## HEPATITIS B VACCINATION IN ROMANIA

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## NATIONAL IMMUNIZATION PROGRAMME

- Is part of National Programme of Communicable Diseases
- It is founded from a state budget and ensures free of charge vaccination of all children, from birth to 15 years old

Objectives:

Protection of population health against the main communicable disease which are preventable through vaccination:

- according to the population ages mentioned into the national schedule
- of risk groups population





## HISTORICAL DATA ON HBV

- In the early 1990s, Romania had a high incidence of over 30 cases of hepatitis B per 100,000 population.
- The disease represented a serious public health problem, especially with regard to children.
- During the 1990s, public health measures were introduced such as the enforcement of the use of single use needles and a routine vaccination programme for children and health workers.





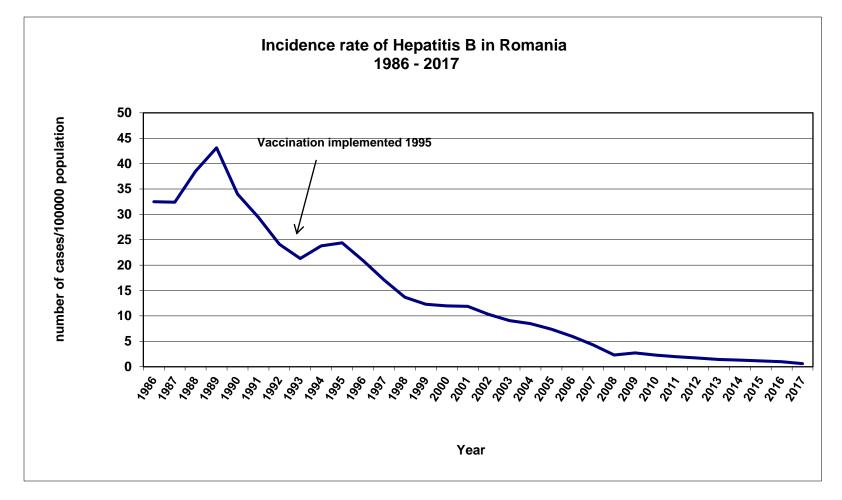
## **HEPATITIS B VACCINATION IN ROMANIA**

- Vaccination against hepatitis B has been introduced in Romania in 1995.Vaccination scheme comprises 3 doses: at the birth (the first 24 hours), at 2 months age and at 6 months age
- In 1999 vaccination against hepatitis B was extended to 9 years old children (3<sup>rd</sup> class of primary school) as well as students from the 1st year of faculty/college (students from the 1st year of Medicine and Stomatology faculties, respectively sanitary schools)
- In 2003 vaccination at 18 years old in high schools





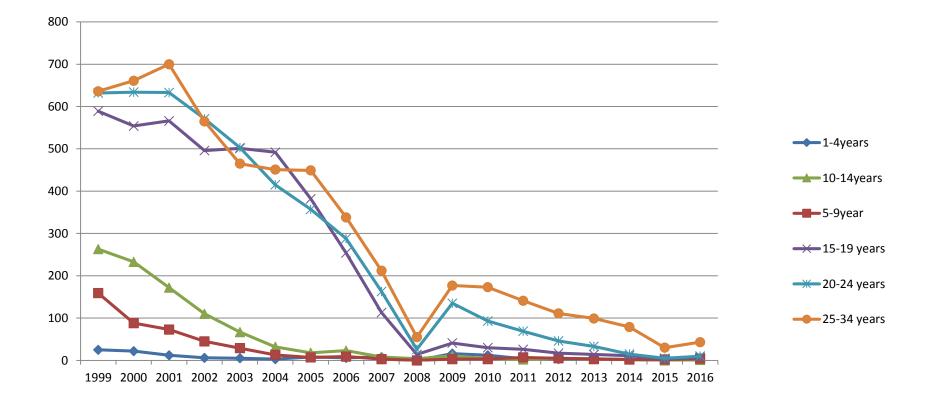
#### THE NATURAL HISTORY OF VIRAL HEPATITIS B INFECTION IN ROMANIA 1989 - 2016







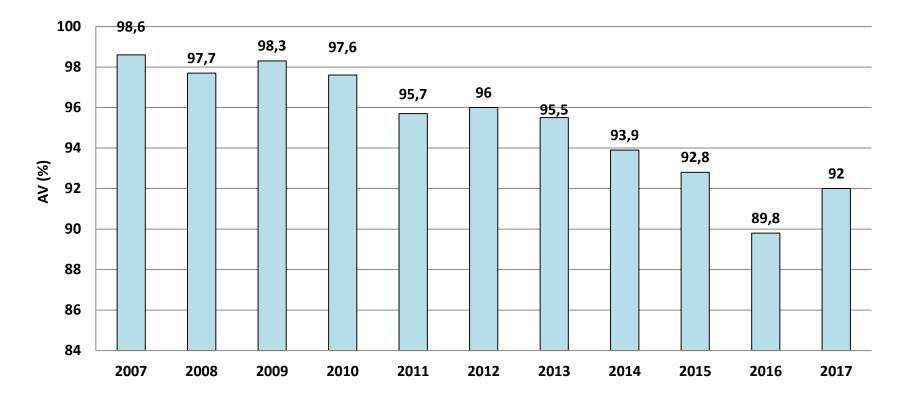
#### No. of HBV cases age group 1-34 years Romania, 1999-2016







## VACCINATION COVERAGE (VC%) WITH 3 DOSES OF HEPATITIS B VACCINE







#### CURRENT NATIONAL IMMUNIZATION PROGRAMME I. Vaccination according to the population ages mentioned into the national schedule

AGE RECOMMENDED	VACCINATION TYPE	COMMENTS		
First 24 hours of life 2-7 days age	Hepatitis B vaccine Calmette Guerrin vaccine (BCG)	In maternity		
2 months age	Diphtheria–Tetanus-acellular Pertussis-Poliomyelitis-Hepatitis B- Haemophilus infl. B vaccine (DTaP-IPV-HepB-Hib) Pneumococcal conjugated vaccine	Family doctors		
4 months age	Diphtheria–Tetanus-acellular Pertussis-Poliomyelitis-Hepatitis B- Haemophilus infl. B vaccine (DTaP-IPV-HepB-Hib) Pneumococcal conjugated vaccine	Family doctors		
11 months age	Diphtheria–Tetanus-acellular Pertussis-Poliomyelitis-Hepatitis B- Haemophilus infl. B vaccine (DTaP-IPV-HepB-Hib) Pneumococcal conjugated vaccine	Family doctors		
12 months age	Measles-Mumps-Rubella vaccine (MMR)	Family doctors		
5 years age	Measles-Mumps-Rubella vaccine (MMR)	Family doctors		
6 years age	Diphtheria–Tetanus-acellular Pertussis-Poliomyelitis (DTaP – IPV)	Family doctors		
14 years age	Diphtheria–Tetanus vaccine for adults (dT)/Diphtheria– Tetanus-acellular Pertussis vaccine for adults (dTap)	Family doctors		





# Hepatitis B vaccination of risk group population

- It is recommended free of charge to contacts of HBV infection cases, supported by the programme
- No official recommendation for other risk categories as: dialysis, i.v. drugs users, MSM, prostitutes, etc
- For health personnel this type of vaccination and in case of accidental exposure to biological products is ensured from the hospital funds





### **VACCINATION ACTIVITIES PROVIDERS**

Private system – out of pocket

Public system:

- $\checkmark$  Maternity hospitals in the first 24 hours after birth
- ✓Family doctors in combined hexavalent vaccines
- ✓ Neonatologists and pediatricians in combined hexavalent vaccines – out of pocket
- ✓ Other categories of medical doctors for adults out of pocket





## ANTENATAL SCREENING

- AgHBs screening tests are offered free of charge, supported by the health insurance funds
- There not enough coverage of pregnant women (aprox. 60%)
- The data are not monitored in order to inform the public health policy
- Specific immunoglobulins for newborns from positive mothers are not covered by the insurance fund





## Sero-prevalence study results, Romania, 2013 – Hepatitis B Virus infection's markers

	HBc Ab		HBs Ag		HBs Ab (<10/≥10mUI/ml)		HBs Ab (≥10mUI/ml)		
	N	%	Ν	%		Ν	%	Ν	%
Overall	911	27.9	138		4.2	2094	64.1	1138	34.9
Age group:									
0-4 years	17	5.6	1		0.3	270	89.1	184	60.7
6-11months	3	4.3							
5-14 years	12	3.9	1		0.3	238	78.0	85	27.9
15-24 years	35	11.0	17		5.3	230	72.3	122	38.4
25-34 years	129	22.4	25		4.3	328	56.9	186	32.3
35-44 years	148	25.5	36		6.2	293	50.4	132	22.7
45-64 years	274	46.4	36		6.1	352	59.6	202	34.2
≥65 years	296	50.1	22		3.7	383	64.8	227	38.4





## CONCLUSIONS

- The HBV vaccination program decreased the prevalence of HBV from 8 to 4%
- Shortage of HB vaccine can affect the decrease trend so there is a need for sustainability
- High risk population groups must be covered from the insurance fund
- Screening data must be use by the public health in order to inform health policy



