

# **IMPACT OF VHPB MEETING IN BULGARIA (Sofia, 24-25 March 2011)**

***PREVENTION AND CONTROL  
OF VIRAL HEPATITIS IN LATIN AMERICA AND BRAZIL,  
LESSONS LEARNED AND THE WAY FORWARD***

***BRASILIA, BRAZIL, 19-21 MARCH 2014***



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# BULGARIA – BACKGROUND



## BULGARIA



NATIONAL CENTRE OF INFECTIOUS AND PARASITIC DISEASES, BULGARIA

# BULGARIA – BACKGROUND

## Population and demographic processes in 2012

### Population

7,284,552 (31 December 2012)

### Age structure (2012)

0-14 years 13.4% ▼

15-24 years 11.4% ▼

25-49 years 35.1% ▲

50-64 years 21.3 % ▲

65 years and over 18.8% ▲

### Median age

42.8 years ▲

### Birth rate

69,121 newborns in 2012

9.5 births per 1,000 population

### Death rate

15.0 deaths per 1,000 population

### Infant mortality rate

7.8 per 1,000 live births

### Life expectancy

74.0 years ♂ 70.9 years ♀ 77.9 years

### Population growth rate

-5.5 per 1,000

Source *National Statistical Institute*: <http://www.nsi.bg/>





NATIONAL CENTRE OF INFECTIOUS AND PARASITIC DISEASES, BULGARIA

# **WHY ORGANIZE THE VHPB MEETING IN BULGARIA?**



# HEPATITIS EPIDEMIOLOGICAL DATA

## 1. Hepatitis B in Bulgaria

- Bulgaria is a country in an area of intermediate endemicity of Hepatitis B, with 3-5% HBV carrier prevalence and more than 30% of the population with serological evidence of HBV infection.

## 2. Hepatitis A in Bulgaria

- Hepatitis A is the most common type viral hepatitis in Bulgaria, accounting to more than 75% of all cases of viral hepatitis. Bulgaria is a country with intermediate endemicity of HAV infection with incidence rate varying from 27.3 – 80.1 to 233.6 per 100,000 population during the epidemic periods. Very low case-fatality rate with 0 to 2 deaths reported annually.

## 3. Hepatitis C in Bulgaria

- Bulgaria is a country with low to intermediate endemicity for hepatitis C with incidence rate of acute cases varying from 0.8 to 1.8 per 100,000 population and 1.2 to 1.4 % of the general population with serological evidence of HCV infection.

**All acute cases of VH infection clinically manifested with jaundice as well as all laboratory positive cases are subject to mandatory notification in Bulgaria. The EU case definition<sup>1</sup> and case classification have been adopted since 2005; since 8 July 2011, the EU case definitions of 2008 are applied.<sup>2</sup>**

<sup>1</sup>COMMISSION DECISION of 19 March 2002 laying down case definitions for reporting communicable diseases to the Community network under Decision No 2119/98/EC of the European Parliament and of the Council (notified under document number C(2002) 1043) 2002/253/EC)

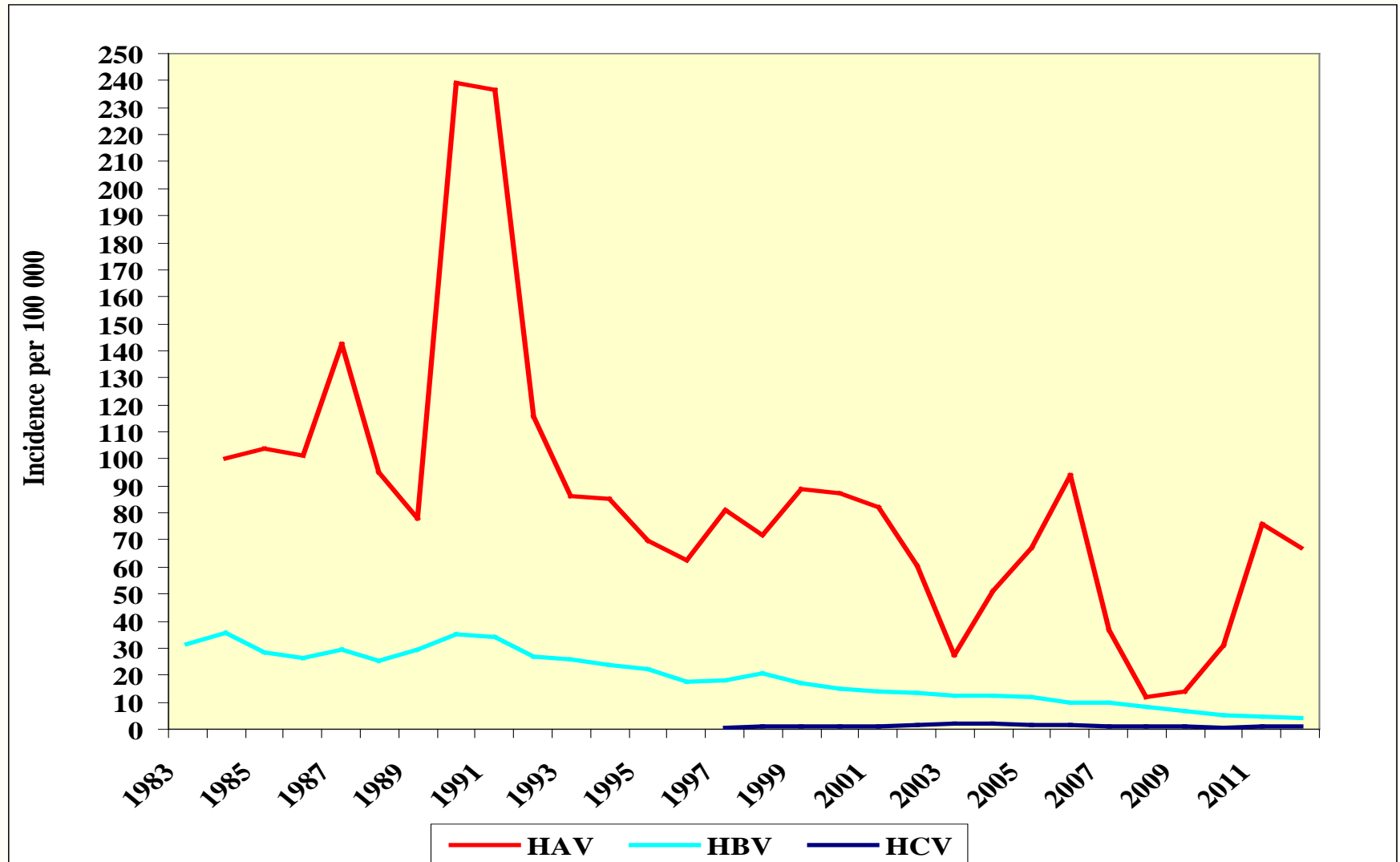
<sup>2</sup>COMMISSION DECISION of 28/IV/2008 amending Decision 2002/253/EC laying down case definitions for reporting communicable diseases to the Community network under Decision No2119/98/EC of the European Parliament and of the Council (Text with EEA relevance)

# BULGARIA – BACKGROUND

## VIRAL HEPATITIS (Number of cases and incidence per 100,000)

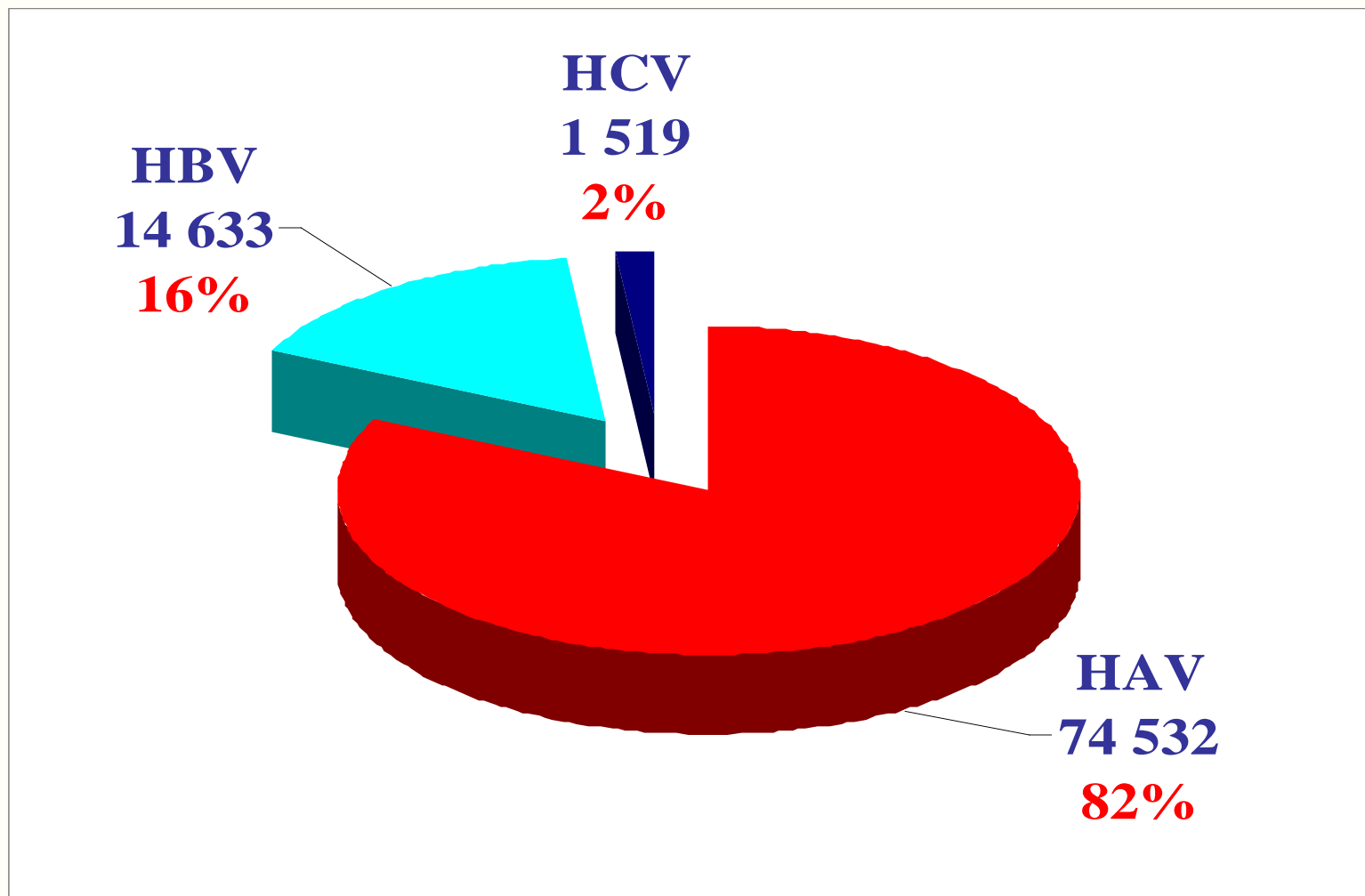
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Hepatitis A</b>														
Cases	7119	6485	4753	2155	3990	5225	7266	2800	908	1064	2350	5588	4919	1825
Incidence	86,9	79,6	60,2	27,5	51,2	67,3	94,1	36,4	11,9	14,0	31,1	75,9	67,1	25,1
<b>Hepatitis B</b>														
Cases	1230	1134	1074	965	969	940	773	753	624	504	387	344	322	302
Incidence	15,0	13,9	13,6	12,3	12,4	12,1	10,0	9,8	8,2	6,6	5,1	4,7	4,4	4,2
<b>Hepatitis C</b>														
Cases	88	103	131	145	146	106	121	98	89	93	58	60	92	95
Incidence	1,1	1,3	1,7	1,8	1,9	1,4	1,6	1,3	1,2	1,2	0,8	0,8	1,3	1,3

# INCIDENCE OF HAV, HBV AND HCV IN BULGARIA, 1983-2012

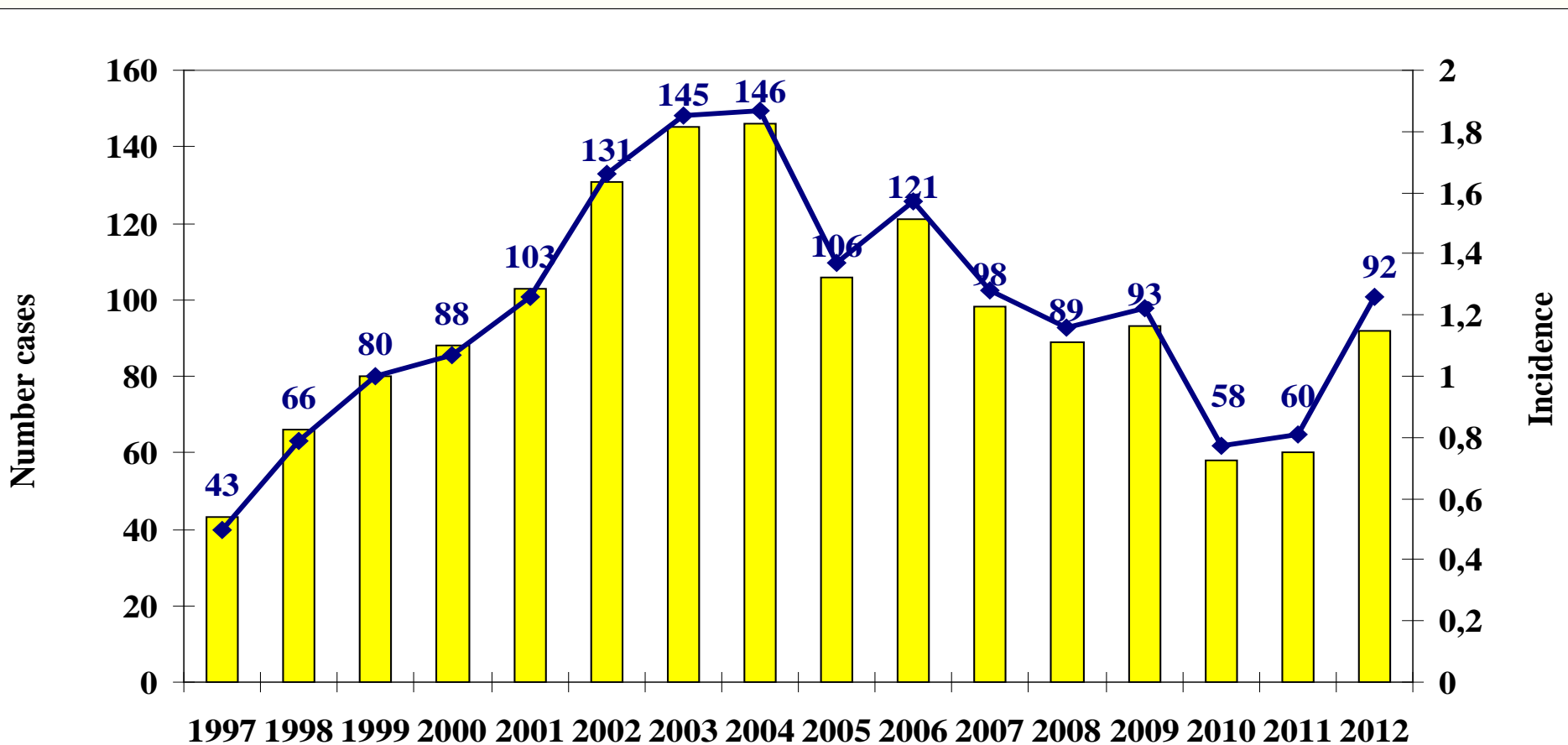




# NUMBER OF HAV, HBV AND HCV CASES IN BULGARIA, 1997-2012



# NUMBER OF CASES AND INCIDENCE RATE PER 100000 POPULATION OF ACUTE HCV IN BULGARIA, 1983-2012



# HEPATITIS B IMMUNIZATION IN BULGARIA

**HBV Vaccines used:** Recombinant DNA vaccines

**Immunization Schedule:** 0 – 1 – 6

At birth → 1 month of age → 6 months of age  
(within 24 hours)

**Immunization strategy:**

- 1983 – 1987 No immunization
- January 1988 – July 1991 Selective immunization of newborns to HBsAg - positive mothers
- August 1991 Start of the universal newborn immunization
- 1992 up to date Routine universal newborn HBV immunization

# **BURDEN AND PREVENTION OF VIRAL HEPATITIS IN BULGARIA**

*SOFIA, MARCH 24-25, 2011*

## **Objectives of the meeting:**

- Provide an overview of surveillance systems for infectious diseases;
- Review the epidemiological situation on viral hepatitis;
- Give an overview of the current prevention and control measures on viral hepatitis;
- Discuss the progress achieved in hepatitis prevention 20 years after the introduction of Universal Hepatitis B vaccination;
- Review the possible implementation of new prevention strategies, control measures and monitoring systems;
- Discuss the successes, problems and barriers to overcome, and the way forward.



# AGENDA OF MEETING

- A total of 24 presentations at the VHPB meeting in Bulgaria.
- All are available on the VHPB website: [www.vhpb.org](http://www.vhpb.org)

1.	Impact of the Hepatitis Resolution adopted by the World Health Assembly (WHA 63.18)
2.	Organisation and funding of the health system in Bulgaria National immunisation program Overview of communicable disease surveillance system in Bulgaria Healthcare Policy for vulnerable groups, especially Roma in Bulgaria Concept of health mediators – history, job description and mediator’s activities
3.	Epidemiology of viral hepatitis in Bulgaria Molecular epidemiology of HBV and HCV Phylogenetic reconstruction of two large HAV outbreaks occurring simultaneously in different regions in Bulgaria Seroepidemiological study on HBV and HCV prevalence in Bulgaria Hepatitis A in city of Plovdiv in 2006 – outbreak investigation and control measures

4.	<p>Viral hepatitis and surveillance in Blood bank in Bulgaria</p> <p>IDU risk group and viral hepatitis</p> <p>Sero-epidemiology of viral hepatitis in haemodialysis and control measures</p> <p>Health care-associated viral hepatitis C</p>
5.	<p>Quality of life of patients with HBV infection – case study.</p> <p>Viral hepatitis – The patients’ impact in Bulgaria (Hepasist)</p>
6.	<p>Clinical aspects of viral hepatitis</p> <p>Treatment and laboratory monitoring of chronic hepatitis patients in Bulgaria</p>
7.	<p>National Hepatitis B vaccination programme: cost-benefit assessment of introduction of universal HBV vaccination of newborns in Bulgaria</p> <p>Epidemiological effectiveness of the universal newborn HBV vaccination: 20 years after</p> <p>Economic analysis of the universal HBV vaccination 20 years after introduction</p>
8.	<p>Protection of medical staff through hepatitis B vaccination: serological and epidemiological data from hospitals in Bulgaria</p> <p>Our experience in prevention by selective immunization against viral hepatitis A and B of the staff of Military Medical Academy – Bulgaria</p>

# IMPACT OF THE VHPB MEETING

- Initiative and support for organizing a meeting of all national stakeholders – health care and public health professionals with different fields of expertise, policymakers and opinion leaders, WHO, Non governmental organizations (NGOs), Patients Associations:
  - » Discussions
  - » Exchange of information;
- Bringing together national experts and international specialists to examine and discuss the broad spectrum of problems, related to viral hepatitis (surveillance, prevention and control, treatment, vaccination of population at risk etc.);
- Thanks to the questions asked by international participants from VHPB, we were able to see the big picture appearing from the many details;
- The presence of the VHPB members was indeed a kind high-level advocacy, essential to promote and prioritize the problems related to the VH and to raise the priority given to hepatitis by the policymakers (MoH, Parliament), ensuring the essential political support;
- Publications;
- Important recommendations, some of them already implemented.

# THE MAIN CONCLUSIONS AND RECOMMENDATIONS OF THE MEETING

- Innovative ways need to be found to extend the coverage of routine immunization programmes in order to reach vulnerable populations, e.g. Roma children (approaches for bringing routine immunization programmes closer to vulnerable populations, building on successful models, such as the health mediator concept);
- Questions about the documentation and validation of vaccination coverage data;
- More analysis and interpretation of the available data, with greater application of the conclusions to policy-making;
- Vulnerability to infection of numerous health-care staff, as well as the lack of protection of many medical and nursing students. Need for clear guidance and for health education regarding vaccination of medical and nursing students and health-care workers;
- Mandate should be given to infection-control teams, for leadership in training. Education about standard precautions should start during training at universities;
- Public health experts, epidemiologists and vaccinologists, gastroenterologists, liver specialists, infectious disease specialists, internists, general practitioners, other experts and civil society should be closely involved in the decision-making process, coordinating policies and programmes on viral hepatitis.



# RESULTS (1)

1. Round table discussion in the National Assembly;
2. Conception about a National hepatitis programme elaborated;
3. National Plan for prevention, screening, early diagnosis and treatment of viral hepatitis in Bulgaria (prepared and pending for approval at present)
  - National awareness and communication strategy (annex to the National Plan);
4. **Medical standard on prevention and control of health-care-associated infections** - Regulation No 3 of 8 May 2013 for approval of medical standard on prevention and control of health-care-associated infections. Issued by the Ministry of Health, State Gazette No 43 of 14 May 2013;
5. Several national meetings "Initiative for Health and Vaccination" with Roma NGOs, the National Network of Health Mediators, GOs and public health officers;

# RESULTS (2)

## 6. ECDC project "**Let's talk about protection**":

- Practical guide for HCPs and HMs
- Presentation for parents

Translated and culturally adapted materials – simple language, graphics and pictures explaining the benefits and risks from immunization; answers to the most popular concerns that parents have towards vaccination.

Implemented by the National Network of Health Mediators and NCIPD for facilitating the communication between HCPs, HMs and parents on the topic of vaccination.

## 7. A new Programme BG 07 "Public Health Initiatives", financed under the Norwegian Financial Mechanism and EEA Financial Mechanism, 2009-2014. Awarded grant for the implementation of project: "**Improvement of surveillance of vaccine-preventable diseases: National web-based immunization register**"

# VH PREVENTION & CONTROL IN BULGARIA

- HBV universal newborn immunization
- Prevention measures in blood transfusion
- Haemodialysis patients – standard precautions and specific preventive measures, HBV immunization
- Health-care workers – prevention of exposure, awareness raising, information and training, HBV immunization for health-care workers, medical and nursing students
- Injecting drug users – testing, awareness raising, treatment of addiction and harm-reduction activities
- Patients' associations – informing the general population about hepatitis, including testing and prevention:
  - <http://www.npo.bg/>
  - <http://www.hepactive.org/welcome>
  - [www.hepasist.org](http://www.hepasist.org)
- European immunization week, World Hepatitis Day – informing general population
- Collaboration with Roma Health Mediators

# CUMULATIVE NUMBER OF IMMUNIZED WITH HBV VACCINE NEWBORNS AND HEPATITIS B INCIDENCE IN CHILDREN 0-14 AND 15-19 YEARS OF AGE IN BULGARIA IN 2012

