype 1a accounts for 18.5%, the others being less frequent - HCV genotype 3a (1.8%) and HCV genotype 4a (1.8%). However, recent introduction of new HCV genotypes stimulate a continuous epidemiological surveillance,

[229] European Centre for Disease Prevention and Control (2009), Annual epidemiological report on communicable diseases in Europe, URL: http://ecdc.europa.eu/en/publications/Publications/0910_SUR_Annual_Epidemiological_Report_on_Communicable_Diseases_in_Europe.pdf.
[230] Ruta, S. M.; Matusa, R. F.; Sultana, C.; Manolescu, L; Kozinetz, C. A.; Kline, M. W.; Cernescu, C. (2005), "High Prevalence of Hepatitis B Virus Markers in Romanian Adolescents With Human Immunodeficiency Virus Infection", *Medscape General Medecine*, 7, 1, pp. 68-72.
[231] Molnar, G.; Popa, S.; Jebeleanu, L.; Damian, C. (1994), "Seroprevalence Study of markers for Hepatitis infections in epidemiological anamnesis of population", *Bacteriologia, Virusologia, Parazitologia, Epidemiologia*, 30, pp. 141–149, article in Romanian.
[232] Grigorescu, M.; Radu, C.; Pascu, O.; Oproiu, A.; Ionita, A. (2001), "Etiological profile of chronic Hepatitis and liver cirrhosis in Romania. A multicentre study", *Romanian Journal of Gastroenterology*, 10, pp. 199-204.
[233] Ruta, S. M.; Manolescu, L.; Sultana, C.; Cernescu, C. (2004), Seroprevalence of viral Hepatitis infection in the general population in Romania, *Revista Româna de boli infecțioase*, 7, 3-4, pp. 139-145, article in Romanian.
[234] Gheorghe, L.; Popescu, I; Iacob, R.; Iacob, S.; Gheorghe, C. (2005), "Predictors of death on the waiting list for liver transplantation characterized by a long waiting time", *Transplant International*, 18**,** pp. 572-576.
[235] Grigorescu, M. (2009), "HCV Genotype 1 is Almost Exclusively Present in Romanian Patients with Chronic Hepatitis C", *Journal of Gastrointestinal and Liver Diseases*, 18, 1, pp. 45-50.

suggesting shifts in the transmission pathways with the possible emergence of recombinants in people with multiple infections[236].

In Romania HCV-infection was independently associated with the history of transfusion, parenteral treatment, haemodialysis, and IDU, suggesting that transfusions and contaminated equipment used for medical procedures has played a key role in HCV transmission among the Romanian population[237]. It has been showed that infected HCV patients are rather older (44.45 years old) and more frequent women, the great majority of HCV-infections are detected in adults and the transmission is associated with iatrogenic non-sterile interventions and lower economic standards[238].

The burden of HCV-infection in Romania is an area of great concern for at least three main reasons: based on scarce and outdated information, Romania is considered the European country with the highest prevalence rate (double than of Spain or Greece, for example).

Romania is one of the most important sources of migrant population towards Western Europe, in particular to countries such as Spain and Italy, therefore altering the decreasing trend of HCV prevalence in these countries.

There is an urgent need for a national strategy for the active detection and control of the silent epidemic of HCV-infected population in Romania[239].

According to the latest data available from the Romanian National Surveillance System, in 2007 there were only 90 confirmed cases of Hepatitis C infection in Romania and a notification rate of 0.4 per 100.000 population – one of the lowest in Europe (less than one per 100.000 in Austria, Greece, Hungary, Italy, Malta, the Netherlands, Portugal, Romania and Slovenia - aggregated data report)[240].

The prevalence of HCV-infection for Romania is now reported to be significantly higher in rural areas (4.43%) as compared to urban areas (2.76%). A higher prevalence of HCV is associated with older age groups, lower education level and lower income level[241].

In a report from 2007 of National Antidrug Agency from Romania[242] regarding the HIV and HCV prevalence in IDU population from Romania the HIV prevalence in a number of 327 tested IDUs was 1.5%, while the HCV prevalence was much higher (61.5%). The highest percentage of HCV-infection is found in IDUs with a long history of injecting drugs, more than 5 years old (71.2%), in IDUs with 3-5 ys (17.2%) and the lowest percentage of HCV-infection is in short time injecting (1-2 years). Risk factors in acquiring HIV and HCV-infections from this report associate utilisation in common of syringes (69.9% of infected IDUs) or needles (61.8% of infected IDUs) or both (88.7%) – the relative risk is RR syringes = 1.791, and RRneedles = 1.755).

Some studies[243] indicate that genotype 1b HCV was the only one found in women aged 40-60 years old, with chronic Hepatitis C diagnosed more than 10 years ago and a history of blood transfusions received during surgical interventions. The other 3 genotypes were detected in younger patients (aged 17-35 years),

[236] Ruta, S.; Sultana, C.; Manolescu, L.; Tardei, G.; Motoc, A.; Brehar-Cioflec, D.; Szmal, C.; Dinu, S.; Oprisoreanu, A. M.; Oprisan, G. (2008), "The Changing Profile of Circulating HCV Genotypes in Romania", 13th International Congress on Infectious Diseases, Kuala Lumpur, Malaysia, June 19 - 22.

[237] Gheorghe, Liana; Iacob, Speranta; Csiki, Irma Eva (2008), "Letter to the Editor- Prevalence of Hepatitis C in Romania: Different from European rates?", *Journal of Hepatology*, 49, 4, October, pp. 661-662.

[238] Ruta, S. M.; Manolescu, L.; Sultana, C.; Cernescu, C. (2004), Seroprevalence of viral Hepatitis infection in the general population in Romania, *Revista Româna de boli infecțioase*, 7, 3-4, pp. 139-145, article in Romanian.

[239] Gheorghe, Liana; Iacob, Speranta; Csiki, Irma Eva (2008), "Letter to the Editor- Prevalence of Hepatitis C in Romania: Different from European rates?", *Journal of Hepatology*, 49, 4, October, pp. 661-662.

[240] European Centre for Disease Prevention and Control (2009), Annual epidemiological report on communicable diseases in Europe, URL: http://ecdc.europa.eu/en/publications/Publications/0910_SUR_Annual_Epidemiological_Report_on_Communicable_Diseases_in_Europe.pdf.

[241] Gheorghe, Liana; Iacob, Speranta; Csiki, Irma Eva (2008), "Letter to the Editor- Prevalence of Hepatitis C in Romania: Different from European rates?", *Journal of Hepatology*, 49, 4, October, pp. 661-662.

[242] National Antidrug Agency from Romania (2007), *Investigation of HIV and HCV infections prevalence in intravenous drug users from Bucharest under treatment or in swiching seringes programs*, http://www.ana.gov.ro/rom, on 20th Oct 2009.

[243] Ruta S.; Sultana, C.; L., Manolescu; Tardei, G.; Motoc, A.; Brehar-Cioflec, D.; Szmal, C.; Dinu, S.; Oprisoreanu, A. M.; Oprisan, G. (2008), "The Changing Profile of Circulating HCV Genotypes in Romania", *International Journal of Infectious Disease*, 12, suppl 1.

with recently identified Hepatitis C infection, mainly associated with a history of intravenous drug use during the preceding 5 years.

3.10.4 HBV spreading among young people in Romania

After the introduction of the universal immunization programme in 1995, the main route of infection remains through unprotected sexual contact, especially in young people. Studies indicate that patients with HBV-infection (antigen HBs- positive) are more frequently young men (median age 20.5), the HBV spreading being mostly associated with heterosexual and intra family transmission[244]. The data clearly show that the trend in Hepatitis B incidence is decreasing for both age groups[245].

In the general population, one out of five young sexual active adults disclosed having more than one sexual partner in the last three months, and only 58.9% of the men and 52.9% of the women declared using a condom at first sexual contact, or during current sexual activity. The promotion of condom use within the family practitioners network and family planning clinics network remains limited. There are very few selling points in rural areas[246].

In Romania, as in many other Eastern European countries, a significant increase in street prostitution was seen during the last decade, often associated with traffic of human beings. As prostitution continues to be illegal in Romania, there are no official estimations of the number of commercial sex workers and consequently the data regarding HIV-infection in this particular risk group are limited and unreliable[247].
The discriminatory legislation towards men who have sex with men (MSM) was only recently eliminated, but, according to the reports of NGO "ACCEPT" (the first Romanian nongovernmental organization that defends and promotes the rights of lesbians, gays, bisexuals and transgender persons) discrimination persists at the level of attitudes and mentalities. Therefore, seroprevalence studies of HIV and STI in this population are scarce.

Preliminary data based on tests performed among users seeking medical assistance in Bucharest centres suggest a very low prevalence for HIV: around 0.1 % (two positive case out of 136 IDUs tested). In most cases no confirmation tests were done, with the exception of the HIV cases. For HCV and HBV, the prevalence of infection rates among IDUs from Bucharest remained practically unchanged in 2007 as compared to the previous years (2003–06)[248]. 73% of the heroin injectors used non-sterile injecting equipment during the last injection and over 90% injected with used needle within the last month. Preventing the use of illegal drugs and associated risks among the teenagers and young adults is of outmost importance[249].

According to the data reported from administration of a standardized questionnaire, the great majority of patients recognized a percutaneous route, in decreasing order: dental surgery, general surgery and blood or blood products administration. Transmission by blood or blood products accounted for only 34.8% of cases, but all these patients had had at least one more presumable factor, which might have favoured percutaneous transmission, so we were unable to establish the date of infection. Non-percutaneous routes seem to occur more often in younger patients than percutaneous transmission or community-acquired. Testing of all donated units is mandatory for Hepatitis B and C, HIV, HTLV I/II and syphilis. But, according to

[244] Ruta, S. M.; Manolescu, L.; Sultana, C.; Cernescu, C. (2004), Seroprevalence of viral Hepatitis infection in the general population in Romania, *Revista Româna de boli infecțioase*, 7, 3-4, pp. 139-145, article in Romanian.
[245] Pitigoi, D.; Rafila, A.; Pistol, A.; Arama, V.; Molagic, V.; Streinu-Cercel, A. (2008), "Trends in Hepatitis B incidence in Romania, 1989-2005", *Eurosurveillance*, 13, 2.
[246] National Institute for Public Health (2004), *National Survey on Reproductive Health*, Bucharest. on: ftp://ftp.unfpa.ro/unfpa/SSRR2004.pdf, (in Romanian).
[247] Romanian Association Against AIDS (Asociatia Romana Anti SIDA) (2005), *Commercial sex work, a public health and social perspective Romania*, URL: http://www.ceehrn.org/EasyCEE/sys/files/ 2007_UniversalAccess_Romania.pdf.
[248] European Monitoring Centre for Drugs and Drug Addiction (2007), *Drug Situation, Country overview Drug-related infectious diseases in young IDUs in Romania*.
[249] National Anti-Drug Agency (2006); *Evaluation report on the 2005–2008 Action Plan for the implementation of the National Antidrug Strategy 2005–2012*; URL: www.ana.gov.ro.

a recent WHO report on the status of blood services in South-Eastern Europe, the number of donations in Romania is 1.7 per 100 inhabitants per year as compared to 3.6 per 100 inhabitants in many other European countries and to a mean of 2.1 per 100 inhabitants in all South-Eastern European states. Of particular concern relating to transmission risk is the high number of remunerated donors (79%) and replacement donors, such as family and directed donations (10%), the last one accounting for many of the first-time donors[250].

The reported homogeneous distribution of HCV genotypes in three distinct populations - Romanian, Hungarian and Moldavian is quite surprising in the European context and suggests an epidemic profile, related to parenteral transmission, associated with surgery, blood transfusions and blood product administration, and the medical use of unsterilized needles for injections or vaccinations[251].

To prevent chronic HCV-infection and its consequences, prevention of new HCV-infections should be the primary objective of public health activities. In Romania, the identification of people with chronic HCV-infection is difficult. The most efficient way to achieve this identification is not known yet, because the prevention effectiveness of different implementation strategies has not been evaluated. For these reasons we must initiate widespread programmes to identify, counsel, and treat persons infected chronically with HCV. These measures, combined with improvements in the efficiency of treatment, are expected to decrease the morbidity and mortality from HCV-related chronic liver diseases. The epidemiologists and public health authorities must create a programme for monitoring the progress of these activities, to evaluate their efficiency in achieving a reduction in HCV– related chronic infection[252].

3.10.5 HCV spreading among young people in Romania

In the last two decades due to the eradication of transfusion-acquired infections, the great improvement in healthcare facilities and the limited increase in intravenous drug users (IDU) in Romania, the reported incidence of HCV has decreased. However, the situation with regard to drug-related infectious diseases reveals that only a limited amount of data on the prevalence of HIV, Hepatitis B and Hepatitis C is available at national level. There are no official data concerning the number of intravenous drug users (IDUs) in Romania, but estimations indicate an important increase of the number of people injecting heroine in Bucharest, especially young people aged 15 to 24 years, and even users aged 10 and 16 years old, reaching an estimated incidence of 24.000 (1% of the total Bucharest population)[253].

3.10.6 Country situation on HIV-AIDS. The Romanian existing reporting system on HIV/AIDS.

There are 9 regional Centres for HIV/AIDS in Romania. All the new diagnosed and confirmed cases are reported centrally to the "National AIDS Commission" and to the District Public Health Directorates. The system includes also periodic reassessment of the clinical/immunological disease stage of the already infected patients.

Starting from 2007, the care system for STIs is now concentrated at the hospital level and based on a network of clinics and dermatology - venereal wards that covers the entire national territory. The Health Insurance Houses and the Health Ministry for both insured and uninsured people support the cost of treatment. The treatment schemes and their duration vary significantly and the patients' addressability toward the hospital services is relatively low. The treatment services are not integrated in the others levels of

[250] World Health Organization (2007), *Blood services in South-Eastern Europe. Current status and challenges*; URL: http://www.euro.who.int.
[251] Grigorescu, M. (2009), "HCV Genotype 1 is Almost Exclusively Present in Romanian Patients with Chronic Hepatitis C", *Journal of Gastrointestinal and Liver Diseases*, 18, 1, pp. 45-50.
[252] Iancu, L. S. (2001), "Infection with Hepatitis c virus a real health problem", *Journal of preventive Medicine*, 9, 1; pp. 35-42, (article in Romanian).
[253] UNGASS (2009), *Country progress report. Romania, Reporting period: january 2007–december 2008*.

medical assistance, it is unclear what is the role of the family doctors (general practitioners) and other specialists in the diagnosis and treatment[254].

3.10.7 HIV/AIDS situation in Romania

At the end of 1989, immediately after the fall of the communist regime in Romania, the "St S.Nicolau Institute of Virology in Bucharest reported the first data on a major parenterally transmitted AIDS outbreak in children, with several thousands of cases. More than 98% of these cases were concentrated in abandoned children living in public institutions at the time of diagnosis, as a result of the disastrous pronatalist policy of the communist regime that banned abortion and contraception and ignored sex education. Only a small percentage (4%) of the pediatric cases resulted from vertical infection[255].

A second wave of this unique nosocomial paediatric HIV epidemic was recognized during 1993-1995, when several hundreds of cases were diagnosed, this time in children living with their families and having both parents HIV negative. The major risk factors involved in transmission were presumed to be reuse of unsterilized needles and syringes together with the indiscriminate use of unscreened blood microtransfusions. Again, multiple parenteral treatments were documented as a major risk factor for HIV transmission[256].

Since then, Romania accounted for the highest number of HIV-infections from the entire WHO European region. Even if the new HIV diagnoses between 2001 and 2006 were declining sharply in Romania (from 440 to 180), Romania still has the largest rate of AIDS cases from the Centre Europe -9.8 per million population[257]. In the period 1989-1993 the majority of cases were recorded in infants and children less than four years old. Materno-foetal transmission of HIV was documented in only 4.8% of the total cumulative cases of HIV AIDS in children reported in mid-2007. Most of the cases have been reported in 1990 (43 of a total of 1123). Then there was registered a continuous decline (16 out of 373 newly diagnosed cases in children in 2000 and three out of 15 newly diagnosed cases in children in 2006), in contrast to the reported increase in the number of adult cases[258].

Since 1995, the HIV/AIDS incidence rate among adults has increased constantly, mainly related to heterosexual transmission. This mode of transmission accounts for 60.57% of the total adult cases registered at mid-2007. Of note are the absence of nosocomial transmission in adults, the relatively low incidence of transmission through unscreened blood and, the high percentage of the so-called "unknown" transmission (25.46%), which suggests an inadequate way of assessing the relative significance of different modes of acquiring the infection. In 1998, legal provisions were introduced for mandatory HIV counselling and free testing in order to diagnose this infection among pregnant women[259].

As of June 30, 2009, Romania has reported a cumulative total of 15.899 cases of HIV/AIDS, 9790 in children and 6109 in adults, 5500 AIDS deaths[260]. HIV/AIDS is recognized as a national strategic priority for the health system. Romania is the only country in Central and Eastern Europe providing universal access to treatment and care for this disease. More than 70% of the total reported number of HIV patients, the great majority between 14-20 ys. old, are in active medical surveillance receiving antiretroviral therapy (ARV) ac-

[254] Government Of Romania (2007), *National Strategy For Surveillance, Control And Prevention Of HIV/AIDS Cases.*
[255] Patrascu, I. V.; Constantinescu, S. N.; Dublanchet, A. (1990), "HIV-1 infection in Romanian children", *Lancet*, 335**,** 8690, p. 672.
[256] Hersh, B. S.; Popovici, F.; Apetrei, R. C.; Zolotusca, L.; Beldescu, N.; Calomfirescu, A.; Jezek, Z.; Oxtoby, M. J.; Gromyko, A.; Heymann, D. L. (1991), "Acquired immunodeficiency syndrome in Romania", *Lancet*, 338**,** 8768, pp. 645-649.
[257] EuroHIV (2007), *HIV/AIDS Surveillance in Europe. End-year report 2006*, Saint-Maurice French Institute for Public Health Surveillance, 75**,** Table 18, p. 40.
[258] National AIDS Committee; Department for AIDS monitoring; Matei Bals National Institute for Infectious Diseases (2007), *Statistic data on HIV/AIDS infection in Romania*, June; URL: http://www.cnlas.ro/hiv/statistica.htm.
[259] Ruta, S. M.; Matusa, R. F.; Sultana, C.; Manolescu, L.; Cernescu, C. (2003), *Some limits in estimating the burden of HIV-related mobidity in Romania. Proceedings of the Romanian Academy Series B*, 5, pp. 73-78.
[260] National AIDS Committee; Department for AIDS monitoring; Matei Bals National Institute for Infectious Diseases (2007), "Statistic data on HIV/AIDS infection in Romania", June; URL: http://www.cnlas.ro/hiv/statistica.htm.

cording to international standards. After 2000 most of the paediatric cases were reported in the group 10–14 years old. An obvious explanation for these findings is that an overwhelming part of all these cases represent children parenterally infected during childhood, who are diagnosed very late during the evolution of the infection[261]. Nosocomial transmission has now greatly diminished, the national transfusion system is considered safe.

A particular concern is related to the lack of an adequate coordinated plan for the transition of HIV infected teenagers to appropriate assisted-living arrangements, especially in the case of those living in foster, group home, orphanage, or extended family placements, and for formerly institutionalized children who were returned to impoverished and often dysfunctional birth families without adequate monitoring and support for those families[262]. Programs directed towards the promotion of the rights of HIV/AIDS infected persons and reduction of stigma/discrimination are only just beginning and social interventions directed at vulnerable groups are modest.

In the last 3 years, the HIV/AIDS situation in Romania remains stable with no major changes in incidence. Overall, the level of epidemic is low and there is no sign of concentration among vulnerable groups, despite high-risk behaviour identified among them. From the Ministry of Health HIV/AIDS Commission data results that over 50% of the newly discovered HIV cases in 2006 are among young persons aged 15 to 29. Sexual transmission is prevalent (over 78% of the newly discovered HIV cases), followed by vertical transmission, increasing in 2005 and 2006 and exceeding 5%, while transmission associated with drugs consumption stays under 2%. The sexual transmission of HIV continues to lead the epidemic among adults, this data being confirmed by corroboration with the annually high incidence rates for syphilis[263].

3.10.8 HIV/AIDS spreading among young people

By the 2009, out of the total HIV/AIDS adult cases, 40.5% are registered in the age group of 15-24 years and over a third of the newly diagnosed cases of HIV/AIDS-infections continue to be in the same age group. In 2006, the incidence of HIV/AIDS in this group was 7.24 at 100.000 population compared to a mean of 1.64 at 100.000 population in the other age-groups[264].

The great majority of these patients were infected in early childhood, and represent a large cohort of long term survivors, that can fuel a new wave of HIV-infections. Reintegration of institutionalized children into families is a process that still face difficulties, and inadequate support for these families is a broader problem in Romania. A 2004 study of 141 families who had taken children back found that only 25 percent reported receiving any counselling, and 50% reported receiving no assistance at all. Most of the families were very poor, were headed by persons with below average education, and had three or more children under eighteen. In many cases the family's school age children were not attending school, and 60 % said they had difficulties raising the reintegrated child265. Widespread stigma and discrimination against people living with HIV, promoted by ignorance and fear, will be a major obstacle in the successful integration of the HIV infected teenagers and young adults in Romanian society[266].

The main route of transmission in young adults is unprotected heterosexual contact. According to a study of the National Institute for Public Health, funded by the Global Fund against HIV, TB and malaria in the general population, the median age of the first sexual contact has constantly decreased in the last dec-

[261] Ruta S; Cernescu, C. (2008), "Influence of social changes on the evolution of HIV infection in Romania International", *Journal of Environmental Studies*, 65, 4, pp. 501-513.
[262] Human Rights Watch Report (2006), *Life doesn't wait: Romania's failure to protect and support children and youth. Living with HIV*, 18, 6, D.
[263] UNGASS (2009), *Country progress report. Romania, Reporting period: january 2007–december 2008*.
[264] National AIDS Committee; Department for AIDS monitoring; Matei Bals National Institute for Infectious Diseases (2007), *Statistic data on HIV/AIDS infection in Romania*, June; URL: http://www.cnlas.ro/hiv/statistica.htm.
[265] UNGASS (2009), *Country progress report. Romania, Reporting period: january 2007–december 2008.*
[266] Ruta, S.; Cernescu, C. (2008), "Influence of social changes on the evolution of HIV infection in Romania". *International Journal of Environmental Studies*, 65. 4, pp. 501-513.

ade from 20.5 years in 1996 to 18 years for girls and to 16 years for boys in 2004[267]. As little as 9.2% of young people (age 15-24) – 12.5% of women and 5.8% of the male respondents – know two methods to prevent the HIV-infection and 34.7% of the respondents (39.8% women and 29.4% men) correctly reject the three misconceptions[268].

Reproductive and sexual health education for young people is part of the curriculum in primary and secondary schools, but mainly promoted as optional course at all levels of the mandatory education (starting with primary school and ending with high school – 12 grades); specific training programs, that include HIV prevention are being developed for teachers. The program covers currently 4.979 (63.66%) of the 7.821 schools at national level. Programs are trying to influence behaviours, attitudes and the level of information of the young beneficiaries regarding the transmission of STDs and preventing unwanted pregnancies through edutainment methods; to promote the right and constant use of the condom, to inform about the consequences of untreated STDs and to encourage testing. The target groups are of the programs are mainly young people but the programs address also to vulnerable populations such as: Sex workers, MSM, IDUs, TB patients, STIs patients, prisoners, sailors, hemodialisis/transfusions, HIV contacts. Concern is related to the sustainability of these programs that are now overtaken by the different ministries that should provide adequate funding, continuous training of personnel and expand them further.

[267] National Institute for Public Health (2005); *National Survey on Reproductive Health*, Bucharest. URL: ftp://ftp.unfpa.ro/unfpa/SSRR2004.pdf (in Romanian).
[268] UNGASS (2009), *Country progress report. Romania, Reporting period: january 2007–december 2008*.

3.11 Slovenia

3.11.1 *Country situation on Hepatitis B and C. The reporting system for HBV, HCV and HIV/AIDS.*

GPs, doctors, laboratories are obliged to notify infectious diseases. Infectious diseases are notified on form number 8,163 DZS. Statistics on communicable diseases are systematically collected and analyzed by the Regional Institutes of Public Health and submitted to the Communicable Diseases Centre at the Institute of Public Health of the Republic of Slovenia, where statistics at the national level are compiled. Slovenia is divided into 9 health regions with regional health centres. The data are first checked, analyzed and evaluated and then monthly reports and an annual report on the incidence and epidemiological characteristics of communicable diseases in Slovenia are prepared. In addition to systematic surveillance, some diseases are monitored with sensitive laboratory-based investigative systems in order to obtain the necessary information for developing communicable diseases control programmes and to evaluate the effectiveness of these programmes.

Statistics on HIV/aids and other sexually transmitted infections (STIs) are compiled separately from other communicable diseases, using a different set of variables. Doctors send data on questionnaires, personal data are coded according to Soundex system. Despite compulsory notification, there is still a problem of under reporting of communicable diseases. The notification of communicable diseases by microbiological laboratories and some hospitals is still very incomplete. When it comes to serious diseases, however, it is estimated that notification is quite good. The real burden of communicable diseases could be estimated in burden studies[269].

3.11.2 *HBV situation in Slovenia*

Slovenia is among countries with the lowest incidence and prevalence with Hepatitis B. Reporting cases of Hepatitis B is obligatory by law. In recent years Hepatitis B was so called adult disease but this can change rapidly. Especially vulnerable group is young MSM. Reported cases by year were 24 in 2003; 23 in 2004; 19 in 2005; 26 in 2006; 16 in 2007. No one has died in the same period[270].

[269] National Institute of Heath, *Annual Statistic on Health 2007*,
URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.
[270] National Institute of Heath, *Annual Statistic on Health 2007*,
URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.

Table 3.11.2.1 – Registered HBV cases by age group in 2007 .

DIAGNOSES	65	45-65	25-44	1to24	<1	TOTAL
ACUTE HEPATITIS B WITH DELTA-AGENT WITHOUT COMA	0	0	1	0	0	1
ACUTE HEPATITIS B	1	8	4	2	0	15
CHRONIC VIRAL HEPATITIS B WITH DELTA-AGENT	1	1	1	0	0	3
CHRONIC VIRAL HEPATITIS B	0	9	12	0	0	21
CARRIER OF VIRAL HEPATITIS (HBs Ag carrier)	3	8	26	7	1	45

Source: National Institute of Heath, Annual Statistic on Health 2007, URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.

During the period from 2003 to 2007 the prevalence of antibodies against Hepatitis B virus (HBV; anti-HBc) among confidentially-tested IDUs treated within the network of Centres for the Prevention and Treatment of Illicit Drug Users ranged from the highest 10.4% in 2003 to the lowest 3.6% in 2007. The acute and chronic HBV-infection incidence rate in the Slovenian population reported during the period from 2003 to 2007 ranged from the highest 3.2/100.000 population in 2005 to the lowest 2.0/100.000 population in 2007. Due to underreporting, HBV reported incidence rates underestimate the true burden of the disease.

Since 1999 vaccination for Hepatitis B is organised for age group between 5 and 6 years and is obligatory, covered by health insurance. Namely that particular vaccine should be proactive only for 6-7 years and should have side effects some says). Free vaccination is available for relatives of IDUs and by NGO for MSM.

The government is promoting and organizing free vaccination for MSM. Each year we deliver 50 referrals for free among young MSM and each year we organize an event on world Hepatitis day on May 19th. www.worldHepatitisday.org with slogan Am I number 12?

3.11.3 *HCV situation in Slovenia*

Hepatitis C isn't a rare disease in Slovenia. In 1999 HCV-infections were detected in 60 (52.2%) Slovenian IDUs[271]. In 2007 was reported 14 cases (0.7/100.000) of acute Hepatits C, 99 cases (4.9/100.000) chronic Hepatitis C. Mainly younger people are infected. Almost a half (46.5%) of reported cases of chronic Hepatitis C was from age group 25-34 years. During the period from 2003 to 2007 the prevalence of antibodies against Hepatitis C virus (HCV) among confidentially-tested IDUs treated within the network of CPTDAs ranged from the highest 23.4% in 2005 to the lowest 21.8% in 2007.

[271] *Anonimous* (1999), "Prevalence of Hepatitis C and G Virus Infections Among Intravenous Drug Users in Slovenia and Croatia", *Scandinavian Journal of Infectious Diseases*, 31, 1, pp. 33-35.

Table 3.11.3.1 – Registered HCV cases by age group in 2007.

DIAGNOSES	65	45-65	25-44	1to24	<1	TOTAL
ACUTE HEPATITIS C	1	2	9	2	0	14
CHRONIC VIRAL HEPATITIS C	3	16	67	12	1	99
OTHER SPECIFIED ACUTE VIRAL HEPATITIS	0	0	0	1	0	1
CRONIC VIRAL HEPATITIS, UNSPECIFIED	1	0	1	1	0	3

Source: National Institute of Heath, Annual Statistic on Health 2007, URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.

The acute and chronic HCV-infection incidence rate in the Slovenian population reported during the period from 2003 to 2007 ranged from the highest 7.2/100.000 population in 2005 to the lowest 5.6/100.000 population in 2007. Due to underreporting, HBV reported incidence rates greatly underestimate the burden of the disease[272].

In Slovenia has been implemented a wide network of free needle exchange programmes and free substitute therapy widely available in major cities around the country. Each year Clinic for infectious diseases in Ljubljana is organizing a wide campaign and free testing on HCV.

The information on prisons available concern vaccinations for employees of the prison administration. They are free for at-risk groups and/or on request. Slovenian prisons provide facilities for intimate non-supervised visits. Drug Free Units are available at the moment in four prisons with one of them in the only female prison in the country. Concerning measures of care, antiviral treatment for Hepatitis C is available in Slovenian prisons. As for drug-related treatment, detoxification programmes that include a gradual reduction of therapy (medicine or methadone), checks by urine tests and psychological assistance which comprises motivation and support programmes are offered. Drug free treatment with psycho-social support is available in drug free units. Treatment with antagonists (Naltrexone) is available as well. Concerning substitution treatment, methadone was prescribed to 380 inmates in 2004. 125 inmates were detoxified, maintenance methadone treatment was prescribed for 210 inmates and methadone was introduced to 45 inmates. Compared to 2003, the number of inmates receiving methadone increased by 13.7%. All methadone patients in prisons have to agree to drug testing (a urine test). As part of the methadone programme, prisoners agree to participate in a psychosocial programme. As regards external drug services in Slovenian prisons, the NGO Association for Harm Reduction 'Stigma' visit drug users in prison who were previously their clients in the community and also prisoners they have not previously met. Their prison work is mainly at Ljubljana prison for two hours, twice per week. As regards pre-release interventions, 45 inmates were initiated in substitution treatment in 2004. Concerning referral to outside drug services, a link is established with therapeutic centres that are available to prisoners after release. The information is given to prisoners but the onus is placed upon the individual to take the initiative and follow-up the contacts themselves[273].

[272] National Institute of Heath, *Annual Statistic on Health 2007*,
URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.

[273] Stöver, H. ;Weilandt, C.; Zurhold, H.;Hartwig, C.; Thane, K. (2008); *Final Report on Prevention, Treatment, and Harm Reduction Services in Prison, on Reintegration Services on Release from Prison and Methods to Monitor/Analyse Drug use among Prisoners,*
URL: http://www.aidsactioneurope.org/uploads/tx_windpublications/996-0.pdf, on 10th September 2009.

3.11.4 *HBV and HCV spreading among young people in Slovenia*

Official data on HBV and HCV spreading among young people (15-24 years old) in Slovenia in under-reported. In 2007, HBV and HCV acute cases reported in age group 0-24 were 2[274].

3.11.5 *Country situation on HIV-AIDS. HIV/AIDS situation in Slovenia*

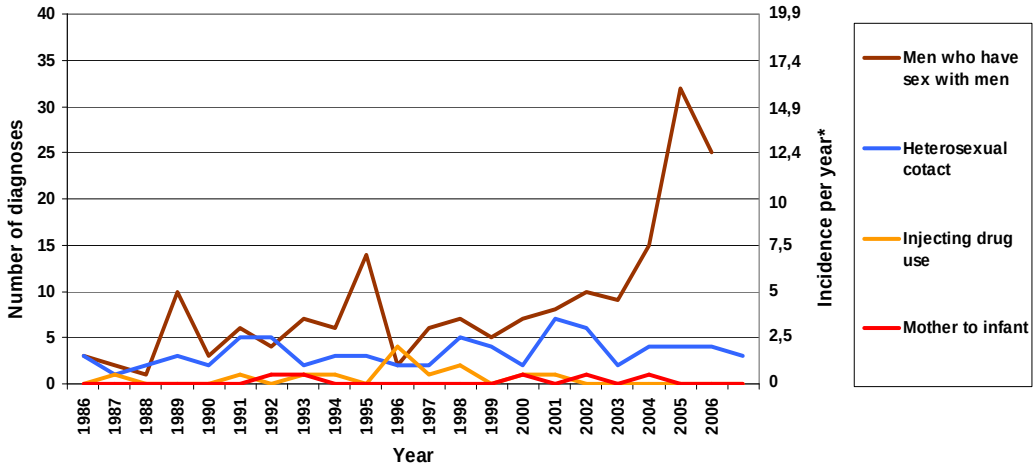
Slovenia is a low HIV prevalence country. The prevalence of HIV-infection has not reached 5% in any population group with a higher behavioural risk. According to all available surveillance information, the rapid spread of HIV-infection has not started yet among injecting drug users (IDUs). During the last five years, from 2003 to 2007, there was not a single new HIV diagnosis reported among IDUs, although there was a cumulative total of 13 new HIV diagnoses among IDUs reported since 1986 when the national HIV surveillance based on notification of diagnosed cases was initiated, with the last one in 2001. During the period from 2003 to 2007, HIV prevalence consistently remained below 1% among confidentially-tested IDUs treated in the network of Centres for the Prevention and Treatment of Drug Addiction (CPTDAs). Similarly, among a total of 1,090 saliva specimens collected for unlinked anonymous testing for surveillance purposes at three different sentinel sites (two CPTDAs in Ljubljana and Koper and three non-governmental needles and syringes exchange programmes, two in Ljubljana and one in Koper) not a single specimen was positive for HIV antibodies[275].

Less than one individual per 1000 inhabitants is living with HIV-infection. Men who have sex with men have been the most affected, but the proportion of infected has stabilized at a level of a few percent, and has consistently remained below five percent. There is as yet no evidence of a substantial HIV-infection burden among injecting drug users (IDU) and their sexual partners or any other population group at higher behavioural risk.

During the 2006 the annual reported incidence rate of newly diagnosed HIV-infection cases has been 16.4 per million population, 15% lower than the reported rate in 2005. In 2006, MSM represented 76% of newly diagnosed HIV-infection cases in comparison to 82% in 2005. A cumulative total of 13 cases of HIV-infection among IDU were reported during the period from 1986 to 2006, the last one in 2001. A cumulative total of five cases of mother-to child transmission of HIV-infection were reported during the period from 1986 to 2006, the last one in 2004.

[274] National Institute of Heath, *Annual Statistic on Health 2007*,
URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.
[275] National Institute of Heath, *Annual Statistic on Health 2007*,
URL: http://www.ivz.si/javne_datoteke/datoteke/1627-03_Nalezljive_bolezni_2007.pdf.

Figure 3.11.5.1 – HIV transmission way during the period from 1986 to 2006.



Source: Klavs, I.; Bergant, N.; Kustec, T., Kastelic, Z. (2006), Infection with HIV in Slovenia: Annual Report 2006. URL: http://www.ivz.si/javne_datoteke/datoteke/640-letnoHIV06.pdf. (In slovene)

In 2006, HIV diagnosis was established very late, within three months preceding AIDS diagnosis, in 9.1% of all new diagnoses. The proportion of very late diagnoses has been decreasing recently. The diagnostic HIV testing rates have been increasing slowly to 1.3 tests per 100 Slovenians in 2006. In 2006, five AIDS cases were diagnosed (2.5 per million population), of which one presented with pulmonary tuberculosis. No AIDS deaths were reported in 2006.

Information on age, gender and transmission categories on PLWHA is not available. However, relevant information on cumulative reported newly diagnosed HIV case is shown in table 3.11.5.1.

Table 3.11.5.1 – Cumulative number of reported newly diagnose HIV cases (including AIDS cases)* by 31 December 2006 according to age, gender and transmission category.

HIV**	Male (age)				Female (age)				Total (Male and Female)				Total
Transmission route:	**<15**	**15 -24**	**>25**	**UnKn.**	**<15**	**15-24**	**>25**	**Unkn.**	**<15**	**15-24**	**>25**	**Unkn.**	
Injecting drug use	0	1	8	0	0	0	4	0	0	1	12	0	13
Male-to-male sex	0	18	162	2	0	0	0	0	0	18	162	2	182
Heterosex. contact	0	6	32	0	0	6	27	0	0	12	59	0	71
Mother to child transmission	2	0	0	0	3	0	0	0	5	0	0	0	5
Blood transfusion	3	4	8	0	0	0	0	0	3	4	8	0	15
Nosocomial***	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	1	24	0	0	5	4	0	0	6	28	0	34
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**5**	**30**	**234**	**2**	**3**	**11**	**35**	**0**	**8**	**41**	**269**	**2**	**320**

* The cumulative number of reported newly diagnosed HIV cases includes also cases of HIV/AIDS cases that have already died. We do not have information on age, gender and mode of transmission on all PLWHA.
**including all reported AIDS cases and non-symptomatic HIV-infections.
*** "Nosocomial infection" refers to patients infected in healthcare settings.

Source: Klavs, I.; Bergant, N.; Kustec, T., Kastelic, Z. (2006); Infection with HIV in Slovenia: Annual Report 2006. URL: http://www.ivz.si/javne_datoteke/datoteke/640-letnoHIV06.pdf. (In Slovene).

3.11.6 *HIV/AIDS spreading among young people*

In Slovenia the HIV spread among young people is very low: only 3 registered cases in 2007 among young men in the age group 20-24, no registered case in the age groups under 15 and no registered case in the age group 15-19.

3.12 Countries factsheets

In the following tables the overall picture of the country contexts is represented in a comparable way.

Table 3.12.1 – General country data.

Country	1.1 Size of population (year)	1.2 Life expectancy at birth (year)	1.3 % of population under 15 (year)	1.4 % of population under 24 (year)	1.5 Population below income poverty line (year)	1.6 Median age at first sex contact (year)	1.7 Health expenditure per capita per year (year)	1.8 Contraceptive prevalence rate (year)	1.9 Birth Rate (year)	1.10 Maternal mortality rate per 100.000 live births (year)
Bulgaria	7.606.551 people (2009)	69.49 years for males; 76.65 years for females (2007)	13.4% (2007)	26.7% (2007)	26% (2007)	17.1 years old (2004)	$ 741 (2006)	86% (2000-2007)	9.6/1000 (2007)	11/100.000 (2005)
Cyprus	796.740 people (2009)	78.33 years for tot. population; 75.91 years for males; 80.86 years for females (2009)	19.1% (2009)	33% (2007)	16% (2009)	N/A	$ 1696 (2006)	77% (2000-2007)	12.5/1000 (2009)	6.6/100.000 (2009)
Czech Republic	10.489.183 people (2009)	74.0 years for males; 80.1 years for females (2008)	14.1% (2008)	39.7% (2008)	9,8% (2007)	18 years old(2008)	$ 1490 (2006)	54% 2000-2007)	11.5/1000 (2008)	4/100.000 (2005)
Greece	11.171.740 people (2007)	77.7 years for males; 81,83 years for females	14.3% (2007)	11.6% (2007)	N/A	N/A	$ 2727 (2007)	N/A	9.54/1000 (2008)	3/100.000 (2007)

Country	1.1 Size of population (year)	1.2 Life expectancy at birth (year)	1.3 % of population under 15 (year)	1.4 % of population under 24 (year)	1.5 Population below income poverty line (year)	1.6 Median age at first sex contact (year)	1.7 Health expenditure per capita per year (year)	1.8 Contraceptive prevalence rate (year)	1.9 Birth Rate (year)	1.10 Maternal mortality rate per 100.000 live births (year)
		(2007)								
Hungary	10.045.401 people (2008)	73.3 years for tot. population; 66,2 years for males 77,3 years for females (2008)	15.53 % (2005)	27.7 % (2005)	N/A	N/A	$ 1329 (2005)	77% (2000-2007)	9.7/1000 (2007)	8.2/100.000 (2007)
Italy	60.045.068 people (2008)	78.50 years for males – 84.20 females for (2006)	14.1% (2007)	24.3 % (2007)	4.1% (2007)	17.6 years old (2004)	$ 2623 (2006)	60% (2000-2007)	9,6/1000 (2008)	3/100.000 (2005)
Lithuania	3.349.872 people (2009)	66 years for males; 78 years for females (2009)	15.07% (2009)	30.8% (2009)	N/A	N/A	$ 1041 (2006)	47% (2000-2007)	10.5/1000 (2008)	5/100.000 (2008)
Malta	413.609 people (2009)	79.44 years for tot. population; 76.95 years for males; 81,47 years for females (2008)	25% (2008)	37% (2008)	15% (2006)	21 years old (2008)	$ 1825 (2006)	44.5% (2008)	9.2/1000 (2008)	8/100.000 (2005)
Poland	38.136.000	71.3 years	16.7%	30.6%	17%	18.5 ye-	$ 910	49% (2000-	10.2/1000	6.5/100.000

Country	1.1 Size of population (year)	1.2 Life expectancy at birth (year)	1.3 % of population under 15 (year)	1.4 % of population under 24 (year)	1.5 Population below income poverty line (year)	1.6 Median age at first sex contact (year)	1.7 Health expenditure per capita per year (year)	1.8 Contraceptive prevalence rate (year)	1.9 Birth Rate (year)	1.10 Maternal mortality rate per 100.000 live births (year)
	people (2008)	for males; 80.0 years for females (2008)	(2008)	(2008)	(2008)	ars old (2005)	(2006)	2007)	(2007)	(2005)
Romania	21.584.365 (2007)	73 years (2008)	23.16% (2007)	14.9 % (2007)	25% (2005)	16 years old (2004)	$ 610 (2006)	70% (2000-2007)	9.8/1000 (2007)	24/100.000 (2005)
Slovenia	2.046.795 (2009)	78.85 years for tot. population; 75.4 for males; 82.3 years for females (2008)	14% (2008)	26% (2008)	12% (2007)	16 years old for males; 17 years old for females (2004)	$ 2065 (2006)	74% (2000-2007)	1.4/1000 (2007)	6/100.000 (2005)

Source:

Bulgaria **1.1**, **1.2**, **1.5**: EUROSTAT (2009), *Country profile*; **1.3**, **1.4**: EUROSTAT (2009), *Statistical Factbook 2009*; **1.6**: WHO (2006), *Sexuality Education in Europe. A Reference Guide to Policies and Practices*; **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/bgr/en/; **1.8**: United Nations (2009), *The State of the World's Children 2009*, URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf;
1.9: WHO, *Country region*,
http://www.euro.who.int/main/WHO/CountryInformation/HFAExtracts?Country=BUL&language=English; 1.10: WHO (2009), URL: http://www.who.int/whosis/whostat/EN_WHS09_Table2.pdf.
Cyprus **1.1**, **1.2**, **1.3**, **1.4**, **1.5**, **1.7**, **1.9**, **1.10**: Statistical Service of the Republic of Cyprus (2009); **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/cyp/en/, **1.8**: United Nations (2009), **The State of the World's Children 2009**, URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf.
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URL: http://www.istat.it/salastampa/comunicati/non_calendario/20090422_01/testointegrale20090422; **1.6**: WHO (2006), *Sexuality Education in Europe. A Reference Guide to Policies and Practices*; **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/ita/en/; **1.8**: United Nations (2009), *The State of the World's Children 2009*, URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf; **1.10**: WHO, *World Health Statistics 2009*, URL: http://www.who.int/whosis/whostat/EN_WHS09_Table2.pdf.
Lithuania **1.1**, **1.2**, **1.3**, **1.4**, **1.9**: Department of Statistics to the Government of the Republic of Lithuania (2009); **1.8**: United Nations (2009), *The State of the World's Children 2009*,
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Malta **1.1**, **1.9**: National Statistics Office (2009), *Malta in Figures*; **1.2**, **1.3**, **1.4**: National Statistics Office (2008), *Malta Demographic Review 2008*; **1.5**: Republic of Malta, *Malta National Action Plan on Poverty*
And Social Exclusion 2004-2006; **1.7**: WHO (2008), World Health Statistics 2008,
URL: http://www.who.int/countries/mlt/en/; **1.8**: Republic of Malta (2008), *Health Interview Survey 2008*; **1.10**: WHO (2009), URL: http://www.who.int/whosis/whostat/EN_WHS09_Table2.pdf.
Poland **1.1**, **1.2**, **1.3**, **1.4**, **1.9**: Central Statistical Office (2009), *Concise Statistical Yearbook of Poland*; **1.5**: Central Statistical Office (2008), *Demographic Yearbook of Poland*; **1.6**: *Knowledge about HIV/AIDS and sexual behaviour among the Poles in 2005*, study commissioned by the National AIDS Centre, issued by TNS OBOP; **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/pol/en/; **1.8**: United Nations (2009), *The State of the World's Children 2009*, URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf; **1.10**: Troszyński, Michał (2006), *Health of women of reproductive age (from 15-49 years of age) Poland 2006*, UNFPA, UNDP, Polish Ministry of Health and Institute of Mother and Child.
Romania **1.1**: National Institute for Statistics (2007); **1.2**: WHO (2009), *World Health Statistics 2008*; **1.3**: National Institute for Statistics (2007); **1.4**: AGERPRESS , 11 oct 2008; **1.5**: CIA (2009), *The World Factbook 2009*; **1.6**: National Institute for Public Health (2005), *National Survey on Reproductive Health*, URL: ftp://ftp.unfpa.ro/unfpa/SSRR2004.pdf

(in Romanian); **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/rou/en/; **1.8**: United Nations (2009), *The State of the World's Children 2009*,
URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf;
1.9: United Nation (2007), *Population Division*; **1.10**: United Nation (2005), *Data retrival system*.
Slovenia **1.1**, **1.2**, **1.3**, **1.4**: Statistical office of the Republic of Slovenia (2009); **1.5**, **1.9**: Statistical office of the Republic of Slovenia (2008); **1.6**: Pinter, Bojana (2006), "Sexual behaviour of secondary-school students in Slovenia in 2004", *Zdrav Vestn*, 75, pp. 615-9,
URL: http://www.solazazivljenje.si/aktualno/spolno_vedenje_slovenskih_srednjesolcev_v_letu_2004.html; **1.7**: WHO (2008), *World Health Statistics 2008*, URL: http://www.who.int/countries/svn/en/; **1.8**: United Nations (2009), *The State of the World's Children 2009*,
URL: http://www.childinfo.org/files/The_State_of_the_Worlds_Children_2009.pdf; **1.10**: WHO (2009),
URL: http://www.who.int/whosis/whostat/EN_WHS09_Table2.pdf.

Table 3.12.2 – Epidemiological country data.

Country	Estimated number of persons living with							Estimated number of children under 15 years living with						
	2.1 HBV (year)	2.2 HCV (year)	2.3 HIV/AIDS (year)	2.4 HBV/HCV (year)	2.5 HBV/HIV (year)	2.6 HCV/HIV (year)	2.7 HBV/HCV/HIV (year)	2.8 HBV (year)	2.9 HCV (year)	2.10 HIV/AIDS (year)	2.11 HBV/HCV (year)	2.12 HBV/HIV (year)	2.13 HCV/HIV (year)	2.14 HBV/HCV/HIV (year)
Bulgaria	N/A	N/A	3900 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyprus	<60 (2007)	<30 (2007)	248 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Czech Republic	N/A	N/A	1274 (2009)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greece	N/A	N/A	11.000 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hungary	N/A	N/A	1334 (2008)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Italy	700.000 (2009)	1.500.000 (2007)	150.000 (2008)	18.000 (2009)	9600 (2007)	60.000 (2007)	9000 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lithuania	N/A	N/A	2200 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Malta	N/A	N/A	500 (2007)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Poland	400.000 (2009)	730.000 (2009)	30.000-35.000 (2009)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Romania	1.000.000 (2009)	600.000 – 800.000 (2006)	9669 (2008)	N/A	N/A	N/A	N/A	N/A	N/A	280 (2008)	N/A	N/A	N/A	N/A
Slovenia	345-350 (2007)	140 (2007)	1200 (2008)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3.12.2b

Country	Estimated number of young persons (aged 15-24) living with							Adult persons (aged 15+) prevalence (%) of						
	2.15 HBV (year)	2.16 HCV (year)	2.17 HIV/AIDS (year)	2.18 HBV/HCV (year)	2.19 HBV/HIV (year)	2.20 HCV/HIV (year)	2.21 HBV/HCV/HIV (year)	2.22 HBV (year)	2.23 HCV (year)	2.24 HIV/AIDS (year)	2.25 HBV/HCV (year)	2.26 HBV/HIV (year)	2.27 HCV/HIV (year)	2.28 HBV/HCV/HIV (year)
Bulgaria	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyprus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Czech Republic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greece	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74.11 % (2007)	93.33% (2007)	N/A	N/A	N/A	N/A	N/A
Hungary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Italy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Women: 0.2% (2007)	N/A	N/A	N/A	N/A
Lithuania	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4% (2007)	1.1% (2007)	Women: 0.03%; Men: 0.03% (2007)	N/A	N/A	N/A	N/A
Malta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Poland	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Women: 1.94%; men: 3.84% (2007)	Women: 6.36%; men: 8.14% (2007)	Women: 0.01%; men: 0.05% (2007)	N/A	N/A	N/A	N/A
Romania	N/A	N/A	6109 (2009)	N/A	N/A	N/A	N/A	5.59% (2004)	4.56% (2009)	N/A	N/A	N/A	N/A	N/A
Slovenia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Country	Young persons (aged 15-24) prevalence (%) of							Cumulative number of deaths due to			Number of newly diagnosed cases of						
	2.29 HBV (year)	2.30 HCV (year)	2.31 HIV/ AIDS (year)	2.32 HBV/ HCV (year)	2.33 HBV/ HIV (year)	2.34 HCV/ HIV (year)	2.35 HBV/ HCV/HIV (year)	2.36 HBV (year)	2.37 HCV (year)	2.38 HIV/ AIDS (year)	2.39 HBV (year)	2.40 HCV (year)	2.41 HIV (year)	2.42 HBV/ HCV (year)	2.43 HBV/ HIV (year)	2.44 HCV/ HIV (year)	2.45 HBV/ HCV/ HIV (year)
Bulgaria	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	146 (2007)	98 (2007)	126 (2007)	N/A	N/A	N/A	N/A
Cyprus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	93 (2007)	13 (2007)	9 (2007)	46 (2007)	N/A	N/A	N/A	N/A
Czech Republic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	203 (2009)	25 (2009)	67 (2009)	10 (2009)	N/A	N/A	N/A	N/A
Greece	9.41% (2007)	6.6% (2007)	0.2 (males) 0.1 (fem.) (2007)	N/A	N/A	N/A	N/A	N/A	N/A	30 (2007)	31 (2008)	9 (2008)	60 (2007)	N/A	N/A	N/A	N/A
Hungary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	296 (2008)	88 (2008)	34 (2008)	145 (2008)	N/A	N/A	N/A	N/A
Italy	N/A	N/A	women: 0.2%; men: 0.4% (2007)	N/A	N/A	N/A	N/A	N/A	N/A	39.042 (2008)	1097 (2007)	308 (2007)	1679 (2007)	N/A	N/A	N/A	N/A
Lithuania	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	78 (2008)	84 (2007)	46 (2007)	95 (2008)	N/A	N/A	N/A	N/A
Malta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2 (2007)	1 (2007)	16 (2007)	N/A	N/A	N/A	N/A

Country	Young persons (aged 15-24) prevalence (%) of							Cumulative number of deaths due to			Number of newly diagnosed cases of						
	2.29 HBV (year)	2.30 HCV (year)	2.31 HIV/ AIDS (year)	2.32 HBV/ HCV (year)	2.33 HBV/ HIV (year)	2.34 HCV/ HIV (year)	2.35 HBV/ HCV/HIV (year)	2.36 HBV (year)	2.37 HCV (year)	2.38 HIV/ AIDS (year)	2.39 HBV (year)	2.40 HCV (year)	2.41 HIV (year)	2.42 HBV/ HCV (year)	2.43 HBV/ HIV (year)	2.44 HCV/ HIV (year)	2.45 HBV/ HCV/ HIV (year)
Poland	W. (15-19): 2.83%; (20-24): 3.01%; Men (15-19): 6.19%; (20-24): 5.64%	W. (15-19): 5.66%; (20-24): 5.33%; Men (15-19): 7.26%; (20-24): 9.34%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1004 (2009)	1454 (2007)	10.242 (2007)	46 (2009)	30 (2008)	N/A	N/A	N/A
Romania	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5500 (2008)	927 (2007)	90 (2007)	436 (2008)	N/A	N/A	N/A	N/A
Slovenia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16 (2008)	14 (2008)	48 (2008)	N/A	N/A	N/A	N/A

Country	Percentage of cases aged 15-24 years old of							Predominant infection transmission mode in general population of		
	2.46 HBV (year)	2.47 HCV (year)	2.48 HIV/AIDS (year)	2.49 HBV/HCV (year)	2.50 HBV/HIV (year)	2.51 HCV/HIV (year)	2.52 HBV/HCV/ HIV (year)	2.53 HBV (year)	2.54 HCV (year)	2.55 HIV/AIDS (year)
Bulgaria	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyprus	N/A	N/A	14,2% (2007)	N/A	N/A	N/A	N/A	N/A	N/A	Sexual Transmission (92.4% in 2007)
Czech Republic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Sexual Transmission (2009)
Greece	9.4% (2007)	6.6%(2007)	4.4 % (2007)	N/A	N/A	N/A	N/A	Sexual Transmission (22% in 2008) and IDU (22% in 2008)	IDU (30.7% in 2008)	Sexual Transmission 64.1% (2008)
Hungary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Sexual Transmission + IDU (2008)	IDU (2008)	Sexual Transmission (2008)
Italy	N/A	N/A	male: 1.7%; female: 4.7% (2005)	N/A	N/A	N/A	N/A	Sexual transmission (34.9% between 1997-2004)	IDU (31.9% between 1997-2004)	Sexual Transmission (73,7% in 2007)*
Lithuania	21.1%** (2008)	11.6%** (2008)	20%** (2008)	N/A	N/A	N/A	N/A	IDU (between 1988-2008)	IDU (between 1988-2008)	IDU (between 1988-2008)
Malta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Poland	20% (2008)	15% (2008)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Romania	N/A	<4 % (2004)	40.5% (2008)	N/A	N/A	N/A	N/A	Sexual transmission (2008)	Parenteral (2008)	Sexual transmission (2008)
Slovenia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Sexual transmission (2007)	IDU (2007)	Sexual transmission (2007)

Prevalence (%) among population higher at risk (age 15-24) of												
Country		Bulgaria	Cyprus	Czech Rep.	Greece	Hungary	Italy	Lithuania	Malta	Poland	Romania	Slovenia
2.56 HBV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	4.7% (2008)	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.57 HCV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	1.2% (2008)	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.58 HIV/AIDS (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	0.72% (2008)	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	0.3-0.7% (2009)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.59 HBV/HCV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.60 HBV/HIV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	7.69% (2008)	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	7.69% (2008)	N/A	N/A	N/A	N/A
2.61 HCV/HIV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	9.33% (2008)	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2.62 HBV/HCV/HIV (year)	Migrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MSM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	IDUs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Datum refered only to some regions.

** aged 18-24

Source:

***Bulgaria* 2.4**: UNAIDS (2008), *Bulgaria Country profile*; **2.39**, **2.40**, **2.41**: ECDC (2009), *Annual epidemiological report on communicable diseases 2009*.

***Cyprus* 2.1**, **2.2**: Ministry of Health (2008), *Notifiable Diseases in Cyprus*; **2.3**, **2.38**, **2.41**, **2.48**, **2.55**: Papantoniou, L. (2008), *HIV/AIDS Surveillance in Cyprus-Epidemiological Report. National AIDS Program Manager*, Ministry of Health, Press and Information Office, Cyprus.

***Czech Republic* 2.3**, **2.38**, **2.39**, **2.40**, **2.41**, **2.55**: National Institute of Public Health (2009).

***Greece* 2.3**: UNAIDS (2008), *Greece Country profile*; **2.22**, **2.23**, **2.29**, **2.30**, **2.39**, **2.40**, **2.46**, **2.47**: HCDCP (2009), *Cumulative data 1998-2008*, URL: http://www.keel.org.gr/keelpno/2008/home/diseases_all.pdf; **2.24**, **2.31**, **2.38**, **2.41**, **2.48**: HCDCP (2007), *HIV-AIDS Surveillance Report in Greece*,22; **2.53**, **2.55**: Papaevangelou, Vanna; Van Damme, Pierre (2008), "Epidemiology of Hepatitis C in Greece", *Viral Hepatitis*, 16; 2.58 : EMCDDA (2009), *Statistical Bulletin 2008*, URL: http://www.emcdda.europa.eu/stats08.

***Hungary* 2.3**, **2.38**, **2.39**, **2.40**, **2.41**, **2.53**, **2.54**, **2.55**: OEK (2009).

***Italy* 2.1**: Romanò, Luisa; Sara, Paladini; Tagliacarne, Catia; Zappa, Alessandra; Zanetti, Alessandro Remo (2009), "The changing face of the epidemiology of type A, B, and D viral Hepatitis in Italy, following the implementation of vaccination", *Vaccine*, 27, 25-26, pp. 3439-3442; **2.2**: AISF (2007), "L'infezione da Virus dell'Epatite C. I Grandi Temi di AISF", *I quaderni dell'AISF*; **2.3**, **2.38**, **2.41**, **2.48**, **2.55**: National Institute of Health (2009), *Supplemento del notiziario dell'Istituto Superiore di Sanità*, 22, 3, 1; **2.4**: Galvagna S. (2009), *Co-infection. HIV and Hepatitis Virus*, paper prepared for the meeting "General medicine and HIV/AIDS prevention", Catania, 7 February 2009. (In Italian); **2.5**, **2.6**, **2.7**: Nasta, Paola (2008), "La coinfezione HIV/virus epatitici nella coorte MASTER", *ReAD*, 1, 9, Marzo, pp. 13-15; **2.24**: UNAIDS (2008), *Report on the global AIDS epidemic 2008*; **2.31**: UNAIDS (2008), *Epidemiological Fact Sheet on HIV and AIDS. Core data on epidemiology and response. Italy. Update 2008*; **2.39**: Ministry of Health (2009), URL: http://www.ministerosalute.it/malattieInfettive/datidefcons_carica.jsp?cod_malatt=0703&classe=02&annoselect=2007&period=00&scelta=opt_nazionali; **2.40**: Statistical databases of World Health Organizanition Regional Office for Europe (2009), URL: http://data.euro.who.int/cisid/?TabID=217757; **2.53**, **2.54**: Mele, Alfonso; Tosti, Maria Elena; Spada, Enea; Mariano, Andrea; Bianco, Elvira and SEIEVA Collaborative Group (2006), "Epidemiology of acute viral Hepatitis: twenty years of surveillance through SEIEVA in Italy and a review of the literature", *Istituto Superiore di Sanità - Rapporti ISTISAN 06/12*.

***Lithuania* 2.3**, **2.5**, **2.6**, **2.22**, **2.23**, **2.24**, **2.56**, **2.57**, **2.58**: UNAIDS (2008), *Report of the Global AIDS epidemic*; **2.38**, **2.41**: Lithuanian AIDS Centre; **2.5**, **2.6**, **2.46**, **2.47**, **2.48**, **2.53**, **2.54**, **2.55**, **2.60**, **2.61**: Center For Communicable Disease (2009), *Prevention And Control of Lithuania*.

***Malta* 2.3**: UNAIDS (2008), *Malta Country profile*; **2.39**, **2.40**, **2.41**: ECDC (2009), *Annual epidemiological report on communicable diseases 2009*.

***Poland* 2.1**, **2.2**, **2.3**: National Institute of Public Health - National Institute of Hygiene (2009); **2.22**, **2.23**, **2.24**, **2.29**, **2.30**, **2.31**, **2.38**, **2.30**, **2.40**, **2.41**, **2.46**, **2.47**: National Institute of Public Health - National Institute of Hygiene (2007); **2.42**: National Institute of Public Health – National Institute of Hygiene – Department of Epidemiology and Chief Sanitary Inspectorate – Department of Communicable Diseases Control (2008), *Infectious diseases and poisonings in Poland Report no 12/B/08*, URL: http://www.pzh.gov.pl/oldpage/epimeld/index_p.html.

***Romania* 2.1**: National Institute for Infectious Diseases Matei Balş (2009); **2.2**: Cernescu, C. (2008), *Clinical Virology*, Ed. Medicala. (in Romanian); **2.3**, **2.5**, **2.5**, **2.7**, **2.10**, **2.17**, **2.38**, **2.41**, **2.48**: National AIDS Committee - Department for AIDS monitoring; National Institute for Infectious Diseases Matei Bals (2009), *Statistic data on HIV/AIDS infection in Romania*, June, URL: http://www.cnlas.ro/hiv/statistica.htm; **2.23**: Romanian Association for the Study of Liver (2009); **2.39**, **2.40**: ECDC (2009), *Annual epidemiological report on communicable diseases in Europe*, URL: http://ecdc.europa.eu/en/publications/Publications/0910_SUR_Annual_Epidemiological_Report_on_Communicable_Diseases_in_Europe.pdf; **2.47**: Ruta, S. M.; Sultana C.; Manolescu, L.; Cernescu, C. (2004), "Seroprevalence of Hepatitis infections in general population from Romania", Revista Româna de boli infecțioase; **2.53**: Pitigoi, D.; Rafila, A.; Pistol, A.; Arama, V.; Molagic, V.; Streinu-Cercel, A. (2008), "Trends in Hepatitis B incidence in Romania, 1989-2005", *Eurosurveillance*; **2.54**: Gheorghe, Liana; Iacob, Speranza; Csiki, Irma Eva (2008), "Prevalence of Hepatitis C in Romania: Different from European rates?", *Journal of Hepatology*, 49, 4, pp. 661-662, October; **2.55**: UNGASS (2009), *Country progress report*, Romania, Reporting period: january 2007–december 2008.

Slovenia **2.1**, **2.2**, **2.39**, **2.40**, **2.53**, **2.54**, **2.55**: Institute of Public Health (2008), *Annual report for year 2007*, URL: http://www.ivz.si/javne_datoteke/datoteke/798-Epidemiolosko_spremljanje_NB_2007.pdf; **2.3**, **2.41**: Institute of Public Health (2008), *Okužba S HIV Sloveniji2008. Letno Poročilo 2008*.

All the tables presented in this paragraph have been created by University of Sassari.

These tables show clearly the situation of the available data about HBV, HCV and HIV/AIDS in the project participating countries. The analysis shows similar knowledge gaps identified in several countries especially in the project target group. Data about co-infections aren't available in almost all the participating countries. Only for Greece and Lithuania some data concerning the sub groups are available. This causes difficulty to understand the spread of the three diseases and, consequently, to face the problem.

4. HBV, HCV, HIV BEST PRACTICES IN PREVENTION AND INFORMATION ACTIVITIES

4.1 STIs prevention campaigns: strengths, weakness, opportunities

At present, no specific analysis on HBV and HCV prevention and information campaigns have been carried out. However, the following study that analyses the messages and the efficiency/impact of HIV/AIDS campaigns, carried out from 1987 in Europe, can be also applied to HBV and HCV campaigns, given that the modes of transmissions are the same.

The analysis of the previous campaigns on HIV/AIDS shows that:

a) the key themes are:
   - **Infection**: What is HIV?; What does it do?;
   - **Transmission**: How does it happen?; How doesn't it?;
   - **Prevention**: Behaviours, HIV-testing.

b) The identified objectives are:
   - To explain the phenomenon, hold high the attention;
   - To give information to fight it.

c) The critical factors are:
   - The taboo linked to the sexual sphere;
   - The proclivity to the problem;
   - The taboo to say "condom";

Strengths

The communication on AIDS gives results.

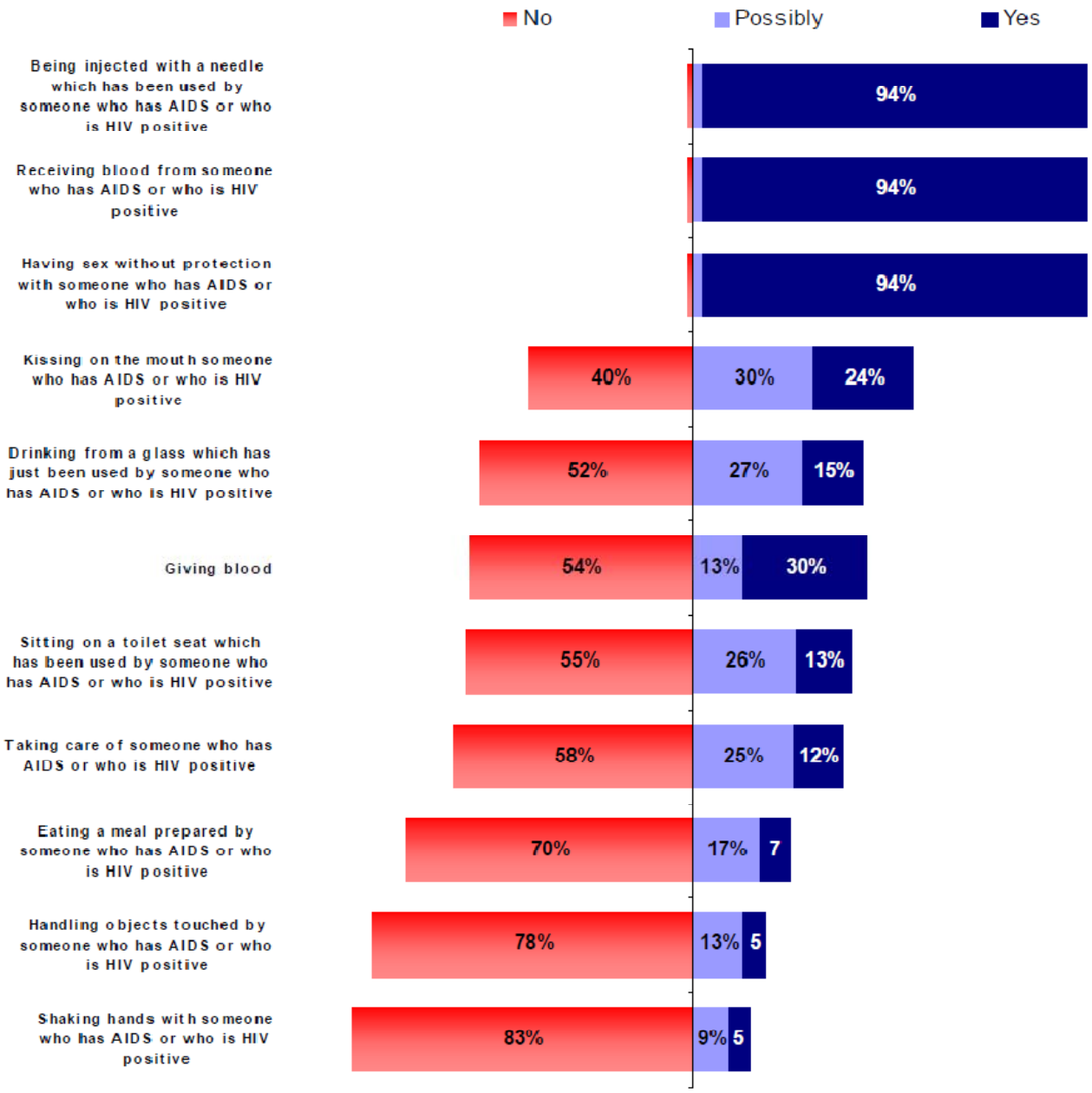
The first prevention campaign on AIDS has been carried out in United Kingdom in 1987. The TV spot used for the campaign proposed three key issues:

- What's AIDS?;
- How does it transmit?;
- How is it possible to fight?;

The message of the TV spot was "*Knowledge saves life*". The pitch of the voice was severe and urgent.

In Europe, according to the Eurobarometer data of 2005, the information related the spread of the disease was high.

Figure 4.1.1 – Information on the transmission of HIV/AIDS in Europe in 2005.

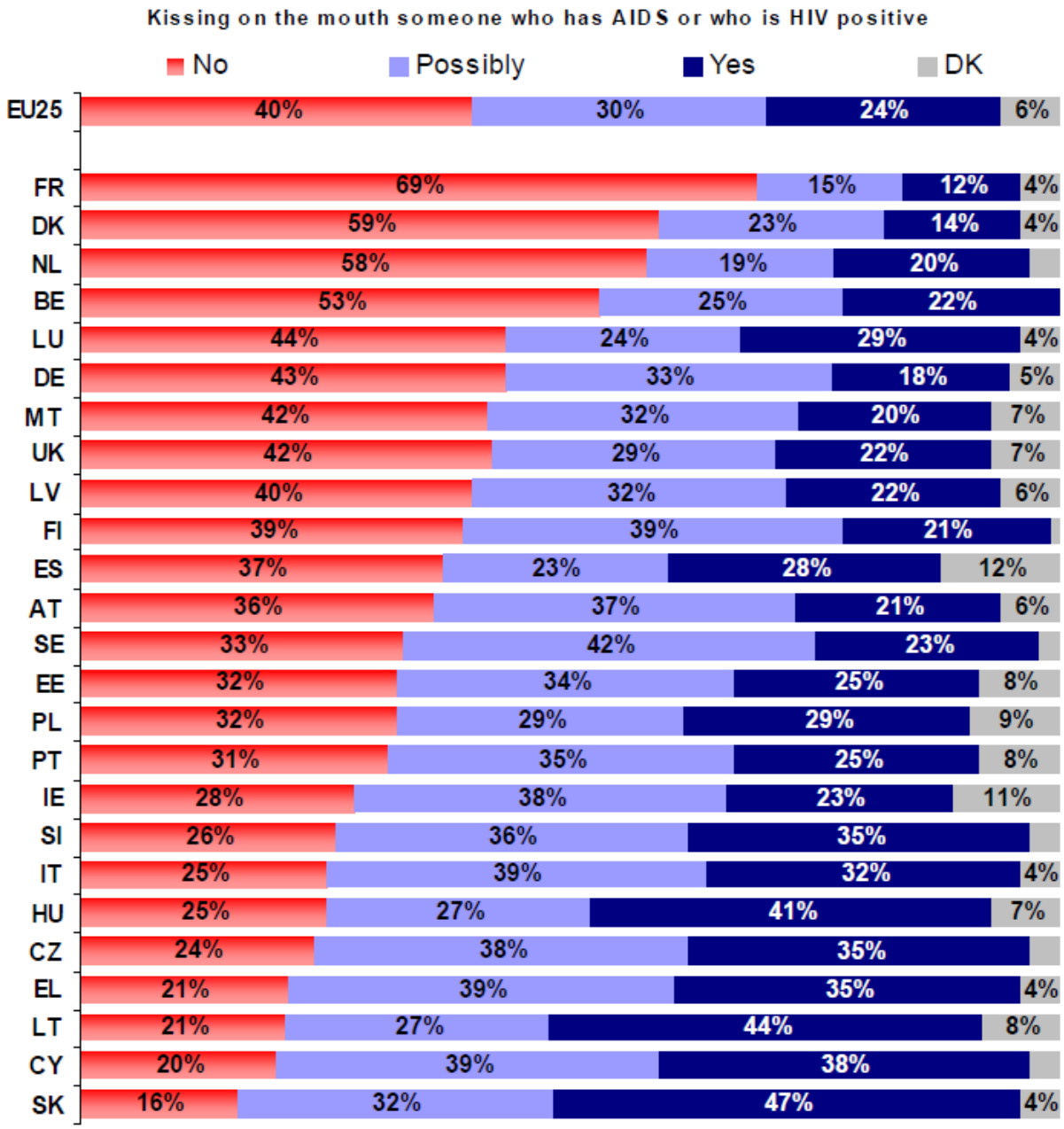


Source: Eurobarometer (2006), AIDS Prevention.

Weakness

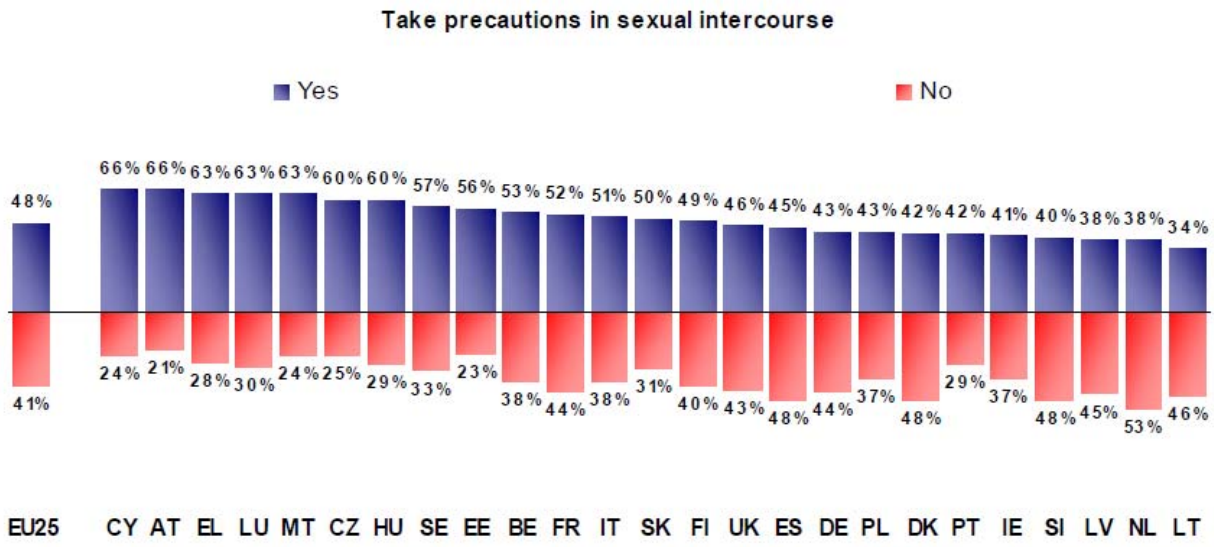
The same 2005 Eurobarometer data reported a different situation in Italy. Instead, there was confusion on how the virus do not transmit.

Figure 4.1.2 – Information on the transmission of HIV/AIDS in each EU member country in 2005.



Source: Eurobarometer (2006), AIDS Prevention.

Figure 4.1.3 – Sexual behaviours in each EU member country in 2005.



Source: Eurobarometer (2006), AIDS Prevention.

Opportunities

In order to achieve positive results in the fields of HIV/AIDS information and prevention, it's very important to spread messages characterized by simplicity, concreteness, bravery, paying attention to the threats linked to three "the narrative frames":

- "We already know all of this": the campaigns that dealt with AIDS were carried out between 1987 and 1995. Furthermore it's possible that people forget the problem or they weren't yet born.
- "It's always the same old story": in the meanwhile the situation changed, in fact, people infected by sexual contacts (homo- and heterosexual) increased, but in Italy it doesn't talk no more about this.
- "There's something more dangerous than AIDS": AIDS has been described and lived as one of the most global serious emergencies, but nowadays it's in competition with themes perceived as more urgent: global warming, terrorism, Influenza A (H1N1) virus, global recession.

In this context, the risks are:

- to disseminate generic communications neglecting basic factors and the theme as a whole;
- to do not inform about the increase of the sexual infection risks.
- to horrify without to explain.

4.2 HBV, HCV, HIV/AIDS information and prevention activities in H-CUBE countries

The following pages show the most relevant information and prevention activities carried out in the project participating countries during the last years. It is important to underline that specific activities about HBV and HCV haven't been carried out in the most of H-CUBE countries. On the other hand, all H-CUBE countries implemented activities in this field. Furthermore, there is lack of information regarding specific activities focused on young people.

4.2.1 Bulgaria

a) HBV, HCV: Association HEPATIST [276] for the World Hepatitis Day on 19 May 2008 promoted a HBV awareness campaign and a fundraising for the testing, also through very successful Bulgarian radio and TV shows (as "Big Brother VIP", "Who Wants to Be a Millionaire"). In these shows some patients told their lives with the disease.

b) HIV/AIDS:

- In 2005, the Ministry of Health launched a prevention campaign against AIDS. On 14 February 2006 (Valentin's day) a mobile units distributed free and anonymous tests in the university campuses in several larger towns of Bulgaria. During the campaign such tests were also provided in the regular testing centres. The campaign is also addressed to substance abusers, prisoners and other vulnerable groups. It finished in 2008277.
- In 2006, national program "Prevention and Control of HIV/AIDS" started implementing activities aimed at preventing new infections in MSM group[278].
- Bulgaria's Red Cross managed a mass anti-AIDS campaign on December 1 2007, the World AIDS day. Volunteers distributed information leaflets, condoms, and red ribbons as a symbol of the fight against the disease, in stations, theaters, and cinemas.
- The campaign also was carried out in Sofia's nightclubs, in attempt to reach out to young people and inform them about the HIV/AIDS issue[279].

4.2.2 Cyprus

a) HBV, HCV: There are no associations, charities, non-government organisations specific to HBV or HCV in Cyprus, even though the government carried out activities in this field.

- In 1996, the Girl Guides Association of Cyprus introduced in its activities an educational program with the help of the Ministry of Health and the World Health Organization (WHO). The program's purpose was to inform the Girl Guides about infectious diseases so as to educate them further on matters of Health and Hygiene. Particularly: acquiring attitude-changing knowledge, thus making protection and safety a top priority when it came to infectious diseases. Through age-appropriate material, the guides learn about germs, viruses and how they are transmitted, including HBV, HCV and HIV. One of this leaflet was focused on Hepatitis ("Hepatitis ABCδE – What you need to know") and have been produced by the Ministry of Health outlining basic information regarding what the liver is and its function, what Hepatitis A, B, C, δ, and E are, description of symptomatology, information regarding diagnosis, how they are transmitted, vaccines, and prevention. The leaflets are available in state hospitals, regional health centres and to public health professionals.
- The Cyprus Family Planning Association has been active since 1971 and aims in educating the public in health matters as well as being an advocate for healthy sexuality and empowering young people to be active and responsible participants in a healthy sexual life. The Cyprus Family Planning Association is a non-profit organisation; a service provider and a leading advocate of sexual and reproductive health and rights for all Cypriots. Main subjects include abortion, access, HIV/AIDS, advocacy, and young people/adolescents. They organise both educational programs as well as providing counselling services to people who need

[276] Association HAPATIST protects interests of Hepatitis infected people in Bulgaria and also is a member of ELPA (European Liver Patients Association).

[277] *Anonymous, "*Free AIDS Tests Mark Valentine's Day in Bulgaria", in *Sofia News Agency*, 13 February 2006, URL: http://www.novinite.com/view_news.php?id=59114

[278] REPUBLIC OF BULGARIA. NATIONAL COMMITTEE FOR PREVENTION OF AIDS AND STIS AT THE COUNCIL OF MINISTERS. UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS (2006), "UNGASS Indicators Country Report. Reporting period: January 2003 – December 2005".

[279] *Anonymous, "*Prevention Campaign starts in Bulgaria on World AIDS Day", in *Sofia News Agency*, 1 December 2007, URL: http://www.novinite.com/view_news.php?id=88081.

their services. Information regarding sexually transmitted diseases is disseminated in the form of leaflets, organised lectures, activities for young people etc (HBV, HCV, HIV/AIDS included).

- Starting from 2004, a leaflet has been produced by KENTHEA (Center of information about drugs and treatment of dependant persons) aiming to educate young people against drugs and communicable diseases. A leaflet specific to Hepatitis C was produced and disseminated to young people with the aim to educate them regarding this disease.

b) HIV/AIDS: The most important HIV prevention and information action is carried out by the National AIDS Programme[280]. This programme is based on four principles:

a) Prevention of sexual transmission;

b) prevention of transmission through blood;

c) prevention of perinatal transmission;

d) reduction of personal and social impact.

Women are targeted specifically in health education, so as to increase their potential for self protection from infection with the HIV virus.

The prevention of the sexual transmission of the virus is one of the main objectives of the National AIDS Programme and for this reason programmes are introduced in groups who are of the highest risk. Peer education is done in schools, where teenagers are trained by their peers, who were themselves trained by health visitors.

A similar programme is implemented through UNOPS funding by the Cyprus Girl Guides Association, who have prepared rich educational materials in Greek and in Turkish. These materials will be used by all stakeholders from the governmental and non-governmental sectors dealing with HIV/AIDS. The basic aim of the peer education programmes is the enhancement of individual capacity for decision making and for acting according to one's personal wish and safety. These programmes are constantly being reinforced through the reviewing of the education methods and the training of health workers and volunteers who will put them into practice. Three workshops were done recently under the guidance of a World Health Organization expert.

The measures for the prevention of AIDS are targeted towards other groups as well, such as, for example, the foreign bar girls, who attend special education sessions provided by the Cyprus Family Planning Association, in cooperation with the National AIDS Programme. More programmes will be developed, addressing other groups such as the homosexual community, ethnic and other minorities, tertiary education students etc[281]:

- "AIDS – ten facts you need to remember". The leaflet briefly describes what AIDS means, how it is and isn't transmitted, how to educate others about it and being responsible about sexual behaviour and coming into contact with blood;
- "AIDS – Safer Sex". The leaflet describes how AIDS is transmitted through sexual contact, symptomatology, and how to protect the self by performing safe sex;
- "A Guide to a Healthy Sexual Life". A 30-page leaflet describing (both in words and pictures) what sexually transmitted diseases are, what the difference between venereal and sexually transmitted diseases are, who runs the risk of becoming infected with the disease, symptomatology, what to do if you think you have contracted a disease, how to tell your partner, how to protect yourself against infections, a list of diseases and explanations for each one (ie. Gonorrhea, Moniliasis, Genital Warts, Trichomoniasis, Genital Herpes, Pubic Lice, Syphilis, Hepatitis B, HIV/AIDS).

[280] Ministry of Health-National AIDS Programme, "HIV/AIDS The Situation in Cyprus and the World", URL: http://www.moh.gov.cy/Moh/moh.nsf/.
[281] http://www.cyfamplan.org/publications\WGII-Cyprus[1].pdf.

Intersectoral collaboration is being promoted, largely with non-governmental organizations such as the Cyprus Red Cross, the Solidarity Movement, the Cyprus Scouts Association and other youth organizations, as well as with seropositive people who will provide information to the public. Part of this work will be 3 coordinated by the Cyprus Youth Board. There will also be cooperation with the Ministry of Defense on the basis of special studies and programmes among the national guards.

Despite the absence of any evidence of transmission of the virus among drug addicts, the responsible services are on the alert, because of the constantly rising drugs problem in Cyprus and abroad. For this reason, there is close cooperation with the Anti Drugs Council, for the prevention of blood borne transmission of the virus among drug addicts, through needle sharing, as part of a multifaceted policy against drugs in Cyprus. Services are also provided which aim to reduce the personal and social impact of HIV-infection, in the following areas: (a) free care comprising counselling, testing for diagnosis and follow-up, clinical care and therapies based on antiretroviral drugs and treatment for opportunistic infections and other affections, (b) psychological and financial support in cooperation with other Ministries and with non-governmental organizations such as the Solidarity Movement and the Gregorios Clinic Foundation and (c) measures targeting the reduction of prejudice and stigma by informing and sensitizing the community on issues concerning people with HIV-infection. Clinical care is provided mainly through the Gregorios Clinic that has been operating since 1996 at the Larnaca General Hospital, with the support of the Foundation.

4.2.3 Czech Republic

HBV, HCV, HIV/AIDS: There aren't special prevention programs for HBV or HCV. Prevention and information for young people are included e.g. in programme of healthy life-style (meetings, lectures in schools, etc.).

The main primary preventive programme called "Game against AIDS" is targeted to young people 14-17 years old, focusing also to other infectious diseases as Hepatitis B and C. This preventive activity is recommended also by National program of solution of the problem of HIV/AIDS in Czech Republic in 2008-2012. This project is carried through an unconventional, free and easy interactive "game" focusing on primary prevention of unwanted pregnancies, STDs (HBV also) and HIV, using such principles as humor, playfulness and competitiveness of young people.

During approximate 100 minutes, groups of 12-15 people participate in the game in five workstations:

1.Mode of HIV transmission;
2. Love, sexuality and protection:
3. Protection against unwanted pregnancies;
4. Body language and sexuality – pantomime;
5. Living with HIV.

This program "Game against AIDS" is performed in elementary schools (13-15 years ald pupils) and high schools (15-17 years old students) in Usti nad Labem, Litomerice, Teplice, Bilina etc.

4.2.4 Greece

a) HBV, HCV: Prevention is the highest priority of the HCDCP. Recommended HBV vaccination for all infants was introduced in the Greek National Immunization Program (NIP) as of 1 January 1998 (see section on HBV immunization), with the aim of preventing acute and chronic HBV infection and achieve elimination of HBV transmission in all age groups. The HCDCP is responsible for updating the recommendations for HBV

vaccination and also supports implementation of management programs to prevent perinatal HBV-infection through:

- testing of pregnant women for HBsAg as part of routine prenatal care;
- recording of HBV vaccination and Hepatitis B immune globulin (HBIG) administration for all neonates born from HBsAg-positive mothers.

1) Vaccination is the most effective tool in preventing the transmission of HBV. The vaccination of Hepatitis B to all neonates is obligatory from 1/1/1998 (Law 4543/10-9-97); systematic vaccination of HBV is effective for preventing acute and chronic HBV infection, as well HBV transmission to all age groups.
2) Education and training are strategic priorities of the HCDCP in order to increase knowledge and awareness among health care professionals, high risk populations and the general public. A specific programme is carried out every year in the schools with the aim is to favour changes in attitude and practice that will result in improved prevention and control. Specifically for viral Hepatitis, free educational material for HBV and HCV is provided in different languages. Recommendations on prevention of transmission of HBV and HCV are given to school teachers and an informative website is available (www.keelpno.gr). One-day meetings and conferences on HBV and HCV as well as training programs for intravenous drug user (IDU) community outreach are organized. Brochures and clinical guidelines are also issued.
3) Ensured through optimized approaches to screening, diagnosis and management of HBV and HCV-infection; protocol design for laboratory follow up; and through recommendations for the treatment of chronic HBV and HCV. In Greece, treatment of patients with chronic HBV and HCV is free of charge since January 2007; molecular biological tests are also offered free of charge.

b) HIV/AIDS: Prevention activities (information programs) on sexual health and sexual transmitted infections are essential to monitor epidemic and evaluate the public health response to control the transmission, without disregarding the effectiveness of other measures implemented. In interpreting that aspect of prevention activities, it should be taken into account that a network of social partners, special infection units and clinics of public/private sectors, and specialized centers in this field ensure the effectiveness and coverage of such prevention activities among targeted group[282]. In this context, information programs on HIV/AIDS-infection are carried out on national level by health professionals of HCDCP/KEELNPO, addressing to young people, aged 15-24 years old, parents, migrants, the Greek army and health professionals and aiming at informing about HIV/AIDS-infection and modes of transmission, and raise awareness of public interest. Some activities are:

a) The National prevention programs focusing on the target group is aimed at reducing HIV transmission within Greece, while access to treatment and care services is to a large extent ensured. In this context, the “Greek National action plan against HIV/AIDS” suggests diverse modes of intervention to control HIV/AIDS transmission among vulnerable social groups (IDUs, MSM, migrants, homo/heterosexuals) as well as prevent heterosexual transmission especially targeted with high risk partners. in 2005 the overall cumulative number of “trainees” in 8 regions of Greece was 10.418 persons. This figure shows an overall increase of around 40.000 persons from 2005 to 2008, trend which confirms the fact that educational approach is of outmost importance when prevention intervention regarding HIV transmission is concerned. The measures identified as major modes of intervention for controlling HIV transmission are the following:

[282] The network consists, among others, of the Ministry of Health and Social Solidarity, the National School of public health, the 2nd Gynecology clinic of the University of Athens and the Hellenic Center for Disease Control and Prevention.

- prevention media campaigns (posters, TV spots, advertisements);
- annual prevention campaign for the World AIDS day targeting to young people;
- educational policies, which refer to educational programs on sexual health and sexual transmitted infections;
- Planning of health and social support services.

The "World Pharmacists" NGO (http://www.worldpharmacists.org) in the occasion of 1 December 2009 (the World AIDS Day) organized an open event in the heart of Athens. The event is held under the auspices of the City of Athens. The event took place at Kotzia square on November 28th, 2009.

4.2.5 Hungary

HBV, HCV, HIV/AIDS: From 1999 after the HBV compulsory vaccination. In Hungary there are no special program for the youth in HBV and HCV, only the global prevention program against the STI.
The Public Health Program contributes to improving population health through the concerted efforts of several working groups. Outstanding representatives of the individual disciplines are invited to sit in the working groups. In the area of HIV/AIDS prevention, the National AIDS Committee is responsible for putting together proposals for the annual action plan.

In 1991, the Sex Education Foundation transposed the PEPLA program (Peer Education Program of Los Angeles) as well as the adult sexual education program of Kupat Holim from Israel. Training materials, posters and leaflets were produced.

In 1992, Hungarian Red Cross and Hungarian AIDS Foundation trained young peer educators who subsequently provided education in subways and schools. From the late-1990's, extracurricular youth programs were started which reached the target audience in summer camps and focused on safe sex and HIV/AIDS prevention. Created between 1995 and 2002, Youth Offices engaged in prevention in major traffic junctions and subways. From 1999, this activity has been organized on the national and regional levels, in coordination with drug prevention, within the frames of child and youth protection activities. Medical undergraduates at Semmelweis University began their peer educators program on AIDS at the time of the change of the political system; subsequently, they added new areas to it: drug, tobacco, alcohol, lifestyles, sex etc. Today, the program is being implemented under the name of Budapest Medical Undergraduates' Peer Educators Foundation. In adult education, the training of school doctors was targeted by 'Fodor József' School Health Society and Pápai Páriz Association.

In July 2005, the first part of a pilot program related to education for family life was completed, which contributed to developing the system of values and personality of young persons, as well as to evolving responsible sexual and drug-avoiding behaviours. The pilot program was elaborated by 'Sexual Education Foundation of Priority Public Interest', which published a multimedia CD-ROM entitled 'Love, sex and what you should know', supported by the Public Health Program. This methodological teaching material uses interactive tools to promote building awareness in private life of the 11-17 year-old age-group. In addition to the CD, a student textbook and a teacher's manual were also published with the title 'Private life and health awareness'. A pilot activity to train educators was also launched in 5 regions with the involvement of teachers, health visitors and peer educators.

Prevention programs for communities taking increased infection risk were also completed with the active involvement of NGOs and individual members of the relevant communities (gay communities, prostitutes, HIV-positives). A HIV/AIDS screening bus was purchased for prostitutes, and all preparations were made to launch the bus's operation (on 10 January 2006, the bus did start operation).

4.2.6 Italy

a) HBV: The main prevention activity for HBV prevention field is the mandatory vaccination campaign managed by Ministry of Health (Law n. 165/91).
Other import activities are:

- In 2003, "Brotzu" Hospital of Cagliari (Sardinia) launched a prevention campaign on HBV and HCV linked to the alcohol consumption among young people. The campaign, entitled "Avere fegato, una questione di cervello" (A good liver, a brain's affair), was carried out at regional level to prevent a cancer liver and increase awareness on the spreading of the diseases as Cirrhosis and Hepatitis. Moreover, one of the aims of the project was the identification of people most at risk and once identified their monitoring. The campaign was realized through capillary actions with the involvement of general practitioners and hospitals. The objectives of the campaign were achieved through seminars, meetings with students in schools, information material as TV spot, leaflets, posters, and a interactive dedicated websites (still on-line): www.averefegato.it.
- On 13-14 May 2005 in Turin (Piedmont Region), the "Italian Association for the Study of the Liver" (AISF) organized a meeting called "Prophylaxis and therapy of Hepatitis B in immuno-compromised patients". The aim was to broaden the prevention and identification aspects of the Hepatitis B by the view of the clinical experts. These experts groups shared experiences and good practices from different clinical areas. At the end of the two days of the meeting, a report with guidelines approved by the participants has been released.
- The pharmaceutical company "Bristol-Myers Squibb", in collaboration with the scientific associations: "AISF" (Italian Association for the Study of Liver), "SIMG" (Italian Association of General Medicine), "SIGE" (Italian Association of Gastroenterology) and "SIMIT" (Italian Association of Tropical Infectious Diseases), promoted a prevention campaign on HBV called "Epatite B: il Tour" (Hepatitis B on tour), since 18th April 2009 till 25th May 2009. Two camping buses visited twenty-four cities in seven regions of Italy, with physicians. Camping buses stayed three days in the main squares of each city setting a Mobile medical unit and an info-point to get informative materials, counselling and answers to FAQ.
- The "LIVER-POOL Federation" (a federation of patients associations) will organize on13th January 2010 in Rome the national convention "Liver sick or diseased liver?". The convention, attended by the leading experts in Hepatology in Italy, representatives of Institutions and Public Bodies, culture and volunteering associations, will be organized and divided into five sessions that will address to the body, the patient, the care and aid, the transplantation of liver and the role of associations.

b) HCV: Regarding HCV, in the last years, non-profit organizations (e.g. EpaC, SOS Fegato) promoted information campaign by press, leaflets, radio and TV spots.

- In 2006 the non-profit organization "EpaC"[283] in collaboration with the pharmaceutical company "Hoffmann-La Roche" carried out an information campaign called "La lotta contro l'HCV inizia

[283] "EpaC" (Education, prevention and research on HCV) carries out information activities addressed to people already infected by HCV and to people at risk. It represents patients and physicians in order to save many lives form the virus and achieve a better quality of life and health care for the patients. Other activities carried out by the "EpaC" are: development of prevention and education actions at national and international level, including cooperation with public or private bodies, in order to promote HCV testing; encourage Public Institutions for implementation of education, prevention and information plans on Hepatitis C at national level; grants; appointment of scientific committees for consultancy; counseling and tasks. Main tools used are: websites; Publication of books, videos, products, magnets, pamphlets, brochures and articles for magazines and newspapers in order to enrich and disseminate the work carried out; television or radio; telephone counselling; meetings, debates and conferences. The daily activities are the personal advocacy and consultancy, oriented to the removal of debilitating emotional states in patients with Hepatitis C, as: feelings of failure and impotence; feelings of humiliation; feelings of guilt toward closed people, fear to express their discomfort. The restoration of self-confidence through dialogue, solidarity, moral support and information are the straight goals of the daily activities. Information services are free of charge by phone, e-mail or at offices in Milan and Rome. The most frequent issues faced are: pathology in general (mode of transmission, distribution, hazard, etc.); treatments, available therapies, and specialized centers; protection of patients and suggestions in the workplace, welfare, exemptions ticket tax; legal advice relating to the law 210/92 and subsequent amendments (compensation for damage by transfusion of infected

dall'informazione" (The fight against HCV starts with information) through a leaflet delivered in more than 500.000 copies in chemist's shops, hospitals, out-patients' departments, public venues. The leaflet had been created and updated by consultant practitioners from "EpaC", with clear and simple texts showing basic information on HCV: what is it, how discover it, tests, risk population, transmission way.

- During August 2007, the Ministry of Health, in collaboration with associations of physicians and health companies, promoted an information campaign called "Nonsoloaids" (Not only AIDS)[284]. The aim was to increase the awareness and the knowledge among young people on the mode of transmission and on risk of the main Sexual Transmission Diseases (STDs), including HCV. The key message of the campaign was focused on the importance and on the promotion of using condom during sexual intercourses.
- The campaign was carried out in newspapers, radio, TV for young people with the involvement of testimonials. Articles, leaflets, posters, radio and TV spots were created.
- In 2008, the "Tuscany Region", in collaboration with "EpaC", organized a information campaign called "Epatite C malattia trascurata?" (Hepatitis C, a neglected disease?). During the campaign had been distributed a brochure in local health agencies, university hospitals, provinces, municipalities and districts. The aim was to increase information on HCV among citizens and provide useful contacts in order to broaden all aspects of the hidden disease.
- The "Marche Region" and the "University of Marche" promoted the campaign "HCV -Screening". The project, started in October 2008, will finish in 2010, with an overall budget of € 450.000. The project intends to develop educational and awareness activities addressing to the population of the "Marche Region". In particular, the project aimed to raise awareness on the importance of early diagnosis in most at risk people.

c) HIV/AIDS: The first prevention campaign in Italy was organized in 1988. The campaign proposed three key issue:

- What's AIDS?
- How does it transmit? How doesn't it?
- Use condom, do not exchange syringes

blood); listening and support for all those affected by the disease and undergoing antiviral therapy burdened with important side effects and consequences on physical and psychological health.

[284] http://www.ministerosalute.it/servizio/galleria.jsp?lang=italiano&id=511&label=aids&dad=s&men=campagne07, available on 13th October 2009.

The message of the TV spot was "*Knowledge saves life*". The pitch of the voice was severe but not alarming.

A study on the first five Italian Campaigns on AIDS (1988-1995) organized by Ministry of Health[285] showed that in Italy the general information on this theme were:

- **Infection**: 99% of Italian people known AIDS; for the 64% AIDS is the most dangerous disease.
- **Transmission**: for the 55% by sexual way; for the 27% by infected blood exchange; the 3% doesn't know the routes of transmission.
- **Prevention**: for the 59% was the usage of condom; for the 13% was the disposable syringes; for the 8% was to avoid the infected blood exchange.

Starting from early 1990's, a wide range of interventions have been carried out on HIV/AIDS information and they include:

- Preparation and diffusion of specific TV spots;
- Information leaflets;
- Dissemination of messages by the press and by posters;
- Organization of events;
- Communicative tools addressed to different population target groups (particularly the youth, foreigners and general population).

In Italy, these activities consisted in: information and education campaigns/interventions through the active participation of socio-health services as well as other actors (families, schools, voluntary organizations, local authorities, parishes, armed forces, police, associations of different categories, sport associations etc.).

Specific communication and prevention campaigns have been carried out recommending the HIV test, anonymous, voluntary and supported by adequate counselling.

A National AIDS help-line has been established to provide a anonymous and free of charge telephone counselling service. The help-line provides primary and secondary prevention activities, through scientific and tailored information provided accordingly with the methods of the telephone counselling[286].
The European Commission Directorate General SANCO (Action Against AIDS Programme), with the support of the World Health Organization, has been promoting the "AIDS & Mobility Project" since 1991 aiming to realize preventive interventions for migrating populations involved in the HIV and AIDS-infection problems[287]. During the campaign, specific leaflets and brochures have been drafted for the different nationalities taking into account scientific contents and different graphic versions. A simple and clear language has been chosen to describe: HIV transmission ways – prevention strategies – test for the search of antibodies – legislative indications to take advantage of free of charge health services. Seven languages have been identified (English, French, Spanish, Russian, Romanian, Chinese and Arab) among those used by the more representative nationalities and ethnic groups on the Italian territory. The production of a leaflet in Italian has also been realised for all the foreign citizens who understand this language and may prefer it[288].

The Italian National Focal Point for AIDS was founded in 1997 within this Project. Such a wide working group, coordinated by the National Institute of Health (the National Health Institute), is made up of public institutions, non-governmental organizations and associations of voluntary service (all involved in migrating phenomena and health needs connected to them). In the last few years, the growing flow of

[285] Moroni, Mauro (1998); *Aids 1998. Italian contribution,* Piccin, Milano. (In Italian)
[286] EU Partnership Project on HIV, TB and Mobility. Italy Country Report (2007).
[287] Congress of Italian National Focal Point. HIV infections, AIDS and migrant populations. National Institute of Health: Rome, 17th November 2004, in *Rapporti ISTISAN 06/29*. In Italian.
[288] EU Partnership Project on HIV, TB and Mobility. Italy Country Report (2007).

people coming to Italy from geographic areas characterized by poverty, war and famine has led to a series of cultural, health and hygienic problems involving both the National Health Service and the world of the voluntary service at all levels. This document reports the contributions of all the members of Italian National Focal Point, in order to give a synthesis of the research and intervention activities of any public, voluntary and non-governmental structure involved in the project[289].

Some of the main significant activities carried out in the last years in Italy are:

- The seventh informative-educational campaign managed by the Ministry of Health was carried out since July 2003 till February 2004 with the title "Avete Idea Della Sofferenza?" (Do you know what suffer them?[290]. The target population were adult and young people. The general objective of the campaign was to raise awareness about the risks of infections. The tools chosen were:
- spots on TV networks, radio stations, cinemas with the participation of sportsmen, actors and showgirls;
- press release, posters, brochures;
- a concert in Rome on 1st December 2003 (World AIDS day) with the title "Stop AIDS Concert";
- a train coach was decorated with the material of the campaign;
- Furthermore, campaign material was distributed in tourist venues, railway stations, luna parks, public transportation.

The AIDS prevention campaign promoted by the Ministry of Health, in collaboration with the Italian National Focal Point (NFP), in 2006 was addressed to the general population and it was entitled "La prevenzione e il tuo amore per la vita. L'amore per la vita contro l'AIDS" (Prevention and love for life. Love for life against AIDS)[291].

The tools of the campaign were:

- a TV spot broadcasted 10.800 times on local networks and National Television;
- big posters in 400 public venues as railway stations and meeting venues for young people;
- press releases;
- summer tour across 6 regions with the support of radio stations and the distribution of gadgets of the campaign;
- brochures in Italian, English, French, Spanish, Romanian, Arabian, Chinese, Russian;
- a website www.againstaidstour.it.

The 2007 campaign promoted by Ministry of Heath, "L'Aids alza la voce. E noi alziamo il volume" (AIDS increases the voice, and we make louder)[292], aimed to increase awareness among young people on the importance of using condoms during sexual intercourses. The main happening of the campaign was the cost-free concert "Scratch AIDS Away" performed on 1th December 2007 (World AIDS Day) in Rome. During the concert, addressed to young people, many famous electronic music disc-jockeys and musicians played. Some bands of students (aged 14-18) of Rome had been selected to perform live in a special session called "Young Arena". Many Italian discos distributed promotional and special informative material. A TV spot was created to promote the concert and to raise AIDS awareness among young people.

In 2006, ANLAIDS (National Association for the Fight Against AIDS), in collaboration with the Ministry of Health, promoted the "Youth Project" targeted on young people aged 14 to 18 years, both in school

[289] Congress of Italian National Focal Point. HIV infections, AIDS and migrant populations. National Institute of Health: Rome, 17th November 2004, in *Rapporti ISTISAN 06/29*. In Italian.
[290] http://www.ministerosalute.it/servizio/galleria.jsp?lang=italiano&id=145&label=aid&dad=s, available on 13th October 2009.
[291] http://www.ministerosalute.it/servizio/galleria.jsp?lang=italiano&id=416&label=aids&dad=s&men=campagne06, available on 13th October 2009.
[292] http://www.ministerosalute.it/servizio/galleria.jsp?lang=italiano&id=544&dad=s&men=campagne07&label= voceAids, available on 13th October 2009.

and extracurricular activities. The project consisted in the design and manufacture 18.000 in a CD ROM game, inspired by an adventure game, interactive, multimedia, entitled "Mirabilia" which provides a guided tour on health and behavior, with games and tests to enable.

The objectives of the project were:

- To provide appropriate information on infectious diseases in general, especially about HIV and its mode of transmission;
- To provide correct information on HIV prevention and most effective methods of its implementation;
- to use an informal instrument, as the game, to disseminate scientific subjects stimulating the interest of young people;
- to establish and/or strengthen the cooperation with schools and, in particular, with the responsible teachers for health;
- to create a network with social-health and educative agencies working in the field of health education;
- to distribute the CD of the project in public events (concerts, conferences, etc.), and in venues attended by young people, setting up a computer station;
- to encourage meetings focused on prevention in schools and other places.

In 2005-2006 and 2007-2008 the non-profit association "LILA" (Italian league for the fight against AIDS) promoted an action of peer education for AIDS prevention in high schools in Florence, "VIOLA"[293]. This campaign was divided in two phases:

The first one consisted in a meeting to collect the declarations of participating students, and in two training sessions headed by psychology experts in the field of AIDS prevention. In the second phase, the involved students created informative material on HIV/AIDS to be distributed among their schoolmates.

In summer 2007, the Local Health Agency of Bologna promoted an information and prevention campaign called "L'estate si fa calda… Se decidi di esporti usa un fattore protettivo alto" (Summer is getting warmer… If you get exposed, use a high level of protection). The aim of the campaign was to increase awareness of general population in the field of the fight against AIDS and to promote the usage of condoms.

4.2.7 Lithuania

HBV, HCV, HIV/AIDS: In Lithuania, specific activities in the field of prevention and information of Hepatisis B and C do not exist, instead there are many activities for HIV and the sexual transmitted diseases in the whole.

Since 1997 the "Lithuanian AIDS Centre" (LAC) in collaboration with the "United Nation Development Programme" (UNDP), "Lithuanian Journalist Union", "World Health Organisation" has organised a competition of mass media coverage on HIV/AIDS, sexually transmitted infections and drug use. Winners nominated making decision together with "Lithuania Journalists Union", and awarded during World' AIDS day event. The methodological material for journalists is prepared. Categories of awards are: press articles, cycle of pictures, broadcast, telecast, reportages, news coverage, documentaries, social marketing, etc.

Since 1999 "Lithuania AIDS Center" (LAC) and Ministry of Education and sciences arranging continuous project "We against AIDS", which provides opportunity for school children using innovative and unconventional forms get knowledge about HIV spreading ways and influencing factors. This gotten knowledge about HIV/AIDS can help to make correct decisions in many tricky life situations. Winners of the individual works contest awarding during the big event-concert in the biggest concert arena in Vilnius. In 2006-2007 this event attracted 20.000 people' audience.

[293] http://www.lila.it/progetti_prevenzione.htm

Between 2003-2008 the "HIV/AIDS prophylaxis and control 2003-2008 programme" was implemented to reduce HIV/AIDS and other associated diseases spread in the Republic of Lithuania; to reduce HIV and other associated diseases consequences for individual and society; render available health care for people with HIV and AIDS; to improve observe system.

"Youth Friendly Services in Lithuania" 2003-2005. Supported by the joint funding of UNDP, UNFPA and UNCEF, the project aims to develop the framework for and provision of youth friendly services in selected municipalities. The project draws on the experience and local capacities developed by existing initiatives; it explicitly focuses on the promotion of mental health, reduction of substance abuse, prevention of HIV/AIDS/STIs among the young people, including especially vulnerable groups.

From 2004 to 2006 the UNPD project "HIV/AIDS and STI prevention among Uniformed Services in Lithuania" was implemented. During the project implementation about 500 uniformed services personnel (young recruits in the Lithuanian Military, new police recruits, military and police personnel) to improve the knowledge on HIV/AIDS and STI prevention so that they are able to protect themselves and continue the HIV/AIDS and STI education activities. The project helped to raise HIV/AIDS awareness among Uniformed Services and to draw more personnel into HIV/AIDS and STI prevention work. The curriculum developed by the project will be used as formal training program in the training institutions.

In 2006-2007 implemented project "HOPE - HIV/AIDS Education for Lithuania Program – Help" in which were arranged three modules (10 days) workshops' program for 190 family doctors and nurses, public health specialists, medicine and social workers, prisoners health care specialists, who got thorough knowledge on HIV-infection case management. This Project proceeded in 2008.

During 2008 the Lithuanian AIDS Centre (LAC) implemented 17 workshops for preventive work groups' members (public health specialists, social workers, administration, teachers, etc.) on implementation of HIV/AIDS prevention in school facilities.

At present, the "Family arrangement and sexual education program" is improved. For this program implementation in the schools preventive work groups composed, instituted new work places for social pedagogues, occasionally improving the competences of public health specialists. HIV/AIDS and STI topics included into Biology, Ethics lessons, prepared health education consultants (for preschool, elementary, primary and secondary education). Pedagogues' qualification improvement implementing in the Pedagogue Profession Development Centre and Education Development Centre responsible for the content of the courses.

Youth centers in Lithuania arranged in 3 towns, where providing information according peer education principle, however still there is a need for such services which are in lack. In the country there are no youth centres where would be providing medical services, notices political unwillingness to promote use of safe tools (condoms).

During reporting period for improving inter – sectorial regional and local collaboration and to build capacity of local authorities and public health authorities in designing and implementing programs and action plans targeted at prevention and control of HIV/AIDS and related problems in their specific environment in 21 municipality (total 60) conferences "HIV/AIDS – problems and perspectives" for local politicians, administration representatives, NGO and other interested parts were organized. In them participated more than 1000 specialists from these and closest regions. This project is supported by U.S. Embassy Vilnius.

4.2.8 Malta

HBV, HCV, HIV/AIDS: There are no specific information and prevention activities for HBV and HCV. The Department of Health Promotion and Disease Prevention leads limited HIV/AIDS campaigns because of constraints it has in the area of Sexual Health Education. There is very limited Sexual Health Education in schools. Some children are being taught about sexual health depending on whether the teacher is willing to

cover the topic or not. Church schools have no Sexual Health Education at all and 50% of schools are run by the Church. The Church is highly influential in the general acceptability of Sexual Health matters being openly discussed. This means that many decisions are taken based on the teachings of the Church and not necessarily on the needs of the population.

The general feeling is still that the abstinence model be presented in campaigns on sexual health. This contrasts deeply with the needs of most age groups particularly young people. The Department celebrates World Aids Day every year by reminding people of prevention. However, the message up to now has always been subdued. The use of the word condom is restricted in many settings including schools.

In 2008, a campaign based on the ABCD model was launched[294]. The model is the preferred one locally as it promotes abstinence as the first choice. However, it is generally felt that young people need more information to be able to make better choices with regards their sexual health. It is also felt that the model does not reflect the reality of the situation in Malta, as a percentage of young people are sexually active. This can be seen from the high rates of teenage pregnancy, also an indication of the need for Sexual Health Education program early in life.

4.2.9 Poland

a) HBV, HCV: In 2004, the initiative of Main Boards of: Polish Society of Epidemiology and Infectious Diseases, Polish Hepatology Association and Polish Society of Children Gastroenterology, Hepatology and Nutrition founded the Polish HCV Experts Group to halt the increasing problem of HCV epidemic and optimization of care of HCV infected. The main targets of working of this Group with cooperation with the Ministry of Health and the Chief Sanitary Inspector are providing of educational shares, introduction of changes in the HCV infection registration system and preparing of the National Program to combat of HCV infection.

In 2006, the initiative of Polish Society of Epidemiology and Infectious Diseases founded Polish HBV Experts Group.

In 2007, the International Medical Students Association launched the project called viral Hepatitis infection - win the healthy liver" (polish title: "WZW-wygraj zdrową wątrobę"). Primary the project was addressed to Medical Academy students and further on to high school students within the peer education programme. Lectures presenting causes, effects and preventative strategies on Hepatitis viruses were planned in the project. As well as the workshops for medical students who were responsible for the peer education. Main objectives of this programme were:

- expand education efforts to increase knowledge of prophylaxis of HCV within the target population;
- increase and enhance the knowledge about epidemiological aspects of the infection, as well as understanding the consequences and compilations of it;
- raise awareness of Hepatitis transmission risks and improve knowledge and skills for sustaining preventive practices;
- improve and increase the reach of prevention and education efforts.
- collaborate with other projects on viral infections.

In 2008 HCV Patients Association "Prometeusze"[295] with the cooperation of Schering-Plough and Polish HCV Expert Group stared the pilot educational action for high school youth within a frame of the national informational campaign under the title " HCV could be defeated" (in polish "HCV można pokonać"). Educational materials about Hepatitis C infection, composed of CD and the commentary in print, were specially prepared for high school students in order to get and increase student's knowledge about the Hepati-

[294] Department of Health Promotion & Disease Prevention (2008), *Annual Report*.
[295] http://prometeusze.pl/,

tis C infection. The content was discussed with Polish HCV Expert Group. The materials were sent to high schools to be presented during educational classes. However the goals of this pilot programme have been achieved only party. According to the evaluation report from one of the voivodships information on programme reached only 50% of healthcare professionals and only 30% of target group took part in courses in HCV-infection. This results were the consequence of weak organization of cascade designed courses. Moreover the participants declared not significant influence of courses participation on changing their attitude towards HCV control.

In 2007-2008, the next social campaign "Stay in the game – You and Your child" (the part of national campaign ("Stay in the game") with cooperation of Roche Company was performed. This campaign was educational – in context drawing attention to the necessity of anti-HCV testing in pregnant women. 1600 free diagnostic anti-HCV tests were performed in pregnant women in 7 cities in Poland. (prevalence 0,4%) Within a frame this national campaign over 60.000 people received educational materials and website www.wzwc.pl was created.

b) HIV/AIDS: Harm reduction programmes have been in practice in Poland since 1991. They are conducted mainly by non-governmental organizations to prevent social and health effects of using injecting psychoactive substances.

The first testing centres started to operate in Poland in 1997, offering anonymous, confidential and free of charge testing, together with pre and post counselling. In the country, there is an unbreakable rule that HIV testing is voluntary. Any society's group is obliged to do an HIV test. At present, there are 27 testing centres, at least one testing point operates in each voivodship. These points receive financial and professional support from the National AIDS Centre. From the very beginning of their operating the special attention is paid to the quality of offered services. The staff at testing points is certified with experience from similar centres abroad. All patients are offered professional pre and post counselling. The system ensures the quality of service, meeting international standards, with full respect of human rights. In case of an HIV test being positive, a counsellor informs the patient about the legal and moral aspects of the disease. We are still working on the increase in testing availability, for example by enlargement of the number of testing centres.

National policy on HIV/AIDS – a gradual progress in creating a comprehensive national strategy to fight the HIV/AIDS epidemics in the last few years manifests basically in: the creation of a special agenda of the Ministry of Health, the National AIDS Centre, which is responsible for guaranteeing adequate realization of the national policy regarding the fight against the HIV/AIDS epidemics:

- National policy instructions on a governmental level, by adopting to the realization of the National Programme of Combating AIDS and Preventing HIV-infections by the Cabinet;
- Creation of an all-Polish network of specialist centres carrying out the ARV treatment;
- Continuous increase of funds allocated from the State budget for ARV treatment;
- Collaboration of governmental sector with civil society organizations, active in the field of fighting against the HIV/AIDS epidemics, through substantial and financial support;
- Introduction of local authorities in the realization of the national strategy for the fight against the HIV/AIDS epidemics; appointment of provinces coordinators, responsible for the introduction of the HIV/AIDS National Program on the local level.

The National Strategy contains the most important priorities of the national strategy as far as the fight against the HIV/AIDS epidemics is concerned. Some of the Program's objectives:

- To improve the existing HIV prevention system;
- To educate the society, to protect and promote human rights; to strengthen women's role;
- To ensure an integrated care system for people living with HIV/AIDS.

The Minister of Health – through National AIDS Centre – plays the main role in creating the national policy in terms of HIV/AIDS on the governmental level. The national strategy as far as HIV/AIDS is concerned is stable and independent from changes of the government and governing parties. This stabilization comes from the instructions enclosed in the above mentioned National Strategy. The first Program embodied years 1996 – 1999. At present the national strategy for the period 2007 – 2011 is being realized.

The National Programme of Combating AIDS and Preventing HIV-infections, implemented in the framework of the Ordinance of the Council of Ministers (13-09-2005) is a strategic document which defines national policy in terms of HIV/AIDS. This Program complies the principle of inviolability of rights of the individual, related to the protection and respect of human dignity. Nongovernmental organizations, also those which unite people living with HIV and AIDS, have an important influence on the final shape of the Polish strategy. The foundation for the Polish strategy are the instructions of the international organizations such as: WHO, UNAIDS, UE. A very important advantage of the National Programme of Combating AIDS and Preventing HIV-infections is its multisectoral character and multilevel structure of activities. Partnership of the organizations dedicated to the prevention activities guarantee their higher effectiveness and wider reach. The main objective of the appointment of the province coordinators is guaranteeing a better appreciation of the needs of the society on a local level and intensification of the activities pointing to reducing the spread of the virus through promotion of collaboration between local authorities and NGOs. An element of the national policy, aimed at reaching a social comprehension, is to provide an adequate social care system. It gives the opportunity of overcoming difficult situations for individuals as well as for families. The types of support differ considerably and include: financial support, services in the place of residence and in social care institutions, help including shelter, meals, or anything else according to the necessities. HIV-infected and AIDS-sick people who have found themselves in a difficult situation benefit from different forms of social care on the same conditions as other citizens.

The two main objectives accepted in the National Program:

- Limiting the spread of HIV-infections in Poland: education of the society, with a special emphasis on the youth; prevention of infections in groups of a higher risk of contracting HIV; HIV testing; monitoring of blood and blood products safety standards; prevention of diseases which lead to HIV-infection.
- Improvement of the quality and accessibility of care for people living with HIV/AIDS: introduction of unified standards of care for people living with HIV/AIDS and their continuous actualization; training of medical personnel, social workers and therapists in HIV/AIDS issues.

The government also supports – by grants – financially and essentially the preventive activities undertaken by NGO's. The activities supported by the state budget might be divided into the following groups:

- Education of different social and professional groups in the field of HIV/AIDS prevention;
- Actions for people living with HIV/AIDS;
- Actions for people at high risk of infection;
- Events organization (celebration of World AIDS Day, conferences, competitions, exhibitions, performances, etc.);
- Information activities (help-lines, internet, publications);
- Anonymous testing points.

The National AIDS Centre ensures professional counselling and consulting for non-governmental organizations in the field of HIV/AIDS prevention. It offers help and support for people living with HIV/AIDS by ensuring them prevention and education in that field. Special attention is paid to education, harm reduction, social and psychological support, programs for youths, women living with HIV/AIDS and their children.

Since 1989, the first non-governmental organization called “Solidarni wobec AIDS Plus” was set up a systematic growth in the number of associations and foundations operating in the field of HIV/AIDS issues has been observed. Their work and involvement are well established in the Polish policy on fighting HIV/AIDS epidemic. Many of these organizations have been implementing local and international programmes in co-operation with EU, UNDP, WHO, Soros Foundation and others. To the present day, their work meets with international approval, and is very positively seen by society. Non-governmental organizations in co-operation with governmental institutions work to improve the level of social awareness, fight against discrimination and fight for respect of human dignity. By mutual support they help seropositive persons to find themselves in a new, more difficult reality.

Each year the National AIDS Centre implements at province level trainings for educators of children and young people, involving teachers, pedagogues, students studying pedagogy, medical academy students, social workers, Young Health Leaders, province methodical centres, religion teachers.

4.2.10 Romania

HBV: In 2008, The European Liver Patients Association (ELPA) and its members managed a survey on national policies for screening for Hepatitis B and C in the European Union. The results came from 21 organizations representing 17 countries: Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Egypt, France, Germany, Italy, Poland, Portugal, Romania, Slovakia, Sweden, Spain and United Kingdom. In the majority of the countries surveyed (Romania included) national governments never conducted any sort of awareness campaigns on Hepatitis B and/or C. Only Croatia, Egypt, France, Spain, and United Kingdom have conducted some sort of awareness campaign (In Croatia spots on TV and jingles on radio stations, billboards, posters in hospitals and public places; radio and TV interviews with specialists and patients, organized testing for free; In Spain, information campaign on radio and television about disease and its treatment.

In 2008, Bristol-Myers Squibb Company organized a multinational campaign, called “B-Aware!”, in order to promote testing, prevention through vaccination and treatment of HBV-infection. A series of local community action were put in place in order to raise awareness about the risk of acquiring Hepatitis B. The campaign partners have officially launched the website information about Hepatitis B (www.hepatitab.com.ro) created especially for the general public. In Romania there have been media events, distribution of informative materials (brochures for general public), set up a website in Romanian with information about the disease; there are no data available about the duration of the project and the scheduled closing year. A questionnaire available on this site helps visitors to find out whether they were or are at risk of contracting the disease[296].

From November 2005 to January 2006, on a sample of 934 high school students, representative of Iasi Close to You Romania Foundation in collaboration with UNICEF Romania, the County School Inspectorate Iasi, Center for Assessment, Prevention and Advice on Drugs Iasi and Market Research Iasi. The project title was "Knowledge, attitudes and practices concerning HIV/AIDS, Hepatitis B and C and injecting drug use among students from high schools in Iasi". Funding for this study was provided by UNICEF Romania. The campaign was aimed at investigating the perceptions of young secondary school students about Hepatitis B and C viruses and the relationship between HIV transmission and injecting drug use. Data were collected by applying a questionnaire and organizing a focus group and the results were used as working tool for public health institutions, local and central authorities and NGOs working in HIV/AIDS and reproductive health so as to develop programs to prevent HIV and other STDs and drug use among teenagers[297].

[296] http://www.sfatulmedicului.ro/.
[297] http://www.antidrogiasi.ro.

In July 2007, the Integration Association promoted a project called “Outside Project”. The project aims to reach drug users in Bucharest and consists of outreach interventions to reduce risk associated with drug use. The tools of the project are information sessions after a process of mapping; the sessions are conducted in the street, in the context of face-to-face meetings. There are no information about the scheduled closing year and duration of the project. The brief informational sessions include discussions on these topics: HIV/AIDS, general information about Hepatitis A, B and C (way of transmission, prevention methods, testing methods, diagnostics and treatments), injection methods without risks, the interaction between sexual behaviour and drug use, availability of prevention of HIV and other information required by the beneficiaries. Each output field is accompanied by the distribution of sterile injection equipment, including syringes, condoms, distilled water and wipes alcohol. In this project injecting drug users receive references to medical services for HIV/AIDS/STIs and other services for drug users. There are no data available about the duration of the project and the scheduled closing year.

HCV: In 2007, the Romanian Association for the Study of Liver (Asociatia Romana pentru Studiul Ficatului – ARSF), together with the Romanian Society of Gastro-Enterology (Societatea Romana de Gastroenterologie si Hepatologie – SRGH), launched “Learn about C!”. It was a national campaign for education, information and prevention of Hepatitis C. The campaign was aimed to inform the Romanian public about HCV-infection, the routes of transmission, diagnostic methods, risk factors and evolution of the disease. This was the first integrated campaign in Romania at national level, and it included installation of a free call-line (0800 883 000), with information about the nearest hospital to address for HCV testing and complete diagnostics. The project extended on a period of one year and was presented in Radio and TV interviews. The website (www.afladeC.ro), which offers complete, non-stop information about HCV-infection, was launched.

Between July-August 2008, Constanta Center for Antidrug Prevention, Evaluation and Guidance was implemented the project "Open your eyes! No extra risks!” in Romanian seaside resort Vama Veche. The project consisted of a duplex Romanian – Bulgarian campaign for the reduction of risks associated with drug consumption (marijuana, cocaine, ecstasy, ketamine, heroin) among the youths in Vama Veche through the supply of adequate information, as well as the promotion of existing services for the treatment of drug addictions. The campaign included two visible and easy accessible locations situated in seaside resort Vama Veche where doctors, psychologists and social assistants give information and distribute leaflets about risks associated with the consumption of drugs (Hepatitis, HIV-AIDS, overdosing).

In 2008, World Hepatitis Alliance and Sano-Hep (Patients Association with liver disease in Romania), together with Bristol-Myers Squibb Company , Romanian Association for the Study of the Liver (ARSF) and National Institute for Infectious Diseases "Prof. Dr. Matei Bals" Bucharest promoted the project called "Am I number 12?". A campaign aimed at informing and educating the population about the severity of Hepatitis B and C and their impact on overall health in Romania, underlying the risks of acquisition of Hepatitis and the importance of early diagnosis. The campaign began in 2008 on World Hepatitis Day, with public educational activities. 15.000 disease awareness brochures were handed out to people who have passed through the main boulevards and squares in Bucharest on 16-17 May. Along with “Am I Number 12?” campaign materials “Sano-Hep” organised a press conference with physicians and patients that generated significant media coverage on TV and written press.

HIV/AIDS: Several prevention campaigns developed in Romania were focused on strategies that promote information, education and communication (IEC) on HIV to the general population, with key messages including limitation of the number of sexual partners, consistent use of condoms, engaging in safer sex, greater involvement of men in reproductive health programs, abstaining from injecting drug, using clean needles and syringes, greater acceptance and involvement of people living with HIV. The campaigns were conducted by public health authorities, NGO’s, schools, local communities.

Between 2004 till 2008, Romanian Angel Appeal and partners (National Institute of Infectious Diseases "Matei Bals" and Ministry of Education and Research) carried out the project called "Mobile Unit – National Prevention Campaign". The objective of the project were: decreasing the incidence of HIV-infection in general population, especially among young people; improving the professional competences of medical staff in preventing, monitoring the HIV-infection and also in providing specialized medical assistance for people living with HIV/AIDS (PLWHA); increasing the access of vulnerable people and those from groups at risk to specific Voluntary Counselling and Testing (VCT) services provided through the network of counselling centres; debating stigma and discrimination of PLWHA and facilitating their social, medical and professional integration. A specific VCT methodology that represented an absolute innovation was perfected and finalized accordingly to the international guidelines and recommendations, then distributed in all locations and shared with local partners. A complete toolkit was realized, with forms and instruments that can evaluate both the counsellor and the session. There have been opened 18VCT centres, in 16 counties and Bucharest. 2.100.000 leaflets, 65.000 brochures for adults, 68.000 brochures for teenagers, 16.000 posters and specific promotional materials were distributed within promotional campaign, informing the public, general population, about the benefits of being informed and HIV tested with pre and post-test counselling. Over 40,000 persons from general population were counselled and tested through VCT network. Over 80% of them were noticed about the result of their HIV test and got post-test counselling. Among them, 167 new cases were confirmed with HIV-infection and referred to psycho-social support through the Day Care clinics network. After two years there are still important difficulties in integrating VCT centres into administrative and financial structures of local health authorities.

Between May 2004 - April 2005, the "Romanian Angel Appeal" managed the project called "Funny Learning Project". Its goals were: preventing the use of illegal drugs and associated risks among the teenagers and young adults; cultivating a non-discriminative attitude towards seropositive persons among youngsters. This project was an innovative initiative in education for health, that uses the PC and its applications. "Give a search on Google" represents for teenagers the equivalent of "Read a book or a guideline about this topic". Especially designed for teenagers from 14 to 18 years, a dedicated communicative and non commercial interactive website was launched (www.5pm.ro). The "story" tells about a virtual journey into a very well known environment, reproducing several situations: at school, dealing with group's pressure for starting its own sexual life, at the disco, at mall, in the park. 12 virtual characters are guiding the trip, summarizing the conclusions and underlining the importance of a responsible behaviour. CDs were distributed and the interactive site countered 25.000 visitors. Over 3.000 persons participated to online contests, with questions based on the information presented on the site; 7 radio and 2 TV appearances, 3 articles in the press and 3 newsletters; publicly launched and promoted during several music festivals events with a high impact upon the targeted age segment. As a recognitions of the outstanding impact upon targeted group, the "5PM" program was rewarded with the Silver Award for Excellence at the Excellence Gala for Public Relations, 2005 edition.

In 2007, "Close to You" Foundation promoted a project called "A community informed – a community involved". The project directly answers the need for services for harm reduction associated with injection drug use, trying to identify and offer services to young people taking injection drugs through different field activities in the community. The project was developed with technical and financial assistance from UNODC Romania and the Local Council – the Department of Community Assistance from Iasi, in partnership with the Center for Prevention, Evaluation and Counselling against the Use of Drugs, the Iasi Police Department, the Public Health Authority from Iasi and the Department of Community Assistance from Iasi The team contacted not only injection drug users, but also their sexual partners, their families, the community in which injection drugs are being taken. The activities implemented within the project were: street mapping (sessions of street education and collecting information with the goal of finding out if there are injec-

tion drug users in certain areas and if it is necessary to develop needle exchange programs), information, education, communication campaigns in clubs and discos; needle exchange; counselling services for harm reduction addressing young people, potential clients; activities of volunteer testing for HIV, Hepatitis B and C; Elaboration and multiplication of informative materials.

RAA Romanian Angel Appeal partner ARAS – Romanian Association Against AIDS managed a Project called "ARTS&AIDS Festival". The goals of the project were promoting the HIV/AIDS subject in the context of art discussion; enhancing the tolerance and social acceptance for seropositive persons; consolidating the network of organizations implementing programs and campaigns in HIV/AIDS field. During 5 days of festival, the participants took part at:

- photo exhibition "The hidden inherit age" by Hazel Thomson, which kept moments from some seropositive teenagers lives and was completed with photos made by YPLWHA RAA;
- social spots on HIV/AIDS, STIs, Drug abuse subjects;
- "Six characters seeking for a worm public", a forum theatre from ARAS;
- The phenomenon film RENT, inspired from the homonym rock opera, a premiere for Romania;
- The marathon concert "Somebody's Child", with a lot of well known Romanian artists.

The festival had an impressive success, proved both by the great number of spectators and by numerous editorial and articles from the press (articles: Radio interviews: TV interviews, over 40 websites referring to the event (the great majority promoted the program and the link to www.raa.ro/artaids.html), presentation articles and 6 press releases.

Between February 2002 and January 2003, the UNDP Romania carried out the project "Multi-media Information Campaign in Schools and High-schools on HIV/AIDS and Related Issues". The project addressed the need for promoting health education on HIV/AIDS and related issues, as part of the regular curricula in Romanian schools, in support of the National Programme for Health (NPHE). The project consisted of working groups to develop curricula and contents for Reproductive health and Substance abuse, based on the agreed curricula. The project disseminates an educational multimedia kit produced and widely distributed in schools and high schools, as a both formal and informal learning tool, used by teachers in health education classes. The kit was produced and validated with MER and other relevant partners, including UN organizations, in order to ensure its full consistency with the broader objectives of the NPHE.

Between June 2008 March 2009, the Baylor Black Sea, Foundation Romania (BBSF) and Designing hope France, promoted the project called "I love you, positive or negative". Duration:; The aim of the project was to promote messages that encourage protected sex and HIV testing regardless of one's HIV status, through images and messages developed by HIV infected and affected in Dobrogea area. The concept of this project is based on connecting photographic arts with messages of prevention and empowerment, printed on posters and condom packages that will be distributed in the community using the resources of the VCT and Volunteering Projects, already implemented by the Baylor Black Sea Foundation. An advantage was the involvement of the HIV infected youth that have a history of occupational deficit and exposure to risky situations, that were responsible for condom packaging and for participation in discussions groups lead by a Baylor psychologist.

4.2.11 Slovenia

HBV, HCV, HIV/AIDS: The main HBV, HCV and HIV prevention and information activities carried out in Slovenia concern especially IDUs and MSM. The strengths of prevalence monitoring of HBV and HCV-infection among IDUs in treatment in the CPTDAs are the national coverage and sustainability of such a surveillance system. Furthermore, three NGO harm-reduction programmes were included in the system:

- AIDS Foundation Robert – needle exchange programme in Ljubljana in 2003.

- STIGMA - needle exchange programme in Ljubljana in 2005 to 2007, The Stigma project focused on needle exchange was eventually run by AIDS Foundation Robert: it developed over time and distributed up to 190.000 injection kits (in 2005) to drug users. AFR also developed outreach projects and a drop-in centre for drug users.
- SVIT – needle exchange programme in Koper in 2004 to 2007.

The early and forceful implementation of harm reduction in Slovenia ensured that HIV/AIDS among drug users has remained very low (less than 1% of Intravenous drug users are HIV positive). This great success is made even more evident in the region of Goriška on the Italian border. Where on the Italian side up to 30% of drug users are HIV positive, this rate has been maintained on a very low level on the Slovenian side thanks to the easy access to clean injection equipment and to adequate information and support for drug users.

Needle exchange started very early in Slovenia, indeed the first centre was opened in 1992 in Ljubljana. In 1995, the Network of Centres for Prevention and Treatment of Drug Addiction was established and provides substitution treatment (mostly methadone but also buprenorphine and slow-release morphine) as well as drug-free rehabilitation and detoxification services. The number of patients benefiting from the prescription of methadone has increased over time (more than 2200 today). Slovenia can be counted among the countries in Europe that maintain the most advanced and comprehensive substitution treatment services for drug users. Substitution treatment is also available in Slovenian prisons (in the Ljubljana prison for instance, 55 out of the 255 inmates receive methadone)[298].

a) Each year Clinic for infectious diseases in Ljubljana organize a wide campaign and free testing on HCV. This is done by radio emission and articles in the press about HCV and information where people can be tested;

b) Each year, 50 referrals for free among young MSM are delivered and each year an event on world Hepatitis day is organized;

c) Since 1997, Medical Students' Association in Ljubljana promotes a "project Virus"[299] organizing workshops for school STOP HIV/AIDS, focused mainly on raising awareness on World AIDS day. Every 1st of December the association a big awareness music concert for youth in city centre, they also organize so called student condom parties to promote condom use. This project mainly sponsored by local and national health authorities and also pharmaceutical companies.

The Slovenian Ministry of Health has been leading an early and effective response together with other governmental sectors and NGOs. Prevention, treatment and care have been mainstreamed into different governmental sectors' activities. Since mid-eighties, information, education and communication activities have aimed at reducing risk-taking behaviour and encouraging responsible sexual behaviour among youth and the general population. In addition, NGOs have been implementing preventive and harm reduction interventions targeted to groups at highest behavioural risk, for example MSM.

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[298] SIMON, Arnaud W.; ILIUTA, Catalina (2006); *NGO perspectives on HIV/AIDS*,
URL: http://ec.europa.eu/health/ph_projects/2004/action3/docs/2004_3_11_frep_a6_en.pdf.

[299] http://virus.dsms.net/.

The three leading MSM NGOs in Slovenia, SKUC-MAGNUS, DIH and LEGEBITRA implement numerous activities aimed at promoting safer sex and HIV voluntary counselling and testing among MSM. These activities include: peer education; distribution of HIV and other STI educational leaflets, condoms and lubricants at gay venues in the community; and MSM media campaigns (radio, web, magazines). Numerous workshops for training MSM volunteers for peer safer sex promotion among MSM have been organized. Anonymous psychosocial telephone counselling including HIV issues organized by SKUC-MAGNUS has been operating for many years, but stopped in 2007, as the numbers of clients decreased due to new and more popular web-based communication approaches (internet chat-rooms, including an internet forum for HIV+ MSM where knowledge and experience is shared). Also, a small self-support group of HIV infected MSM has been started by SKUC-MAGNUS and HIV manual for MSM has been published.

In 2009 new national HIV strategy for 2009-2014 was prepared by all stakeholders and is now in parliament procedures to be adopted and officially presented on a press conference of 1st of December.

In June 2009, a new national 2-years AIDS campaign prepared by University of Ljubljana, Ministry of Health, National Institute of Health, and NGO Skuc, AIT e Legebitra, especially targeted on youth and MSM[300]. It has been launched on December 1st 2009 with a website and, by January 2010, the campaign has been launched on Facebook.com with special interactive contents and awards. Ministry of health dedicated 25.000€ for this low budget campaign. It has been decided for a completely new approach designed by students of Faculty of social sciences, mentored by professor of social marketing. Campaign l target general public with special focus on youth and MSM. All kinds of different printed materials are printed and distributed around the country by various channels to health center, youth centres, schools, universities, clinics, public places frequented by youth etc. All printed and web materials will be also in English. The main messages of the campaign are: “Spread the word, not the virus!”; promoting condoms with: “Condoms are sexy!”; promoting testing with: “This poster has been posted by someone who has already had a HIV test. What about you? Have you had a test?”. Posters and stickers for mirrors in public toilets with information with information on testing, promoting testing and where to get it are delivered. Safe sex packs with condoms and lubes for MSM and condoms for youth are available for free distribution.

[300] www.stop-aids.si

5. HBV, HCV, HIV/AIDS CURRENTLY VALID LEGISLATION

The following table presents the assessment of legislative and judicial systems in H-CUBE participating countries taking into consideration also the protection of people living with HBV, HCV and HIV/AIDS rights.

Table 5.1 - HBV currently valid legislation for each participating country.

COUNTRY	LAW FOR THE PROTECTION AGAINST DISCRIMINATION	CONFIDENTIALITY AND PRIVACY RIGHTS	ACCESS TO JUSTICE	HEALTH AND SOCIAL SECURITY	EMPLOYMENT AND CIVIL LAWS
BULGARIA	Resolution No.144 amending Regulations for the implementation of the Law on Public Health, promulgated by Resolution No. 23 of 1974.	N/A	N/A	Ordinance No 15/12-05-2005 of the Ministry of Health, on Immunizations in Republic of Bulgaria and Guidelines for Surveillance of adverse events after immunization. Ordinance of the Ministry of Health (5-12-2006), on border health control, implementing the International Health Regulation.	N/A
CYPRUS	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HIV/AIDS, HBV, HCV patients are entitled to free healthcare provided by the Republic.	CAP260 Quarantine Law: Under this law which was amended recently (2003) health professionals are mandated to report persons with communicable diseases (cases, not names) to the Ministry of Health. N138(I)/2001 Protection of Personal Data Law: Personal data with respect to patient's personal and health information and identification elements are protected against dissemination.	N165 (I)/2002 Legal Aid Law: All citizens who are not able to pay for legal consult with regards to protecting his legal rights (i.e. Human rights cases) are entitled to legal aid paid by the Republic. N158(I)/1999. Administrative Law: All citizens have the right to submit grievance or make a demand to any public authority to rectify an administrative action. The administrative authority has an obligation to treat all applicants to fair and	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HBV patients are entitled to free healthcare provided by the Republic. N8/1991 Public Assistance Law: Citizens with financial levels lower than those needed to support basic living standards (and cover basic needs) are entitled to social and financial assistance (food, clothing, etc).	N1/1990 Public Service Law: No employer shall discriminate against an applicant for health reasons. No employee can be dismissed from his employment for HIV/AIDS, HBV, HCV health reasons. If dismissed unduly he is entitled to reimbursement. CAP149/ Contract Law: No employer shall discriminate against an applicant for health reasons.

CYPRUS			equal treatment.		No employee can be dismissed from his employment for HIV/AIDS, HBV, HCV health reasons. If dismissed unduly he is entitled to reimbursement. (This law refers to private sector arrangements). In the near future the House of Representatives will try to pass a law that will force the government to provide funds which will be used to employee vulnerable groups.
CZECH REP.	Antidiscrimination law no. 198/2009 Coll. about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades ad habitation	Mandatory confidentiality of health workers according to § 55 Law no. 20/1966 Coll. about care of public health. Infringement of mandatory confidentiality is criminal accordance with § 178 of Penal Code	Penal code – No 40/2009: §152-155: wistful spreading or spreading due negligence of the infectious diseases is a crime punishable by the state	Antidiscrimination law - in "Law for the protection" - in word discrimination there is missing letter "C" - "Access to justice" Penal Code No. 40/2009 – it is from I document. We sent in II that "Czech Republic is part of Regional European Convention". Public Health protection and promotion Act no. 258/2000 Coll.: §53 Measures against spreading HB, HC, HIV and other infectious diseases: Duty to inform doctors before medical invasive method and keep recommendation to prevent spreading of virus HIV, HB, HC and other pathogens. §64 Infected persons are duty to inform about important conditions related to probable transmission of communicable disease because of epidemiological investigation (it means	Antidiscrimination Law no. 198/2009 about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades ad habitation

CZECH REP.				e.g. their sexual contacts) Bulletin Ministry of Health CR, part 2, 2008: Methodical instruction - Prevention of viral Hepatitis– paragraph 6 (restriction of giving blood, body organs and biologic material).	
GREECE	(1) In 2005, Parliament adopted Law 3304/2005 on the "Implementation of the principle of equal treatment regardless of racial or ethnic origin, religious or other beliefs, disability, age or sexual orientation", which incorporates two relevant EU directives (2000/43/EC dated 29 June 2000, and 2000/78/EC dated 27 November 2000). The aim of the Law is to lay down a general regulatory framework for combating discrimination in a wide variety of fields and to designate or establish bodies for protecting, promoting and monitoring compliance with the principle of non-discrimination. (2) In the Constitutional area, we could mention the principles of human dignity (Article 2.1) and free development of personality (Article 5.1), the principle of general equality (Article 4.1), the right of protection of health (Article 5.5), the right to be protected against misuse of personal data (Article 9A), the right to receive free education on all levels at State educational institutions (Article 16.4), the right to make a	(1) The Constitution of Greece recognizes the rights of privacy and secrecy of communications. Article 9 states: "(1) Every person's home is a sanctuary. The private and family life of the individual is inviolable. No home search shall be made, except when and as specified by law and always in the presence of representatives of the judicial power. (2) Violators of the preceding provision shall be punished for violating the home's asylum and for abuse of power, and shall be liable for full damages to the sufferer, as specified by law." (2)A Constitutional amendment in 2001 added a new provision to this article granting individuals a direct right to protection of their personal information. The new provision, Article 9A, states: "All persons have the right to be protected from the collection, processing and use, espe-	(1) According to the Constitution of Greece (Article 20): "Every person shall be entitled to receive legal protection by the courts and may plead before them his views concerning his rights or interests, as specified by law". (2)The Council of State (Supreme Administrative Court) addressed the principle of equality in its judgment 3587/1997 (First Division) and ruled that, under Article 4.1 of the Constitution, the law must provide for uniform treatment of all Greek citizens of identical or similar legal or de facto status. In practice, this means that the Greek state is prohibited from drawing any arbitrary distinctions.	(1) According to the Constitution of Greece (Article 21): "The State shall care for the health of citizens and shall adopt special measures for the protection of youth, old age, disability and for the relief of the needy". (2) IMMIGRANTS : "Anyone who has been infected with the HIV/AIDS virus or other infectious diseases are entitled to free medical treatment, provided that their country of origin cannot provide them with this treatment". (article 11, par.8 quat. e', B.2955/2001). (3) The Greek social security system is a system of public law, enshrined in the Greek Constitution (art. 22, par. 5) which operates with self-administrating social security organisations, set up by law for each occupational category of workers covering the totality of workers in the Greek territory.	General principles: Basic principles include: (a) equal treatment of men and women regarding wages and remaining terms of work, guaranteed constitutionally (Arts 4 I, 22 Const.), recognized as an EU right and regulated in detail by Law 1414/1984, and (b) non-discrimination on the basis of religion, nationality, race, sexual orientation, etc. (Law 3304/2005). Also applicable to all decisions of the employer is Article 281 CC prohibiting abuse of rights (see above, Ch. 4, Section IV B). Practically this means that the decisions of the employer (e.g., redundancies) that are not justified by the general interest of the enterprise but made for personal

GREECE	family (Article 21.1), the right to work and to receive equal pay for work of equal value (Article 22.1.b), the right for respect of human and social rights (Article 25.1), the right to enjoy affirmative measures to counterbalance real inequality (Article 116.2).	cially by electronic means, of their personal data, as specified by law. The protection of personal data is ensured by an independent authority, which is established and operates as specified by law". (3) The Law on the Protection of Individuals with regard to the Processing of Personal Data (Data Protection Act) was approved in 1997. (4) The Hellenic Data Protection Authority (DPA) was established in November 1997 as an independent authority set to monitor privacy violations in Greece. It was created to supervise the implementation of the Data Protection Act and all regulations referring to the protection of personal data. (5) The Constitution of Greece recognizes the rights of privacy and secrecy of communications.			reasons, such as revenge, are considered invalid (Koukiadis, 2009).
HUNGARY	N/A	N/A	N/A	N/A	N/A
ITALY	N/A	Collaboration with the Labour Unions has sometimes proved to be helpful in order to prevent and/or sanction such conducts but in many cases the choice of the patient to keep the secret on his health condi-	The Law n. 210/92 on the available of a pecuniary compensation for who HBV and HCV infected by blood transfusions or incorrect mandatory vaccinations.	2008: new guidelines for the application of the Law n. 40 giving the possibility to STDs infected people to have access to assisted insemination techniques. Law n. 165/91, the Government established the mandatory vaccination against Hepatitis B for all newborns in	October 2009: Seropositive candidates excluded from the call of the competition for students of first class of the Naval Academy for the academic year 2009-

ITALY		tions and the lack of an adequate training of the union representatives, together with the length of the proceedings, constitute a serious obstacle to the effectiveness of the protections set forth by the law.		the first year of life and, only until 12 years after the law became effective for all subject during the 12th year of life.	2010. The sentence of the Constitutional Court No 218/1994 has clarified that the application of Law 135/90 must be complied with the fair balance between the interests of the community with those of individuals without that the individuals, however, waive their fundamental rights, dignity in work, caring and to integrate into society. The exclusion of seropositive candidates from a call of contest is therefore unlawful and discriminatory because the call, addressed to all citizens, cannot rule out categories of people: a general or mass exclusion is contrary to Articles. 3 and 4 of the Italian Constitution.
LITHUANIA	Law on Equal Opportunities, 2003, Nr. IX-1826- To prohibit any direct and indirect discrimination due to age, sex orientation, disability, race, ethnic reliance , religion and any persuasion.	Patients rights and health harm restitution law 2004, IX-2361- Patients rights to qualitative health care, accessibility and acceptability, choose a doctor, health care institution, diagnostic and treatment	The right to judicial protection is constitutional law (Constitution item 30) and Code of Civil procedure: every person can apply for court to defend subjective rights or interests.	National drug control and prevention program 2009-2016 (project). STI prevalence associated with IDU spread dynamic, harm reduction room accessibility, analysis prophylaxis Substitution therapy purpose and indications. 2008-12-31 V-1288. Before substitutional therapy analysis for STI.	Occupational safety and health law, 2003, IX-1672- Protect employers from vocational risk at work, harm measurement and accidents analysis at work. Em-

LITHUANIA		methods, patients rights to private life and inviolability, not to know diagnosis, rights to harm compensation.		Better organize STI prevention and control. More effectively treat ID complications or help to avoid them. Early diagnosis of Hepatitis B and C for young addicted people and for others with social insurance. Lithuanian Health program 1998 Nr. VIII-833. Reduce HIV\AIDS and other STI.	ployers safety and health requirements for young people, pregnant women, breast-feed women, disabled people. Labour codex, 2002, IX-926- Regulate work relations: salary, safety, contracts, workload, labour dispute, work conditions etc.
MALTA	The Equal Treatment of Persons Order LN 85/07 provides for all persons to be treated equally, no matter their gender, age, religion, sexual orientation or any other differences	The Data Protection Act provides for the protection of all data concerning persons, and makes sure no data is given or supplied without the consent of its owner	The Justice Act provides that any person residing in Malta has access to justice and to legal aid.	The laws governing Health and Social Security are separate from each other in Malta. The Public Health Act (Cap 465) regulates all public Health issues and their regulation while the Prevention of Disease Ordinance (Cap 36) requires the notification of some infectious diseases. The Social Security Act provides an adequate range of social services to all the people of Malta including migrants.	N/A
POLAND	Polish Constitution of April 2nd, 1997. The article 32 of the Constitution states guarantees equal before the law. All persons shall have the right to equal treatment by public authorities. No one shall be discriminated against in political, social or economic life	articles 47 – 51 of the Constitution on the legal protection of private and family life, honour and good reputation and freedom to make decisions about ones personal life. Civil Code of April 23rd,	A right for compensation, stated in article 77 of Polish Constitution must be also treated as a supplement for justice accessibility. Code of Civil Procedure of November 17th, 1964 and regu-	Art. 68 Constitution. On the Equal access to health care services, financed from public funds, shall be ensured by public authorities to citizens, irrespective of their material situation. The conditions for, and scope of, the provision of services shall be established by statute. In the matter of so-	Labour Code – Act of June 26th, 1974 - this act guarantees protection against discrimination in occupational environment. Although the HIV nor HCV/HBV sta-

POLAND	for any reason whatsoever. The discrimination is then forbidden in any situation, as the second paragraph states. It means, the discrimination ban has the absolute character. The equality before the law as well as the right of everyone to be equally treated by public authorities, constitutes a strengthening of this protection.	1964 and the Family and Guardianship Code of February 25th, 1964, on the protection of honor, good reputation and home; on the relations between parents and child, between a married couple as well as guardian and pupil. The Infectious Disease Act of December 5, 2008 obliges to report all infectious diseases to the Institute of Public Health in Warsaw.	lates the specific rules of proceedings before various courts, such as labor courts, family and guardianship courts or civil ones. Articles 417, 4171 and 417 of the Civil Code give the material basis of public officials liability and in this sense, Those three regulations covers the matter of a public body responsible for an action (both legal and illegal) of a public official as well as the possibility of seeking compensation for damage caused by a legal act or decision – which is crucial for cases, where the plaintiff demands compensation	cial security, the Constitution encourages the State to guarantee the social security to a citizen (article 67) whenever incapacitated for work by reason of sickness or invalidism as well as having attained retirement age. The scope and forms of social security shall be specified by statute. Social Security System Act of October 13th, 1998. On the particular rights and obligations of a person taking benefits from social security.	tus is not recited among possible grounds of discrimination (article 113), it is undisputed the discrimination on these basis is also forbidden. This conclusion flows from analysis of international standards, such as ILO documents and, most of all, the UN Human Rights Commission Resolution No. 1996/43.
ROMANIA	Order no. 665 of June 3, 2009 for amendment of Schedule 6 to the Order of the President of the National Health Insurance House no. 814/2008 approving the Regulations of organization and functioning of committees of experts from the National House of Health Insurance for certain chronic diseases, that some sites provided by DCI Government Decision no. 720/2008. Law 48/2002 regarding the prevention and punishment of all discrimination forms. In 2004 the law was amended to explicitly include HIV among protected	Order no. 665 of June 3, 2009. Doctors coordinators at the district health insurance houses, the House Health Insurance of Defence, public order, national security and judicial authority, the House of Health Insurance of the Ministry of Transport, Constructions and Tourism, and the House Insurance Health of Bucharest, called the health insurance houses, for the diagnosis and treatment of chronic Hepatitis, liver cirrosis and in-	Order no. 665 of June 3, 2009 Biological samples have been taken into account when prescribing treatment (transaminases, liver biopsy, viraemia) shall remain valid until the start of therapy. It will initially assess the situation haematological (complete blood count: hemoglobin, WBC, platelet count) and will be updated viraemia for chronic viral Hepatitis C and liver cirrhosis C, if the term exceeds with	Order no. 665 of June 3, 2009 The files for initiating antiviral therapy will be required by the expert from the National House of Health Insurance, designated CCNASHCBI, for specific treatment of chronic Hepatitis and liver cirrhosis of viral etiology, and chronic inflammatory bowel disease, monthly, in proportion to the number of patients who are on waiting lists in health insurance houses. Health insurance houses will forward the files required accompanied by a forwarding address showing the amounts available to initiate and continue treatment for every condition.	N/A

ROMANIA	categories. The law provides for a National Council for Combating Discrimination, with powers to investigate complaints, issue small fines, and propose affirmative actions, but thus far use of this mechanism has been limited. Law 448/2006 regarding the protection of disabled persons, HG1175/2005. The law establishes the general objective of the National Strategy for protection, integration and social inclusion of persons with disabilities in agreement with the essential documents of the European Union.	flammatory bowel diseases, will have the professional qualifications of the specialist physician.	12 months from conducting its initial and if the treating physician believes that the assessment is for the patient. Doctor together with study coordinator will be responsible for decisions to reduce or discontinue treatment because of the occurrence of side effects (psychiatric, thyroid, immunological or hematological) and CCNASHCBI will be informed about these decisions, with medical documentation attached. Doctors coordinators will check medical documents from the files of patients so that therapeutic indication is in accordance with established treatment protocol.		
SLOVENIA	Implementation of the Principle of Equal Treatment Act / Zakon o uresničevanju načela enakega obravnavanja – ZUNEO, Official Gazette No 50/2004, 61/2007, on the defense of equal opportunity (sex, nationality, race or ethnic origin, religion or belief, disability, age, sexual orientation or other personal circumstance). Furthermore, it provides general information and explanations	Personal Data Protection Act / Zakon o varstvu osebnih podatkov (ZVOP-1), Official Gazette of the Republic of Slovenia, No. 001-22-148/04, This Act determines the rights, responsibilities, principles and measures to prevent unconstitutional, unlawful and unjustified encroach-	Patients Rights Act/ Zakon o pacientovih pravicah, , Official Gazette of the Republic of Slovenia, No 15/2008, on the institution of the Human Rights Ombudsman, in order to protect human rights and fundamental freedoms in relation to state authorities, local self-	Health Care and Health Insurance Act (1992), in order to prevent and address social problems of individuals, families and population groups. Social Security Act (2004), on the activities of social assistance preventing and solving social problems of individual persons, families and population groups.	The Employment Relationships Act (2002), this Act regulates employment relationships entered into on the basis of employment contracts between workers and employers. The aim of this Act is to achieve the inclusion of workers in the

SLOVENIA	concerning discrimination, draws attention to any irregularities established and recommends how the problems should be resolved. Official Gazette No 59/2002, 61/2007 Equal Opportunities for Woman and Men Act	ments on the privacy and dignity of an individual in the processing of personal data. Principle of lawfulness and fairness; Personal data shall be processed lawfully and fairly. Principle of proportionality; Personal data that are being processed must be adequate and in their extent appropriate in relation to the purposes for which they are collected and further processed. Prohibition of discrimination; Protection of personal data shall be guaranteed to every individual irrespective of nationality , race, colour, religious belief, ethnicity, sex, language, political or other belief, sexual orientation, material standing, birth, education, social position, citizenship, place or type of residence or any other personal circumstance.	government authorities and bearers of public authority, the office of the Ombudsman for the rights of citizens shall be established by law.		working process, to ensure a harmonised running of the working process and to prevent unemployment, taking into account the right of workers to freedom of work and dignity at work, and to protect the interests of workers in employment relationship.

Table 5.2 – HCV currently valid legislation for each participating country.

COUNTRY	LAW FOR THE PROTECTION AGAINST DISCRIMINATION	CONFIDENTIALITY AND PRIVACY RIGHTS	ACCESS TO JUSTICE	HEALTH AND SOCIAL SECURITY	EMPLOYMENT AND CIVIL LAWS
BULGARIA	Resolution No.144 amending Regulations for the implementation of the Law on Public Health, promulgated by Resolution No. 23 of 1974.	N/A	N/A.	Order No.4 of the Minister of Health on the conditions and procedures governing testing for infection by the immunodeficiency virus	N/A
CYPRUS	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HIV/AIDS, HBV, HCV patients are entitled to free healthcare provided by the Republic.	CAP260 Quarantine Law: Under this law which was amended recently (2003) health professionals are mandated to report persons with communicable diseases (cases, not names) to the Ministry of Health. N138(I)/2001 Protection of Personal Data Law: Personal data with respect to patient's personal and health information and identification elements are protected against dissemination.	N165 (I)/2002 Legal Aid Law: All citizens who are not able to pay for legal consult with regards to protecting his legal rights (i.e. Human rights cases) are entitled to legal aid paid by the Republic. N158(I)/1999. Administrative Law: All citizens have the right to submit grievance or make a demand to any public authority to rectify an administrative action. The administrative authority has an obligation to treat all applicants to fair and equal treatment.	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HIV/AIDS, HBV, HCV patients are entitled to free healthcare provided by the Republic. N8/1991 Public Assistance Law: Citizens with financial levels lower than those needed to support basic living standards (and cover basic needs) are entitled to social and financial assistance (food, clothing, etc).	N/A

CZECH REP	Antidiscrimination law no. 198/2009 Coll. about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades and habitation	Mandatory confidentiality of healthwokers according to § 55 Law no. 20/1966 Coll. about care of public health. Infringement of mandatory confidentiality is criminal accordance with § 178 of Penal Code	Czech Republic is part of Regional European Convention for the Protection of Human Rights.	Antidiscrimination Law no. 198/2009 Coll. about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades and habitation. Public Health protection and promotion Act no. 258/2000 Coll.: §53 Measures against spreading HB, HC, HIV and other infectious diseases: Duty to inform doctors before medical invasive method and keep recommendation to prevent spreading of virus HIV, HB, HC and other pathogens. §64 Infected persons are duty to inform about important conditions related to probable transmition of communicable disease because of epidemiological investigation (it means e.g. their sexual contacts) Bulletin Ministry of Health CR, part 2, 2008: Methodical instruction - Prevention of viral Hepatitis– paragraph 6 (restriction of giving blood, body organs and biologic material).	Antidiscrimination Law no. 198/2009 about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades and habitation.

GREECE	In 2005, Parliament adopted Law 3304/2005 on the “Implementation of the principle of equal treatment regardless of racial or ethnic origin, religious or other beliefs, disability, age or sexual orientation”, which incorporates two relevant EU directives (2000/43/EC dated 29 June 2000, and 2000/78/EC dated 27 November 2000). The aim of the Law is to lay down a general regulatory framework for combating discrimination in a wide variety of fields and to designate or establish bodies for protecting, promoting and monitoring compliance with the principle of non-discrimination. In the Constitutional area, we could mention the principles of human dignity (Article 2.1) and free development of personality (Article 5.1), the principle of general equality (Article 4.1), the right of protection of health (Article 5.5), the right to be protected against misuse of personal data (Article 9A), the right to receive free education on all levels at State educational institutions (Article 16.4), the right to make a family (Article 21.1), the right to work and to receive equal pay for work of equal value (Article 22.1.b), the right for respect of human and social rights (Article 25.1), the right to enjoy affirmative measures to counterbalance	The Constitution of Greece recognizes the rights of privacy and secrecy of communications. Article 9 states: "(1) Every person's home is a sanctuary. The private and family life of the individual is inviolable. No home search shall be made, except when and as specified by law and always in the presence of representatives of the judicial power. (2) Violators of the preceding provision shall be punished for violating the home's asylum and for abuse of power, and shall be liable for full damages to the sufferer, as specified by law." A Constitutional amendment in 2001 added a new provision to this article granting individuals a direct right to protection of their personal information. The new provision, Article 9A, states: "All persons have the right to be protected from the collection, processing and use, especially by electronic means, of their personal data, as specified by law. The protection of personal data is ensured by an independent authority, which is established and operates as specified by law". The Law on the Protection of Individuals with regard to the Processing of	According to the Constitution of Greece (Article 20): “Every person shall be entitled to receive legal protection by the courts and may plead before them his views concerning his rights or interests, as specified by law”. The Council of State (Supreme Administrative Court) addressed the principle of equality in its judgment 3587/1997 (First Division) and ruled that, under Article 4.1 of the Constitution, the law must provide for uniform treatment of all Greek citizens of identical or similar legal or de facto status. In practice, this means that the Greek state is prohibited from drawing any arbitrary distinctions. The constitutional principle of equality is directly applicable and accordingly binding on parliament, the government and the courts.	According to the Constitution of Greece (Article 21): “The State shall care for the health of citizens and shall adopt special measures for the protection of youth, old age, disability and for the relief of the needy”. Immigrants. “Anyone who has been infected with the HIV/AIDS virus or other infectious diseases are entitled to free medical treatment, provided that their country of origin cannot provide them with this treatment”. (article 11, par.8 quat. e΄, B.2955/2001). The Greek social security system is a system of public law, enshrined in the Greek Constitution (art. 22, par. 5) which operates with self-administrating social security organisations, set up by law for each occupational category of workers covering the totality of workers in the Greek territory.	General principles: Basic principles include: (a) equal treatment of men and women regarding wages and remaining terms of work, guaranteed constitutionally (Arts 4 I, 22 Const.), recognized as an EU right and regulated in detail by Law 1414/1984, and (b) non-discrimination on the basis of religion, nationality, race, sexual orientation, etc. (Law 3304/2005). Also applicable to all decisions of the employer is Article 281 CC prohibiting abuse of rights (see above, Ch. 4, Section IV B). Practically this means that the decisions of the employer (e.g., redundancies) that are not justified by the general interest of the enterprise but made for personal reasons, such as revenge, are considered invalid (Koukiadis, 2009).

GREECE	real inequality (Article 116.2) (Gavalas, 2004).	Personal Data (Data Protection Act) was approved in 1997. The Hellenic Data Protection Authority (DPA) was established in November 1997 as an independent authority set to monitor privacy violations in Greece. It was created to supervise the implementation of the Data Protection Act and all regulations referring to the protection of personal data. The Constitution of Greece recognizes the rights of privacy and secrecy of communications.			
HUNGARY	N/A	N/A	N/A	N/A	N/A
ITALY	N/A	Collaboration with the Labour Unions has sometimes proved to be helpful in order to prevent and/or sanction such conducts but in many cases the choice of the patient to keep the secret on his health conditions and the lack of an adequate training of the union representatives, together with the length of the proceedings, constitute a serious obstacle to the effectiveness of the protections set forth by the law.	The Law n. 210/92 on the available of a pecuniary compensation for who HBV and HCV infected by blood transfusions or incorrect mandatory vaccinations.	2008: new guidelines for the application of the Law n. 40 giving the possibility to STDs infected people to have access to assisted insemination techniques	October 2009: Seropositive candidates excluded from the call of the competition for students of first class of the Naval Academy for the academic year 2009-2010.

LITHUANIA	Law on Equal Opportunities, 2003, Nr. IX-1826- To prohibit any direct and indirect discrimination due to age, sex orientation, disability race, ethnic reliance , religion and any persuasion. The Equal Opportunities Office.	Patients rights and health harm restitution law 2004, IX-2361- Patients rights to qualitative health care, accessibility and acceptability, choose a doctor, health care institution, diagnostic and treatment methods, patients rights to private life and inviolability, not to know diagnosis, rights to harm compensation.	Penal code – No 40/2009: §152-155: wistful spreading or spreading due negligence of the infectious diseases is a crime punishable by the state	Act No 258/2000 Collection of Law: about protection of public health: §53 Measures in spreading HIV and other infectious diseases. Duty to inform doctors before surgery major and keep recommendation to prevent spreading of virus HIV.	Occupational safety and health law, 2003, IX-1672- Protect employers from vocational risk at work, harm measurement and accidents analysis at work. Employers safety and health requirements for young people, pregnant women, breast-feed women, disabled people. Labor codex, 2002, IX-926- Regulate work relations: samary, safety, contracts, workload, labour dispute, work conditions etc.
MALTA	The Equal Treatment of Persons Order LN 85/07 provides for all persons to be treated equally, no matter their gender, age, religion, sexual orientation or any other differences	The Data Protection Act provides for the protection of all data concerning persons, and makes sure no data is given or supplied without the consent of its owner	The Justice Act provides that any person residing in Malta has access to justice and to legal aid.	The laws governing Health and Social Security are separate from each other in Malta. The Public Health Act (Cap 465) regulates all public Health issues and their regulation while the Prevention of Disease Ordinance (Cap 36) requires the notification of some infectious diseases. The Social Security Act provides an adequate range of social services to all the people of Malta including migrants.	N/A

POLAND	Polish Constitution of April 2nd, 1997. The article 32 of the Constitution states guarantees equal before the law. All persons shall have the right to equal treatment by public authorities. No one shall be discriminated against in political, social or economic life for any reason whatsoever. The discrimination is then forbidden in any situation, as the second paragraph states. It means, the discrimination ban has the absolute character. The equality before the law as well as the right of everyone to be equally treated by public authorities, constitutes a strengthening of this protection.	articles 47 – 51 of the Constitution on the legal protection of private and family life, honor and good reputation and freedom to make decisions about ones personal life. Civil Code of April 23rd, 1964[1] and the Family and Guardianship Code of February 25th, 1964, on the protection of honor, good reputation and home; on the relations between parents and child, between a married couple as well as guardian and pupil. The Infectious Disease Act of December 5, 2008 obliges to report all infectious diseases to the Institute of Public Health in Warsaw.	A right for compensation, stated in article 77 of Polish Constitution must be also treated as a supplement for justice accessibility. Code of Civil Procedure of November 17th, 1964 and regulates the specific rules of proceedings before various courts, such as labor courts, family and guardianship courts or civil ones. Articles 417, 4171 and 417 of the Civil Code give the material basis of public officials liability and in this sense, Those three regulations covers the matter of a public body responsible for an action (both legal and illegal) of a public official as well as the possibility of seeking compensation for damage caused by a legal act or decision – which is crucial for cases, where the plaintiff demands compensation	Art. 68 Constitution. On the Equal access to health care services, financed from public funds, shall be ensured by public authorities to citizens, irrespective of their material situation. The conditions for, and scope of, the provision of services shall be established by statute. In the matter of social security, the Constitution encourages the State to guarantee the social security to a citizen (article 67) whenever incapacitated for work by reason of sickness or invalidism as well as having attained retirement age. The scope and forms of social security shall be specified by statute. Social Security System Act of October 13th, 1998. On the particular rights and obligations of a person taking benefits from social security.	Labor Code – Act of June 26th, 1974[2] - this act guarantees protection against discrimination in occupational environment. Although the HIV nor HCV/HBV status is not recited among possible grounds of discrimination (article 113), it is undisputed the discrimination on these basis is also forbidden. This conclusion flows from analysis of international standards, such as ILO documents and, most of all, the UN Human Rights Commission Resolution No. 1996/43.
ROMANIA	Order no. 665 of June 3, 2009 for amendment of Schedule 6 to the Order of the President of the National Health Insurance House no. 814/2008 approving the Regulations of organization and functioning of committees of	Order no. 665 of June 3, 2009. Doctors coordinators at the district health insurance houses, the House Health Insurance of Defense, public order, national security and judicial authority, the	Order no. 665 of June 3, 2009 Biological samples have been taken into account when prescribing treatment (transaminases, liver biopsy, viraemia) shall remain valid until the start	Order no. 665 of June 3, 2009 The files for initiating antiviral therapy will be required by the expert from the National House of Health Insurance, designated CCNASHCBI, for specific treatment of chronic Hepatitis and liver cirrhosis of viral	Order no. 665 of June 3, 2009 The files for initiating antiviral therapy will be required by the expert from the National House of Health Insurance, designated CCNASHCBI, for specific

ROMANIA	experts from the National House of Health Insurance for certain chronic diseases, that some sites provided by DCI Government Decision no. 720/2008. Law 48/2002 regarding the prevention and punishment of all discrimination forms. In 2004 the law was amended to explicitly include HIV among protected categories. The law provides for a National Council for Combating Discrimination, with powers to investigate complaints, issue small fines, and propose affirmative actions, but thus far use of this mechanism has been limited. Law 448/2006 regarding the protection of disabled persons, HG1175/2005. The law establishes the general objective of the National Strategy for protection, integration and social inclusion of persons with disabilities in agreement with the essential documents of the European Union.	House of Health Insurance of the Ministry of Transport, Constructions and Tourism, and the House Insurance Health of Bucharest, called the health insurance houses, for the diagnosis and treatment of chronic Hepatitis, liver cirrosis and inflammatory bowel diseases, will have the professional qualifications of the specialist physician	of therapy. It will initially assess the situation haematological (complete blood count: hemoglobin, WBC, platelet count) and will be updated viraemia for chronic viral Hepatitis C and liver cirrhosis C,if the term exceeds with 12 months from conducting its initial and if the treating physician believes that the assessment is for the patient. Doctor together with study coordinator will be responsible for decisions to reduce or discontinue treatment because of the occurrence of side effects (psychiatric, thyroid, immunological or hematological) and CCNASHCBI will be informed about these decisions, with medical documentation attached. Doctors coordinators will check medical documents from the files of patients so that therapeutic indication is in accordance with established treatment protocol.	etiology, and chronic inflammatory bowel disease, monthly, in proportion to the number of patients who are on waiting lists in health insurance houses. Health insurance houses will forward the files required accompanied by a forwarding address showing the amounts available to initiate and continue treatment for every condition.	treatment of chronic Hepatitis and liver cirrhosis of viral etiology, and chronic inflammatory bowel disease, monthly, in proportion to the number of patients who are on waiting lists in health insurance houses. Health insurance houses will forward the files required accompanied by a forwarding address showing the amounts available to initiate and continue treatment for every condition.
SLOVENIA	Implementation of the Principle of Equal Treatment Act / Zakon o uresničevanju načela enakega obravnavanja – ZUNEO, Official Gazette No 50/2004, 61/2007, on the defense of equal opportunity (sex, nationality, race or	Personal Data Protection Act / Zakon o varstvu osebnih podatkov (ZVOP-1), Official Gazette of the Republic of Slovenia, No. 001-22-148/04, This Act determines the rights, responsibilities, prin-	Patients Rights Act/ Zakon o pacientovih pravicah, , Official Gazette of the Republic of Slovenia, No 15/2008, on the institution of the Human Rights Ombudsman, in order to pro-	Health Care and Health Insurance Act (1992), in order to prevent and address social problems of individuals, families and population groups. Social Security Act (2004), on the activities of social assistance preventing and solving so-	The Employment Relationships Act (2002), this Act regulates employment relationships entered into on the basis of employment contracts between workers and employers. The aim of

SLOVENIA	ethnic origin, religion or belief, disability, age, sexual orientation or other personal circumstance). Furthermore, it provides general information and explanations concerning discrimination, draws attention to any irregularities established and recommends how the problems should be resolved. Official Gazette No 59/2002, 61/2007 Equal Opportunities for Woman and Men Act	ciples and measures to prevent unconstitutional, unlawful and unjustified encroachments on the privacy and dignity of an individual in the processing of personal data. Principle of lawfulness and fairness; Personal data shall be processed lawfully and fairly. Principle of proportionality; Personal data that are being processed must be adequate and in their extent appropriate in relation to the purposes for which they are collected and further processed. Prohibition of discrimination; Protection of personal data shall be guaranteed to every individual irrespective of nationality , race, colour, religious belief, ethnicity, sex, language, political or other belief, sexual orientation, material standing, birth, education, social position, citizenship, place or type of residence or any other personal circumstance.	tect human rights and fundamental freedoms in relation to state authorities, local self-government authorities and bearers of public authority, the office of the Ombudsman for the rights of citizens shall be established by law.	cial problems of individual persons, families and population groups.	this Act is to achieve the inclusion of workers in the working process, to ensure a harmonised running of the working process and to prevent unemployment, taking into account the right of workers to freedom of work and dignity at work, and to protect the interests of workers in employment relationship.

Table 5.3 – Currently country legislation on HIV/AIDS in each participating country.

COUNTRY	LAW FOR THE PROTECTION AGAINST DISCRIMINATION	CONFIDENTIALITY AND PRIVACY RIGHTS	ACCESS TO JUSTICE	HEALTH AND SOCIAL SECURITY	EMPLOYMENT AND CIVIL LAWS
BULGARIA	Resolution No.144 amending Regulations for the implementation of the Law on Public Health, promulgated by Resolution No. 23 of 1974.	N/A	N/A	Order No.4, 1992, of the Minister of Health on the conditions and procedures governing testing for infection by the immunodeficiency virus.	N/A
CYPRUS	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HIV/AIDS, HBV, HCV patients are entitled to free healthcare provided by the Republic.	CAP260 Quarantine Law: Under this law which was amended recently (2003) health professionals are mandated to report persons with communicable diseases (cases, not names) to the Ministry of Health. N138(I)/2001 Protection of Personal Data Law: Personal data with respect to patient's personal and health information and identification elements are protected against dissemination.	N165 (I)/2002 Legal Aid Law: All citizens who are not able to pay for legal consult with regards to protecting his legal rights (i.e. Human rights cases) are entitled to legal aid paid by the Republic. N158(I)/1999 Administrative Law: All citizens have the right to submit grievance or make a demand to any public authority to rectify an administrative action. The administrative authority has an obligation to treat all applicants to fair and equal treatment.	N1(I)/2005 Patient's Rights: Healthcare is provided to all patients without discrimination, in a fair manner and be based on objective scientific/professional criteria. Regarding chronic communicable diseases such as HIV/AIDS, HBV, HCV patients are entitled to free healthcare provided by the Republic. N8/1991 Public Assistance Law: Citizens with financial levels lower than those needed to support basic living standards (and cover basic needs) are entitled to social and financial assistance (food, clothing, etc).	N1/1990 Public Service Law: No employer shall discriminate against an applicant for health reasons. No employee can be dismissed from his employment for HIV/AIDS, HBV, HCV health reasons. If dismissed unduly he is entitled to reimbursement. CAP149/ Contract Law: No employer shall discriminate against an applicant for health reasons. No employee can be dismissed from his employment for HIV/AIDS, HBV, HCV health reasons. If dismissed unduly he is entitled to reimbursement. (This law refers to private sector arrangements). In the near future the House of Representatives will try to pass a law that will force the government to provide funds which will be used to employee vulnerable groups (ie. HIV/AIDS patients etc).

CZECH REP.	Antidiscrimination law no. 198/2009 Coll. about equal treatment and restriction of disrimination in rights for employment, social security, access to education, health care, service trades ad habitation	Mandatory confidentiality of healthwokers according to § 55 Law no. 20/1966 Coll. about care of public health. Infringement of mandatory confidentiality is criminal accordance with § 178 of Penal Code	Czech Republic is part of Regional European Convention	Antidiscrimination Law no. 198/2009 Coll. about equal treatment and restriction of discrimination in rights for employment, social security, access to education, health care, service trades ad habitation Guideline for solving problems HIV/AIDS in Czech Republic, Ministery of Health Bulletin 2003: Art. 3 - providing care about PLWH - dispensary care is provided by AIDS centres - 7 centres is established in Czech Republic (main AIDS department is AIDS centre FN Bulovka, Prague) Health care is provided without any limitation Social problems PLWH are solved by AIDS centres in cooperation with social workers, NGO´s, especially House of Light of the Czech Company AIDS help in Prague. Law No. 108/2006 Coll. about social services - arranges attitudes of providing social help and care and assistance to persons HIV+ and their families (§8)	Antidiscrimination Law no. 198/2009 about equal treatment and restriction of disrimination in rights for employment, social security, access to education, health care, service trades ad habitation

GREECE	In 2005, Parliament adopted Law 3304/2005 on the "Implementation of the principle of equal treatment regardless of racial or ethnic origin, religious or other beliefs, disability, age or sexual orientation", which incorporates two relevant EU directives (2000/43/EC dated 29 June 2000, and 2000/78/EC dated 27 November 2000). The aim of the Law is to lay down a general regulatory framework for combating discrimination in a wide variety of fields and to designate or establish bodies for protecting, promoting and monitoring compliance with the principle of non-discrimination. In the Constitutional area, we could mention the principles of human dignity (Article 2.1) and free development of personality (Article 5.1), the principle of general equality (Article 4.1), the right of protection of health (Article 5.5), the right to be protected against misuse of personal data (Article 9A), the right to receive free education on all levels at State educational institutions (Article 16.4), the right to make a family (Article 21.1), the right to work and to receive equal pay for work of equal value (Article 22.1.b), the right for respect of human and social rights (Article 25.1), the right to enjoy affirmative measures to	The Constitution of Greece recognizes the rights of privacy and secrecy of communications. Article 9 states: "(1) Every person's home is a sanctuary. The private and family life of the individual is inviolable. No home search shall be made, except when and as specified by law and always in the presence of representatives of the judicial power. (2) Violators of the preceding provision shall be punished for violating the home's asylum and for abuse of power, and shall be liable for full damages to the sufferer, as specified by law." A Constitutional amendment in 2001 added a new provision to this article granting individuals a direct right to protection of their personal information. The new provision, Article 9A, states: "All persons have the right to be protected from the collection, processing and use, especially by electronic means, of their personal data, as specified by law. The protection of personal data is ensured by an independent authority, which is established and operates as specified by law". The Law on the Protection of Individuals with regard to the Processing of Personal Data (Data Protection Act) was approved in 1997. The Hellenic Data Protection Authority (DPA) was established in	According to the Constitution of Greece (Article 20): "Every person shall be entitled to receive legal protection by the courts and may plead before them his views concerning his rights or interests, as specified by law". The Council of State (Supreme Administrative Court) addressed the principle of equality in its judgment 3587/1997 (First Division) and ruled that, under Article 4.1 of the Constitution, the law must provide for uniform treatment of all Greek citizens of identical or similar legal or de facto status. In practice, this means that the Greek state is prohibited from drawing any arbitrary distinctions. The constitutional principle of equality is directly applicable and accordingly binding on parliament, the government and the courts.	According to the Constitution of Greece (Article 21): "The State shall care for the health of citizens and shall adopt special measures for the protection of youth, old age, disability and for the relief of the needy". Immigrants. "Anyone who has been infected with the HIV/AIDS virus or other infectious diseases are entitled to free medical treatment, provided that their country of origin cannot provide them with this treatment". (article 11, par.8 quat. e', B.2955/2001). The Greek social security system is a system of public law, enshrined in the Greek Constitution (art. 22, par. 5) which operates with self-administrating social security organisations, set up by law for each occupational category of workers covering the totality of workers in the Greek territory.	General principles: Basic principles include: (a) equal treatment of men and women regarding wages and remaining terms of work, guaranteed constitutionally (Arts 4 I, 22 Const.), recognized as an EU right and regulated in detail by Law 1414/1984, and (b) non-discrimination on the basis of religion, nationality, race, sexual orientation, etc. (Law 3304/2005). Also applicable to all decisions of the employer is Article 281 CC prohibiting abuse of rights (see above, Ch. 4, Section IV B). Practically this means that the decisions of the employer (e.g., redundancies) that are not justified by the general interest of the enterprise but made for personal reasons, such as revenge, are considered invalid (Koukiadis, 2009).

GREECE	counterbalance real inequality (Article 116.2) (Gavalas, 2004).	November 1997 as an independent authority set to monitor privacy violations in Greece. It was created to supervise the implementation of the Data Protection Act and all regulations referring to the protection of personal data. The Constitution of Greece recognizes the rights of privacy and secrecy of communications.			
HUNGARY	N/A	N/A	N/A	N/A	N/A
ITALY	Law n. 135 (June 1990) established the creation of a interministerial committee for the fight against AIDS; rules the in professional field; measures for the building and renovation of health facilities for the infected people; and local intervention programmes for regions and provinces. The Law n. 135 ensures that the HIV-test is carried out only with the consent of the person. The test is not mandatory, but if there were risk behaviors should be carried out. In particular, art.5 contains rules for the protection of the privacy of people who are diagnosed HIV+ and art.6 forbids all public and private employers to require the execution of the HIV test from their employees. Ministerial Decree 31/03/2008 (published in the Law Journal n. 175 of 28/07/08) established the national surveillance system	Collaboration with the Labour Unions has sometimes proved to be helpful in order to prevent and/or sanction such conducts but in many cases the choice of the patient to keep the secret on his health conditions and the lack of an adequate training of the union representatives, together with the length of the proceedings, constitute a serious obstacle to the effectiveness of the protections set forth by the law.	Sentence n. 44712 (1 December 2008) Cassation Court: the court stated that people with AIDS who continue to have unprotected sexual intercourse will have to respond to voluntary serious injury or murder if the virus causes the death of a partner.	2008: new guidelines for the application of the Law n. 40 giving the possibility to STDs infected people to have access to assisted insemination techniques.	October 2009: Seropositive candidates excluded from the call of the competition for students of first class of the Naval Academy for the academic year 2009-2010. The sentence of the Constitutional Court No 218/1994 has clarified that the application of Law 135/90 must be complied with the fair balance between the interests of the community with those of individuals without that the individuals, however, waive their fundamental rights, dignity in work, caring and to integrate into society. The exclusion of seropositive candidates from a call of contest is therefore unlawful and discriminatory because the call, addressed to all citizens, cannot rule out categories of people: a general or mass exclusion is contrary to Articles. 3 and 4 of the Italian Constitution.

ITALY	of the new HIV case infections. Before this measure, only the new AIDS case infections were under mandatory reporting, whereas it wasn't mandatory for the new HIV case infections.				
LITHUANIA	Law on Equal Opportunities, 2003, Nr. IX-1826- To prohibit any direct and indirect discrimination due to age, sex orientation, disability race, ethnic reliance , religion and any persuasion. The Equal Opportunities Office.	Patients rights and health harm restitution law 2004, IX-2361- Patients rights to qualitative health care, accessibility and acceptability, choose a doctor, health care institution, diagnostic and treatment methods, patients rights to private life and inviolability, not to know diagnosis, rights to harm compensation.	The right to judicial protection is constitutional law (Constitution item 30) and Code of Civil procedure: every person can apply for court to defend subjective rights or interests.	PEP ordinance, 2009, Nr. V-827- Schedule confirmation. PEP treatment is compensated after exposure at work or by violence. Pregnant women health care screening, 2006, Nr. V-1135, under Ministry of Health. High risk factors and prophylaxis for pregnant women. Health care requirements for pregnant women.Arthrosis, HIV and chlamydia trachomatis diagnosis and out-patient treatment, compensation from compulsory health insurance, 2004, Nr. V-313. Lithuanian Health program,1998 Nr. VIII-833.Reduce HIV\AIDS and other STI.	Occupational safety and health law, 2003, IX-1672- Protect employers from vocational risk at work, harm measurement and accidents analysis at work. Employers safety and health requirements for young people, pregnant women, breast-feed women, disabled people. Labor codex, 2002, IX-926- Regulate work relations: samary, safety, contracts, workload, labour dispute, work conditions etc.
MALTA	The Equal Treatment of Persons Order LN 85/07 provides for all persons to be treated equally, no matter their gender, age, religion, sexual orientation or any other differences	The Data Protection Act provides for the protection of all data concerning persons, and makes sure no data is given or supplied without the consent of its owner	The Justice Act provides that any person residing in Malta has access to justice and to legal aid.	The laws governing Health and Social Security are separate from each other in Malta. The Public Health Act (Cap 465) regulates all public Health issues and their regulation while the Prevention	N/A

MALTA				of Disease Ordinance (Cap 36) requires the notification of some infectious diseases. The Social Security Act provides an adequate range of social services to all the people of Malta including migrants.	
POLAND	Ordinance of the Council of Ministers, 13th of September 2005 (Dz. U. Nr 189/2005, pos. 1590) includes a that the Government's legislation policy, as well as all other legislation is oriented towards solutions preventing any discrimination of persons with HIV/AIDS.	Infectious Disease Act of December 5, 2008 obliges to treat infectious diseases (including AIDS) and provides free treatment. It gives patients a right not to disclose their personal data while making a test.	N/A	Healthcare Institutions Act of August 30th 1991 (with amendments) It gives (article 19 paragraph 2) patients a right to give his/her consent to receive certain health services, including HIV antibodies test. It means that HIV tests cannot be done without patient's consent, except blood, tissue and organ donations, when it is this test is obligatory. The Medical Profession Act (article 14 item 1), Nurses and Midwifes Profession Act and the existing Code of Medical Ethics (article 23) and the Code of Ethics for Nurses and Midwifes impose strict obligations to keep all medical and official matters confidential.	N/A
ROMANIA	Law no. 584/2002 on measures to prevent the spread of HIV/AIDS In Romania and main protection measures for persons living with HIV/AIDS. Persons infected with HIV or suffering of	Law no. 584/2002 on measures to prevent the spread of HIV/AIDS In Romania and main protection measures for persons living with HIV/AIDS. Confidentiality is stipulated in all cases and	Romania is part of the regional European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR), and the European	Law no. 584/2002 regarding the HIV/AIDS prevention and main protection measures for persons living with HIV. It guarantees people living with HIV free specia-	Law no. 584/2002 regarding the HIV/AIDS prevention and main protection measures for persons living with HIV. The state is required "to promote non-discriminatory professional

ROMANIA	AIDS are entitled to social protection and non discriminatory treatment in regard of their right to education," including their integration in the formal education system. Law 48/2002 regarding the prevention and punishment of all discrimination forms. In 2004 the law was amended to explicitly include HIV among protected categories. The law provides for a National Council for Combating Discrimination, with powers to investigate complaints, issue small fines, and propose affirmative actions, but thus far use of this mechanism has been limited. Law 448/2006 regarding the protection of disabled persons, HG1175/2005. The law establishes the general objective of the National Strategy for protection, integration and social inclusion of persons with disabilities in agreement with the essential documents of the European Union.	any infringement should be punished	Social Charter, instruments of the Council of Europe. The National Council for Combating Discrimination is the special institution to which all citizens who's human rights were infringed to file a complaint. It has all powers and instruments to decide if the case is a discrimination case and if the case may support the citizen in its actions (providing legal support)	lized medical care and free antiretroviral treatment as well as free treatment for diseases associated with HIV. People living with HIV are also eligible to apply for benefits for persons with disabilities. Law 519/2002 regarding the special protection and work frame for persons with disabilities. It provides for a first degree disability pension for all children and some adults living with HIV/AIDS. In addition to these benefits, under article 17 of Law No. 519/2002 children living with HIV/AIDS are also eligible to receive double the child allocation, a 50 percent increase of the allocation for children with disabilities, free summer camps once a year, free urban transportation, and twelve free tickets for trains and buses per year. It provides for a nutrition subsidy of per day for children and for adults (the amount and agency responsible for distribution specified in Governmental Decision No. 839/2004	development" of persons living with HIV and to ensure their "unbounded and unlimited right to work," and the Labor Code prohibits "any direct or indirect discrimination in relation with an employee, on grounds of gender, sexual orientation, genetic characteristics, age, nationality, race, skin color, ethnicity, religion, political options, social origin, disability, family situation or family responsibility, belonging to a trade union." ILO's best practice code regarding HIV/AIDS and workplace was translated in Romanian and disseminated in 2007.

SLOVENIA	Implementation of the Principle of Equal Treatment Act / Zakon o uresničevanju načela enakega obravnavanja – ZUNEO, Official Gazette No 50/2004, 61/2007, on the defense of equal opportunity (sex, nationality, race or ethnic origin, religion or belief, disability, age, sexual orientation or other personal circumstance). Furthermore, it provides general information and explanations concerning discrimination, draws attention to any irregularities established and recommends how the problems should be resolved. Official Gazette No 59/2002, 61/2007 Equal Opportunities for Woman and Men Act	Personal Data Protection Act / Zakon o varstvu osebnih podatkov (ZVOP-1), Official Gazette of the Republic of Slovenia, No. 001-22-148/04, This Act determines the rights, responsibilities, principles and measures to prevent unconstitutional, unlawful and unjustified encroachments on the privacy and dignity of an individual in the processing of personal data. Principle of lawfulness and fairness; Personal data shall be processed lawfully and fairly. Principle of proportionality; Personal data that are being processed must be adequate and in their extent appropriate in relation to the purposes for which they are collected and further processed. Prohibition of discrimination; Protection of personal data shall be guaranteed to every individual irrespective of nationality , race, colour, religious belief, ethnicity, sex, language, political or other belief, sexual orientation, material standing, birth, education, social position, citizenship, place or type of residence or any other personal circumstance.	Patients Rights Act/ Zakon o pacientovih pravicah, , Official Gazette of the Republic of Slovenia, No 15/2008, on the institution of the Human Rights Ombudsman, in order to protect human rights and fundamental freedoms in relation to state authorities, local self-government authorities and bearers of public authority, the office of the Ombudsman for the rights of citizens shall be established by law.	Health Care and Health Insurance Act (1992), in order to prevent and address social problems of individuals, families and population groups. Social Security Act (2004), on the activities of social assistance preventing and solving social problems of individual persons, families and population groups.	The Employment Relationships Act (2002), this Act regulates employment relationships entered into on the basis of employment contracts between workers and employers. The aim of this Act is to achieve the inclusion of workers in the working process, to ensure a harmonised running of the working process and to prevent unemployment, taking into account the right of workers to freedom of work and dignity at work, and to protect the interests of workers in employment relationship.

These tables, and the further laws below, show clearly the gaps in the judicial systems of the project participating countries in the protection of people living with HBV, HCV and HIV. Many countries have not laws for the civil rights protection of HBV, HCV and HIV positives or other regulations.

5.4 Further currently valid legislation for HBV, HCV, HIV/AIDS in the H-CUBE countries

5.4.1 Currently valid HBV-HCV legislation in Bulgaria

HBV-HCV

a) National Hepatitis strategy by the Bulgarian Ministry of Health in 2008 and the voting of its budget by the Parliament in 2009. This strategic plan should mainly focus on improved prevention measures such as accessible information to the general population as well as vulnerable and risk groups, access to free testing and diagnostics, vaccination campaigns for risk groups and educational programs[301].
b) "Law on Health", effective from 1 January 2005. The section 5 of this law provide a general framework on Communicable Diseases Control, Articles 57, 58, 59, 60, 61, 62, 63.
c) Ordinance No 15/12 May 2005 of the Ministry of Health on Immunizations in Republic of Bulgaria and Guidelines for Surveillance of adverse events after immunization.
d) Ordinance No 21/18 July 2005 of the Ministry of Health, on the procedure for registration, notification and reporting of communicable diseases (State Gazette, No 62 of 29 July 2005), adopting the list of Communicable Diseases, case definitions (possible, probable and confirmed case) for reporting Communicable Diseases.
e) Ordinance of the Ministry of Health on border health control, implementing the International Health Regulation (5 October 2006).
f) With a Decision of the Council of Ministers from 2006 only the Director of the National Center of Infectious and Parasitic Diseases (NCIPD) is allowed to give a permission/certificate for import and export of bacterial, viral and parasitic strains for experimental, clinical and educational needs.

HIV/AIDS

a) Comprehensive National Population Strategy (2006-2020) developed and adopted by the Government.
b) Order No. 4 of 2 April 1992 of the Minister of Health on the conditions and procedures governing testing for infection by the immunodeficiency virus. (Durzhaven Vestnik, No. 34, 24 April 1992, pp. 13-15, as translated in International Digest of Health Legislation, Vol. 45, No. 2, 1994, pp. 169-170.).
c) HBV and HCV currently valid legislation in Cyprus
d) Law of 1932 and its amendments (the most recent of 2008), on the development of a Network for the Surveillance and Control of Communicable Diseases under the Medical and Public Health Services of the Ministry of Health of Cyprus.

5.4.2 Currently valid HIV/AIDS legislation in Cyprus

The National AIDS Programme provide treatment of HIV and AIDS, including antiretroviral drugs, to all citizens, men and women, who meet the necessary clinical and laboratory criteria. Social support is offered by the government services, in cooperation with relevant NGOs. These services are offered equally to men and women. The sex ratio among known HIV seropositives is 6,4 men to one women. Antenatal screening for HIV has been carried out for several years, and prevalence of HIV infection among pregnant women is known to be extremely low.

[301] *Anonymous* (2008); "Role and impact of patient and advocacy groups: country presentations" , in *Viral Hepatitis*, 17, 1, November, pp. 8-18.

5.4.3 Currently valid legislation in Czech Republic

HBV-HCV

a) Act No. 258/2000 Coll. of Law, on Protection of Public Health establishes that the reporting of all infectious diseases is obligatory (the reporting system is called EPIDAT) for every physician, General Practitioners, doctor-specialist and also laboratory. Special form is used for notification ("red form"). The paragraph 53 is on the measures in the spreading HBV and HCV concerning the duty to inform doctors before surgery major and keep recommendation to prevent spreading.
b) Bulletin Ministry of Health CR, part 2, 2008, specifies methodological instructions for the prevention of viral Hepatitis.

HIV/AIDS

a) Bulletin Ministry of Health of Czech Republic, part 8, 2003, indicates the guidelines for solving problems HIV/AIDS in Czech Republic (Definition of case, HIV, source HIV and transmission HIV. Basic information about laboratory examination, recording and practice with identification HIV infection, surveillance HIV, care of HIV persons. Blood donor HIV testing, pregnant women testing. Part of text are supplements: classification of clinical stage HIV/AIDS, rule of consulting, information for HIV+ persons).
b) Act No.258/2000 Collection of Law, 2003;§53: measures in spreading HBV and HCV and other infectious diseases. Duty to inform doctors before medical intervention and keep recommendation to prevent spreading of virus HIV.
c) Decree of the Government No 130, Feb 2008, on National program of solution of the problem of HIV/AIDS in Czech Republic in 2008-2012, with all duties of the state and states institutions listed, terms, responsibility.
d) Act No 40/2009 (Penal Code), §152-155, on wittingly spreading or spreading due negligence of the infectious diseases is a crime punishable by the state.

5.4.4 Currently valid legislation in Greece

HBV - HCV

a) Law 2071/92, Greek Official Gazzete no 123, Vol. Ά, article 47, on the National Health System with the establishment of the Hellenic Center for Disease Control and Prevention. The HCDCP started an initial attempt at INFECTIOUS DISEASE surveillance in 1998.
b) Law 4543/97, on the mandatory vaccination of Hepatitis B to all neonates.
c) Code 3172/2003 ΦΕΚ 197, states that the epidemiological infectious disease surveillance became the responsibility of the HCDCP
d) Bulletin Ministry of Health CR, part 2, 2008, specifies methodological instructions for the prevention of viral Hepatitis.

HIV/AIDS

a) Royal law, code ΦΕΚ: 262/1950, on Surveillance of Infectious Disease was established in Greece, which made recording of new INFECTIOUS DISEASE cases mandatory, but achieved poor compliance.
b) Code 3172/2003 ΦΕΚ 197, states that the epidemiological infectious disease surveillance became the responsibility of the HCDCP.
c) Ministry of Health of Greece, part 8, 2003, indicates the guidelines for solving problems HIV/AIDS in Greece (Definition of case, HIV, source HIV and transmission HIV. Basic information about laboratory ex-

amination, recording and practice with identification HIV infection, surveillance HIV, care of HIV persons. Blood donor HIV testing, pregnant women testing. Part of text are supplements: classification of clinical stage HIV/AIDS, rule of consulting, information for HIV+ persons).

d) Decree of the Government No 130, Feb 2008, on National program of solution of the problem of HIV/AIDS in Greece in 2008-2012, with all duties of the state and states institutions listed, terms, responsibility.

e) Act No 40/2009 (Penal Code), §152-155, on wittingly spreading or spreading due negligence of the infectious diseases is a crime punishable by the state.

5.4.5 Currently valid legislation in Hungary

HBV - HCV

a) 13. § and 15.§ (1) a) of Act XLVII of 1997 is the legal basis of the surveillance is on the Management and Protection of Health and Related Personal Data (and 1st Annex with the list of compulsory notifiable communicable diseases):

b) 1. § of decree 63/1997 (XII.21.) of the Minister of Welfare, on the regulation of notification of communicable diseases (and 1st Annex with the list of compulsory notifiable communicable diseases).

HIV/AIDS

a) Decree 18/2002 (XII.27.) issued by ESZCSM (Ministry for Health, Social and Family Affairs), on HIV diagnostics and actions required to prevent the spread of infection causing acquired immune deficiency syndrome and on the order of carrying out screening tests.

b) Parliamentary Decision 46/2003. (IV. 16.) OGY, on the implementation of a National Programme for the Decade of Health.

5.4.6 Currently valid legislation in Italy

HBV - HCV

Italian legislator dedicated attention to Hepatitis starting from early 1990's. With the Law n. 165/91, the Government established the mandatory vaccination against Hepatitis B for all newborns in the first year of life and, only until 12 years after the law became effective for all subject during the 12th year of life. In 1992 the Law n. 210 established the available of a pecuniary compensation for who HBV and HCV infected by blood transfusions or incorrect mandatory vaccinations.

HIV/AIDS

The Law n. 135 (June 1990) was the first relevant law on HIV/AIDS in Italy and it concerned a plan of emergency measures in the prevention and the fight against AIDS. In particular, it established the creation of a inter-ministerial committee for the fight against AIDS; rules the in professional field; measures for the building and renovation of health facilities for the infected people; and local intervention programmes for regions and provinces. The Law n. 135 ensures that the HIV-test is carried out only with the consent of the person. The test is not mandatory, but if there were risk behaviours should be carried out.[302]

The Ministry of Health, through the Ministerial Decree 31/03/2008 (published in the Law Journal n. 175 of 28/07/08), established the national surveillance system of the new HIV case infections. Before this meas-

[302] http://www.epicentro.iss.it/problemi/aids/aids.asp#test

ure, only the new AIDS case infections were under mandatory reporting, whereas it wasn't mandatory for the new HIV case infections (under pre-AIDS phase)[303].

The main programme instrument covering health in Italy is the National Health Plan ("Piano Sanitario Nazionale"), revised every two years. The right to health care to all persons present in Italy (regardless of their legal status) existed since 1995, but was formalised in 1998. Therefore, irregular foreigners are guaranteed also for continuous care treatment and preventive care, not only emergency[304].

5.4.7 Currently valid legislation in Lithuania

HBV - HCV

a) Communicable diseases surveillance and prevention and control are regulated by a special law since 1996 called "The Republic of Lithuania Law for Prevention and Control of Communicable Diseases in Humans". The law was amended at the end of 2001 and it sets the general frame for all activities in the field of communicable diseases.
b) Health minister's order No 673 (24-12-2002), on mandatory epidemiologic objects registration, information on content epidemiologic objects registration and information's transmission procedures confirmation and amendments (10-05-2004 NoV-348; 20-01-2005 No V-38; 09-01-2008 No V-10; 28-07-2008 No V-696; 14-11-2008 No V-1110).
c) Health Minister's order No. V-19 (14-01-2008), on the individual notification system from local to the national level for communicable disease and their agents.
d) Law No.67-272 (06-01-2009), on the communicable diseases and AIDS Center provision ratification. The Center organizes communicable diseases epidemiological superintendence in the Republic of Lithuanian: prevention, importation, outspread and control (including HIV/AIDS, Hepatitis and other STI). The Center organizes vaccination programme, prepare methodical recommendation for all concerned institutions and do prevention campaigns. Cooperate with other Ministries and NGO in prophylaxis and prevention.

HIV/AIDS

a) Order of the Minister of Health No. V-117 (25-02-2003), on the epidemiological surveillance of sexually transmitted infections and HIV infection, HIV carriage and HIV.
b) Order by the Ministry of Health No. V-313 (05-03-2004), on the HIV disease and ambulatory treatment compensation methods.
c) Order by Ministry of Health No. 4-108 (01-13-2009), on the financial support for "HIV dependence diseases treatment programmes in 2009-2012 ".

5.4.8 Currently valid legislation in Malta

HBV, HCV, HIV/AIDS

Public Health Act (Chapter 465) No 13, 2003, is the is the principal law of Malta that governs Public Health Regulations with the aim of promoting and protecting the health of the people of Malta. It defines the sanitation laws, infectious disease regulations and regulations regarding public health in general.

[303] http://www.ministerosalute.it/hiv/paginaInternaHiv.jsp?id=198&menu=strumentieservizi
[304] http://ec.europa.eu/health/ph_projects/2004/action1/docs/action1_2004_a07e_09_en.pdf

5.4.9 Currently valid legislation in Poland

HBV - HCV

a) Poland has a long history of prophylactic vaccination against infectious diseases. Hepatitis B vaccination was introduced in Poland between 1989 and 1996 as part of the Expanded Programme on Immunization (EPI) and became instrumental in decreasing the potential for HBV infection (official publication number Dz. U. Nr 126, poz. 1384 with further changes). At that time, vaccination was offered free of charge to high-risk groups: newborns of HBsAg-carrier mothers, health-care workers, medical/nursing schools students and caretakers at institutions for mentally retarded persons. Beginning from 1993 it has been decided that vaccination against VH-B will be obligatory for all newborns. Due to financial constraints, it has been introduced in three phases, and since 1996, all newborns in Poland have been vaccinated.

b) According to recent Vaccination Calendar[305], active immunization is also mandatory for: health care workers at the risk of infection; medical students (high school and university) during the first year of studies; patients with chronic kidney diseases, especially dialyzed patients, and those infected with HCV; patients awaiting planned extracorporeal circulation surgery, and persons coming into close contact with acute VH-B or chronically HBV-infected individuals, HIV infected persons as well as children with acquired immunodeficiency defects.

c) The EPI is also supported by recommended vaccinations in certain groups, who pay for the vaccines. For Hepatitis B, these include chronically ill patients, teenagers who were not yet vaccinated, patients awaiting planned surgery, and those at high risk because of lifestyle or occupation[306].

d) Since there is no prophylactic vaccine available for HCV, control of the infection is concerned on preventing and reducing the burden of HCV by early diagnosis, effective preventing programmes, and appropriate therapy of cases.

e) According to polish rules, in every case of possible blood and organ donors are tested for viral markers of anti-HIV I/II, HBsAg and anti-HCV, introduced in 1991. Organs from the positive donors are not transplanted.

HIV/AIDS

a) The decree of the Council of Ministers from 21-10-1986, AIDS was put on the list of infectious diseases and since then, in accordance with the above mentioned act, any diagnosed AIDS case must be reported to the epidemiology department of the State Hygiene Institute.

b) Ordinance of the Council of Ministers Dz. U. No 189/2005 pos. 1590 (13-09-2005), on combating AIDS in Poland and it is carried out in accordance with a national strategy called the National Programme of Combating AIDS and Preventing HIV Infections. The Programme is a strategic document of national importance which determines state's policy on HIV/AIDS.

c) Healthcare Institutions Act of 30-08-1991 (with amendments). Article 19 paragraph 2, on the right of the patients to give his/her consent to receive certain health services, including HIV antibodies test. It means that HIV tests cannot be done without patient's consent, except blood, tissue and organ donations, when it is this test is obligatory. The present Polish law apart from blood donation and transplantology, as well as criminal proceedings and court warrant, does not allow to perform HIV/AIDS diagnostic procedures without consent or against patient's will. The issue of HIV/AIDS diagnosis is strictly connected with keeping these cases confidential by doctors and hospital staff.

[305] http://www.mz.gov.pl/wwwfiles/ma_struktura/docs/program_szczepien_26082009.pdf, on 11th September 2009.
[306] Slusarczyk, J. (2001); "Vaccination against Hepatitis viruses in Poland", *Vaccine*, 19, 17-19, pp. 2384-2388.

d) Infectious Disease Act of 5-12-2008, on the obligation to report all infectious diseases to the Institute of Public Health in Warsaw. By. The mentioned Infectious Disease Act obliges to treat infectious diseases (including HIV) and provides free treatment. It gives patients aright not to disclose their personal data while making a test.
e) The Medical Profession Act (article 14, item 1), Nurses and Midwifes Profession Act and the existing Code of Medical Ethics (article 23) and the Code of Ethics for Nurses and Midwifes impose strict obligations to keep all medical and official matters confidential. It must be added that in 1998, for the first time in the history of the criminal law, the Polish Criminal Code of June 06, 1997 was amended by a regulation which introduced a punishment for exposing other persons to HIV infection. Art. 161 sec.1 of the Code says: "Whoever, being aware of his/her HIV infection, exposes directly other persons to infection from that disease shall be subject to imprisonment of up to three years".

5.4.10 Currently valid legislation in Romania

HBV - HCV

Acute HBV and HCV viral Hepatitis cases are reported by the attending physician (infectious disease specialist) to the Public Health Authority which insert all data in the local database and then assemble them in the register of the National Institute of Public Health from where the data is transmitted to the National Center of Communicable Diseases Prevention and Control (CCNASHCBI).

HIV/AIDS

a) Law 48/2002, on prevention and disproof of all discrimination forms. In 2004 the law was amended to explicitly include HIV among protected categories. The law provides for a National Council for Combating Discrimination, with powers to investigate complaints, issue small fines, and propose affirmative actions, but thus far use of this mechanism has been limited.
b) Law 519/2002, on the special protection and work frame for persons with disabilities. Article 2 provides for a first degree disability pension for all children and some adults living with HIV/AIDS. In addition to these benefits, under article 17, children living with HIV/AIDS are also eligible to receive double the child allocation, a 50 percent increase of the allocation for children with disabilities, free summer camps once a year, free urban transportation, and twelve free tickets for trains and buses per year.
c) Law 584/2002 on HIV/AIDS prevention and main protection measures for people living with HIV. It guarantees people living with HIV free specialized medical care and free antiretroviral treatment as well as free treatment for diseases associated with HIV. Medical facilities and doctors are obligated to provide care in accordance with their training and the patient's symptoms. Article 7 provides for a nutrition subsidy. People living with HIV are also eligible to apply for benefits for persons with disabilities. Persons infected with HIV or suffering of AIDS are entitled to social protection and non discriminatory treatment in regard of their right to education, including their integration in the formal education system. Arts. 8(4), 8(5) are on "HIV/AIDS persons who know their status are legally responsible for voluntary transmission of the infection if this happened in circumstances that they are responsible for," and "HIV infected persons which do not know their status are not legally responsible if they transmit HIV infection".
d) Law 448/2006 (Equal opportunities for people with disabilities to a society without discrimination), on the protection of disabled persons. The law establishes the general objective of the National Strategy for protection, integration and social inclusion of persons with disabilities. It is providing support for families who have membership in the disabled. The strategy emphasizes the importance of creating a network of services to support independent life in the family in order to prevent institutionalization. Adopting the new legislation was made in agreement with the essential documents of the European Union. It is mainly linked

with the recognition of HIV/AIDS as a disability that entitles the person having a disability certificate to benefit of economic subsidies.

5.4.11 Currently valid legislation in Slovenia

HBV - HCV

a) Law 16/99, on the rules on notification of infectious diseases and specific measures for their prevention and control. This Act defines infectious diseases which are threatening the health of the population of the Republic of Slovenia (hereinafter referred to as infectious diseases), and hospital or nosocomial infection resulting in a causal relation to the provision of health care activities (hereinafter referred to as nosocomial infections) and provides measures for prevention and management. Protecting the population against infectious diseases and nosocomial infections including a system of social, collective and individual actions and measures for their prevention, control, treatment and disposal of their consequences. Here are listed all Infectious diseases for which are carried out the general and specific measures for their prevention and control. Depending of the nature and needs are classified into four groups. It also defines how doctors has to report certain diseases.

b) Health Services Act (Official Gazette 36/04). This act defines what is covered with health activity which includes measures and activities, which according to medical doctrine and with the application of medical technology carry out healthcare workers and other medical staff and collaborators in health protection, prevention, detection and treatment of patients and injured people. This Act regulates the content and the provision of medical care, public health services and the integration of health organizations and health workers in the chambers and associations. Protecting people against the introduction of communicable diseases from abroad reflects the measures imposed by that law, and international health and sanitary conventions and other international treaties concluded by or ratified by the Republic of Slovenia.

c) Resolution on the 2004 - 2009 National programme on drugs control, adopted in 2004. The Resolution on the National Programme in the Field of Drugs (ReNPPD) is a result of current social development and signifies a harmonisation of various sectoral approaches in relation to aims, priority tasks, sources and costs. The ReNPPD takes into account the international legal framework, UN conventions, the provisions of the Council of Europe and European Union and other international treaties and recommendations in various professional fields;

d) Contagious Diseases Act (Official Gazette 33/2006). This Act defines infectious diseases which are threatening the health of the population of the Republic of Slovenia (hereinafter referred to as infectious diseases), and hospital or nosocomial infection resulting in a causal relation to the provision of health care activities (hereinafter referred to as nosocomial infections) and provides measures for prevention and management. Protecting the population against infectious diseases and nosocomial infections including a system of social, collective and individual actions and measures for their prevention, control, treatment and disposal of their consequences. Protecting people against the introduction of communicable diseases from abroad reflects the measures imposed by that law, and international health and sanitary conventions and other international treaties concluded by or ratified by the Republic of Slovenia.

HIV/AIDS

a) The national strategy for prevention and combating HIV infection 2010-2015 has been prepared together with all stakeholders, especially NGOs working in HIV/AIDS prevention. It gives wide range of guidelines for prevention, testing, treatment and protection of human rights of PLWH. Unfortunately is never completely implemented because of lack of resources.

b) The strategy focus on prevention which remains a priority in Slovenia, both in the context of the promotion of sexual and reproductive health (especially among young people) as a strengthening of prevention activities among high-risk groups. It is very important cooperation with NGOs that are active and successful in this field. Active approach is needed to promote voluntary confidential testing for HIV infection among groups that practice behaviours which result in greater risk of infection (particularly men who have sex with men), thus contributing to the earlier identification of infection and timely treatment as early action to prevent transmission of the infection. Continue to be provided access to quality treatment, including counselling for safer sex and to inform and treat sexual partners. De-stigmatisation efforts and combating discrimination must be constant in the control of epidemics. This are the main outlines of this document which is waiting to be approved in the parliament to gain higher political commitment.

c) All patients will receive all necessary prevention, treatment, care and support for free in specialised clinic for infectious diseases. With top confidentiality all patients are treated in one central national point. Cases are reported to IPH without names, files are kept separately, there is no record on electronic card for medical care, so no other medical staff will see and know persons HIV status.

During the drafting of this report we encountered two main difficulties: the lack of updated and targeted available data (especially on Hepatitis B and C) for the whole European Union and, the too different national reporting systems among participating countries. These challenges have been faced thanks to the highest level of all H-CUBE projects partners. The project participating partners are:

Università degli studi di Sassari

(Italy)

Kethea

(Greece)

National AIDS Centre / Krajowe Centrum ds. AIDS

(Poland)

Sex Education Foundation

(Hungary)

Społeczny Komitet ds. AIDS Social AIDS Committee

(Poland)

Associazione Nazionale per la lotta contro l'AIDS Sezione Lombarda

(Italy)

Bulgarian Family Planning and Sexual Health Association

(Bulgaria)

Zdravotní ústav se sídlem v Ústí nad Labem

(Czech Republic)

Lietuvos AIDS centras

(Lithuania)

Open University of Cyprus

(Cyprus)

Ministry for Social Policy

(Malta)

DRUŠTVO ŠKUC

(Slovenia)

Institutul de Virusologie "St.S. Nicolau"

(Romania)

Istituto Europeo per lo Sviluppo Socio Economico

(Italia)

6. TABLES

Table 3.6.6.1 – Annual spread (1999-2008) of AIDS-infection cases by region of residence.

Table 3.6.6.2 – Percentage rate (%) of AIDS cases by age and sex in 1990, 1995, 2005 e in the total of the cases.

Table 3.6.6.3 – AIDS cases spread from the beginning of the epidemic disease, by province reporting and residence, and by incidence rate in 2008 by province of residence.

Table 3.8.2.1 – Prevalence of Hepatitis B according to age groups in Malta in 2002.

Table 3.11.2.1 – Registered HBV cases by age group in 2007.

Table 3.11.3.1 – Registered HCV cases by age group in 2007.

Table 3.11.5.1 – Cumulative number of reported newly diagnose HIV cases (including AIDS cases)* by 31 December 2006 according to age, gender and transmission category.

Table 3.12.1 – General country data.

Table 3.12.2 – Epidemiological country data.

Table 5.1 – Currently country legislation on HBV in each participating country.

Table 5.2 – Currently country legislation on HCV in each participating country .

Table 5.3 – Currently country legislation on HIV/AIDS in each participating country.

7. FIGURES

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ANNEX I

HBV data per province and age in Italy in 2007. Data available in the website of Ministry of Health, URL:http://www.ministerosalute.it/malattieInfettive/datidefcons_malattie.jsp?opt=opt_regioni&contr_anno=no&anni=2007.

Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Region	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
PIEMONTE	2	0	2	4	42	16	3	1	4	0	0	53	21	0	74
VALLE D`AOSTA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
LOMBARDIA	0	0	10	6	182	46	15	6	0	0	0	207	58	0	265
P. A. BOLZANO	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2
P. A. TRENTO	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2
VENETO	1	0	7	4	90	27	9	6	0	0	0	107	37	0	144
FRIULI VENEZIA GIULIA	0	0	0	0	8	1	1	0	0	0	0	9	1	0	10
LIGURIA	0	0	1	1	28	3	0	0	0	0	0	29	4	0	33
EMILIA ROMAGNA	0	1	2	3	59	14	4	4	0	0	0	65	22	0	87
TOSCANA	2	1	4	6	71	16	4	3	0	0	0	81	26	1	108
UMBRIA	0	0	2	0	16	5	1	0	0	0	0	19	5	0	24
MARCHE	0	0	1	0	10	9	1	2	0	0	0	12	11	0	23
LAZIO	0	0	8	4	130	34	3	3	0	0	0	141	41	0	182
ABRUZZO	0	0	0	0	1	3	0	0	0	0	0	1	3	0	4
MOLISE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAMPANIA	0	0	3	4	33	13	2	3	0	0	0	38	20	0	58
PUGLIA	0	0	4	1	15	8	2	1	0	0	0	21	10	0	31
BASILICATA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
CALABRIA	1	0	1	2	8	2	1	3	0	1	0	11	8	0	19
SICILIA	0	0	1	0	12	1	3	1	0	0	0	16	2	0	18
SARDEGNA	0	0	0	0	8	0	2	0	1	0	0	11	0	0	11
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

ABRUZZO															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
CHIETI	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1
L`AQUILA	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1
PESCARA	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1
TERAMO	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
ABRUZZO	0	0	0	0	1	3	0	0	0	0	0	1	3	0	4
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

BASILICATA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
MATERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POTENZA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
BASILICATA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

CALABRIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
CATANZARO	0	0	1	2	6	1	0	0	0	0	0	7	3	0	10
COSENZA	1	0	0	0	0	1	1	1	0	1	0	2	3	0	5
CROTONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R.CALABRIA	0	0	0	0	2	0	0	2	0	0	0	2	2	0	4
V.VALENTIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALABRIA	1	0	1	2	8	2	1	3	0	1	0	11	8	0	19
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

CAMPANIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
AVELLINO	0	0	0	0	2	3	0	0	0	0	0	2	3	0	5
BENEVENTO	0	0	0	0	1	2	0	0	0	0	0	1	2	0	3
CASERTA	0	0	0	0	7	1	0	2	0	0	0	7	3	0	10
NAPOLI	0	0	3	4	19	6	2	0	0	0	0	24	10	0	34
SALERNO	0	0	0	0	4	1	0	1	0	0	0	4	2	0	6
CAMPANIA	0	0	3	4	33	13	2	3	0	0	0	38	20	0	58
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

EMILIA ROMAGNA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
BOLOGNA	0	0	0	0	8	2	1	0	0	0	0	9	2	0	11
FERRARA	0	0	0	1	3	2	0	0	0	0	0	3	3	0	6
FORLI	0	0	0	1	15	1	1	0	0	0	0	16	2	0	18
MODENA	0	1	1	0	11	3	0	1	0	0	0	12	5	0	17
PARMA	0	0	0	0	3	3	0	2	0	0	0	3	5	0	8
PIACENZA	0	0	1	1	4	1	2	0	0	0	0	7	2	0	9
RAVENNA	0	0	0	0	4	0	0	0	0	0	0	4	0	0	4
R.EMILIA	0	0	0	0	3	0	0	0	0	0	0	3	0	0	3
RIMINI	0	0	0	0	8	2	0	1	0	0	0	8	3	0	11
E.ROMAGNA	0	1	2	3	59	14	4	4	0	0	0	65	22	0	87
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

FRIULI VENEZIA GIULIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
GORIZIA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
PORDENONE	0	0	0	0	3	0	1	0	0	0	0	4	0	0	4
TRIESTE	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
UDINE	0	0	0	0	3	1	0	0	0	0	0	3	1	0	4
F.VEN.GIULIA	0	0	0	0	8	1	1	0	0	0	0	9	1	0	10
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

LAZIO															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N	TOT.
FROSINONE	0	0	1	0	17	3	0	0	0	0	0	18	3	0	21
LATINA	0	0	0	0	7	2	0	0	0	0	0	7	2	0	9
RIETI	0	0	0	0	3	0	0	0	0	0	0	3	0	0	3
ROMA	0	0	7	4	99	29	3	3	0	0	0	109	36	0	145
VITERBO	0	0	0	0	4	0	0	0	0	0	0	4	0	0	4
LAZIO	0	0	8	4	130	34	3	3	0	0	0	141	41	0	182
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

LIGURIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N	TOT.
GENOVA	0	0	0	1	6	2	0	0	0	0	0	6	3	0	9
IMPERIA	0	0	1	0	4	0	0	0	0	0	0	5	0	0	5
LA SPEZIA	0	0	0	0	14	1	0	0	0	0	0	14	1	0	15
SAVONA	0	0	0	0	4	0	0	0	0	0	0	4	0	0	4
LIGURIA	0	0	1	1	28	3	0	0	0	0	0	29	4	0	33
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

LOMBARDIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
BERGAMO	0	0	0	1	10	5	1	1	0	0	0	11	7	0	18
BRESCIA	0	0	1	0	17	7	1	0	0	0	0	19	7	0	26
COMO	0	0	0	1	13	3	2	1	0	0	0	15	5	0	20
CREMONA	0	0	1	0	5	2	0	0	0	0	0	6	2	0	8
LECCO	0	0	1	0	5	0	0	0	0	0	0	6	0	0	6
LODI	0	0	1	1	3	0	0	0	0	0	0	4	1	0	5
MANTOVA	0	0	0	0	3	2	0	0	0	0	0	3	2	0	5
MILANO	0	0	4	0	103	22	8	3	0	0	0	115	25	0	140
PAVIA	0	0	0	0	13	2	1	0	0	0	0	14	2	0	16
SONDRIO	0	0	0	1	2	0	0	0	0	0	0	2	1	0	3
VARESE	0	0	2	2	8	3	2	1	0	0	0	12	6	0	18
LOMBARDIA	0	0	10	6	182	46	15	6	0	0	0	207	58	0	265
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

MARCHE															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
ANCONA	0	0	0	0	3	3	1	0	0	0	0	4	3	0	7
ASCOLI PICENO	0	0	0	0	2	3	0	0	0	0	0	2	3	0	5
MACERATA	0	0	1	0	5	1	0	2	0	0	0	6	3	0	9
PES. URBINO	0	0	0	0	0	2	0	0	0	0	0	0	2	0	2
MARCHE	0	0	1	0	10	9	1	2	0	0	0	12	11	0	23
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

MOLISE															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
CAMPOBASSO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISERNIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MOLISE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

PIEMONTE															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N	M	F	N.N.	TOT.
ALESSANDRIA	0	0	1	0	6	1	0	0	0	0	0	7	1	0	8
ASTI	0	0	0	0	4	0	0	0	0	0	0	4	0	0	4
BIELLA	0	0	0	0	1	1	0	0	0	0	0	1	1	0	2
CUNEO	0	0	0	0	7	2	1	0	0	0	0	8	2	0	10
NOVARA	0	0	0	0	13	1	1	1	0	0	0	14	2	0	16
TORINO	2	0	1	4	9	8	1	0	4	0	0	17	12	0	29
VCO	0	0	0	0	1	1	0	0	0	0	0	1	1	0	2
VERCELLI	0	0	0	0	1	2	0	0	0	0	0	1	2	0	3
PIEMONTE	2	0	2	4	42	16	3	1	4	0	0	53	21	0	74
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

TRENTINO-ALTO ADIGE															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N	M	F	N.N.	TOT.
P. A. BOLZANO	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2
P. A. TRENTO	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

PUGLIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
BARI	0	0	3	1	7	5	0	1	0	0	0	10	7	0	17
BRINDISI	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
FOGGIA	0	0	1	0	4	1	1	0	0	0	0	6	1	0	7
LECCE	0	0	0	0	3	1	0	0	0	0	0	3	1	0	4
TARANTO	0	0	0	0	1	1	0	0	0	0	0	1	1	0	2
PUGLIA	0	0	4	1	15	8	2	1	0	0	0	21	10	0	31
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

SARDEGNA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
CAGLIARI	0	0	0	0	3	0	0	0	0	0	0	3	0	0	3
NUORO	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
ORISTANO	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
SASSARI	0	0	0	0	4	0	1	0	1	0	0	6	0	0	6
SARDEGNA	0	0	0	0	8	0	2	0	1	0	0	11	0	0	11
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

SICILIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N	TOT
AGRIGENTO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALTANISSETTA	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2
CATANIA	0	0	0	0	1	0	1	0	0	0	0	2	0	0	2
ENNA	0	0	0	0	2	0	0	0	0	0	0	2	0	0	2
MESSINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PALERMO	0	0	0	0	4	0	2	1	0	0	0	6	1	0	7
RAGUSA	0	0	0	0	3	0	0	0	0	0	0	3	0	0	3
SIRACUSA	0	0	0	0	1	1	0	0	0	0	0	1	1	0	2
TRAPANI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SICILIA	0	0	1	0	12	1	3	1	0	0	0	16	2	0	18
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

TOSCANA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
AREZZO	0	0	0	1	2	0	0	0	0	0	0	2	1	0	3
FIRENZE	0	1	0	1	11	7	0	1	0	0	0	11	10	0	21
GROSSETO	0	0	0	2	2	0	0	0	0	0	0	2	2	0	4
LIVORNO	0	0	2	0	7	0	3	0	0	0	0	12	0	1	13
LUCCA	1	0	0	0	11	1	1	1	0	0	0	13	2	0	15
M. CARRARA	0	0	1	1	8	3	0	1	0	0	0	9	5	0	14
PISA	1	0	0	0	9	3	0	0	0	0	0	10	3	0	13
PISTOIA	0	0	0	0	4	0	0	0	0	0	0	4	0	0	4
PRATO	0	0	1	1	13	0	0	0	0	0	0	14	1	0	15
SIENA	0	0	0	0	4	2	0	0	0	0	0	4	2	0	6
TOSCANA	2	1	4	6	71	16	4	3	0	0	0	81	26	1	108
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

UMBRIA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
PERUGIA	0	0	0	0	12	2	1	0	0	0	0	13	2	0	15
TERNI	0	0	2	0	4	3	0	0	0	0	0	6	3	0	9
UMBRIA	0	0	2	0	16	5	1	0	0	0	0	19	5	0	24
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

VALLE D`AOSTA															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
VALLE D`AOSTA	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097

VENETO															
Age	0-14		15-24		25-64		>=65		AGE UNKNOWN			TOTAL			
Province	M	F	M	F	M	F	M	F	M	F	N.N.	M	F	N.N.	TOT.
BELLUNO	0	0	0	0	5	0	0	2	0	0	0	5	2	0	7
PADOVA	0	0	0	0	9	2	2	0	0	0	0	11	2	0	13
ROVIGO	0	0	0	0	3	1	0	1	0	0	0	3	2	0	5
TREVISO	0	0	2	1	32	7	5	2	0	0	0	39	10	0	49
VENEZIA	0	0	4	3	22	11	1	0	0	0	0	27	14	0	41
VERONA	0	0	0	0	14	5	1	1	0	0	0	15	6	0	21
VICENZA	1	0	1	0	5	1	0	0	0	0	0	7	1	0	8
VENETO	1	0	7	4	90	27	9	6	0	0	0	107	37	0	144
ITALY	6	2	46	35	719	198	51	33	5	1	0	827	269	1	1097