



Hepatitis situation in the Republic of Serbia

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**Prevention and control of Viral Hepatitis in Albania and the neighbouring
countries: lessons learnt and the way forward**

Tirana, October 2016



LEGISLATION in the Republic of Serbia:

- Health Protection Law (2005,2009, 2010, 2011, 2012, 2013,2014,2015)
- Law on Protection of Population Against Infectious Diseases (2016)
- Program on Protection of Population Against Infectious Diseases (2016)
- Regulation about Immunization and Ways of Protecting Drugs(2006,2013,2014,2015)

The estimated **POPULATION** of the Republic of Serbia in 2015 is **7,095,383**:

- 3,455,335 males
- 3,640,048 females



HEPATITIS PREVALENCE/INCIDENCE IN THE REPUBLIC OF SERBIA IN 2015



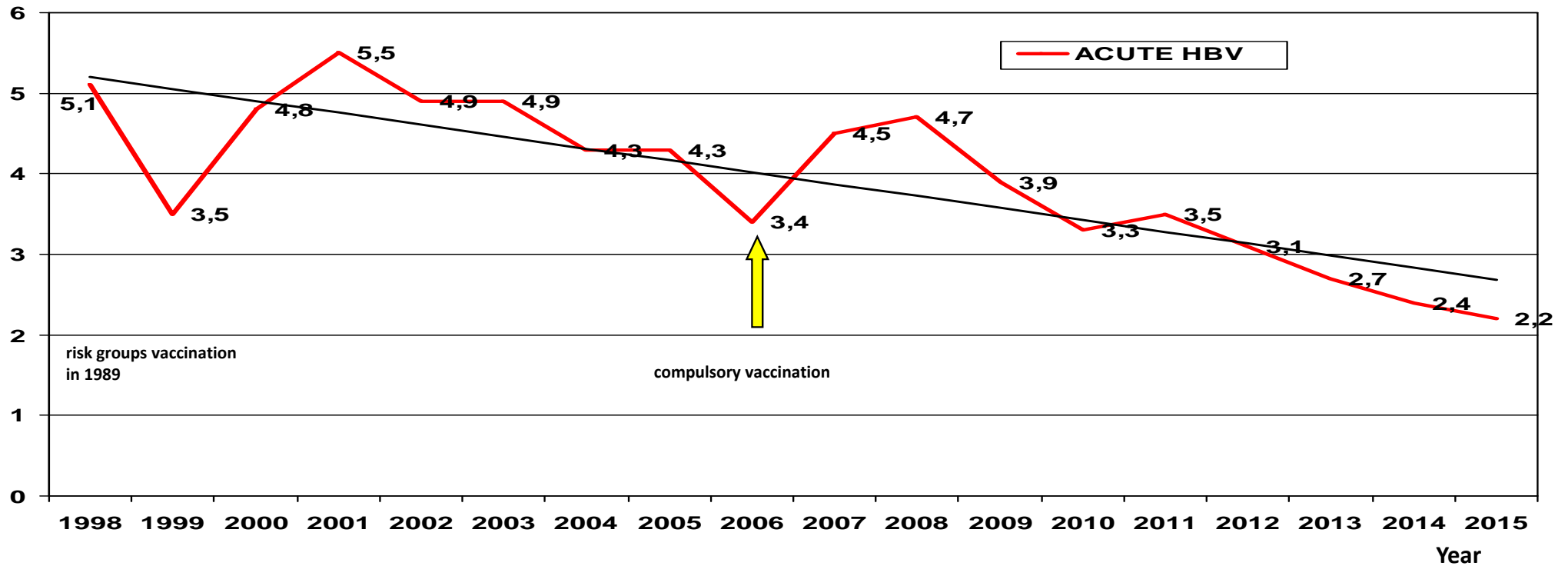
	Hep A	Hep B (HBsAg)	Hep D	Hep C	Hep E
General population	1.18 (Inc./ 100.000)	- 2.2 (Inc./ 100.000) - Estimated prevalence is less than 1%	-	- 1.04 (Inc./ 100.000) Estimated prevalence is less than 1%	0.06 (Inc./ 100.000)
Blood donors		0.06 (Prev./ 100.000)		0.05 (Prev./ 100.000)	
Pregnant women		0.2 (Prev./ 100.000)		0.4 (Prev./ 100.000)	
IDU		1.18 (Prev./ 100.000)		38.3 (Prev./ 100.000)	
MSM		2.2 (Prev./ 100.000)		1.2 (Prev./ 100.000)	
Haemodialysis patients		1.4 (Prev./ 100.000)		4.4 (Prev./ 100.000)	
Migrants		-		-	
Healthcare workers		0.50 (Prev./ 100.000)		0.34 (Prev./ 100.000)	
Sex partner		14.0 (Prev./ 100.000)		3,79 (Prev./ 100.000)	



INCIDENCE OF ACUTE HBV, REPUBLIC OF SERBIA, 1998-2015



Rate (per 100,000)



SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 1998-2015



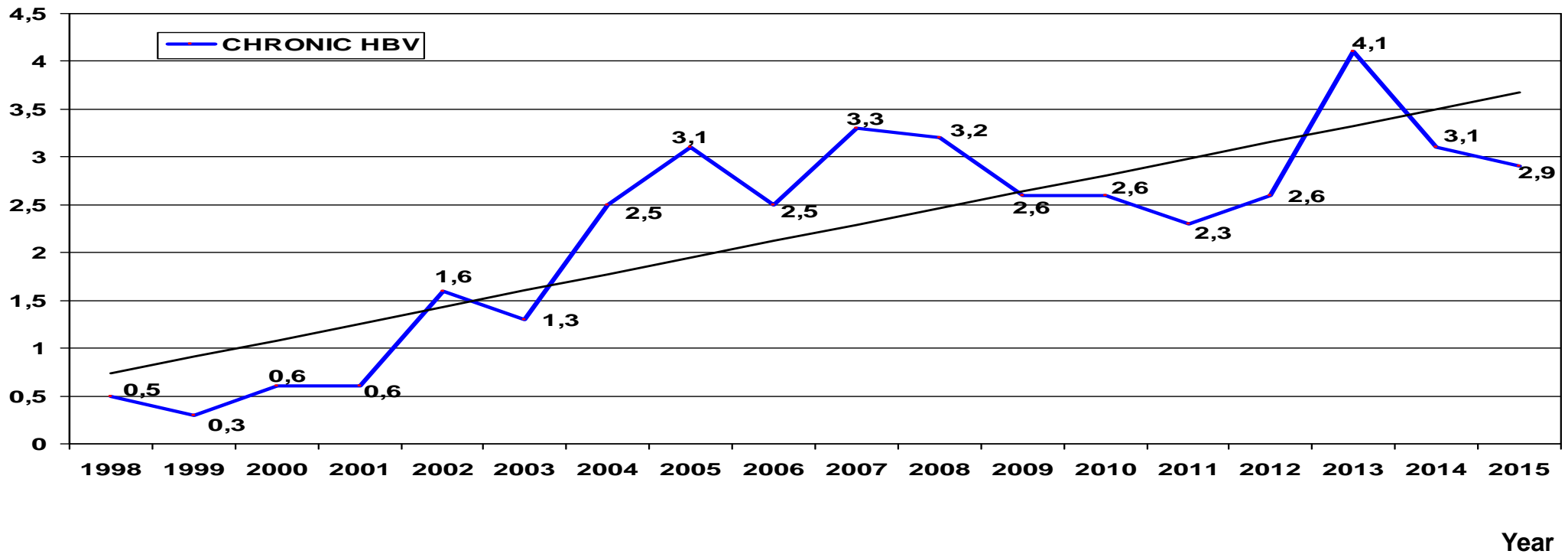
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INCIDENCE OF CHRONIC HBV, REPUBLIC OF SERBIA 1998-2015



Rate (per 100,000)



SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 1998-2015



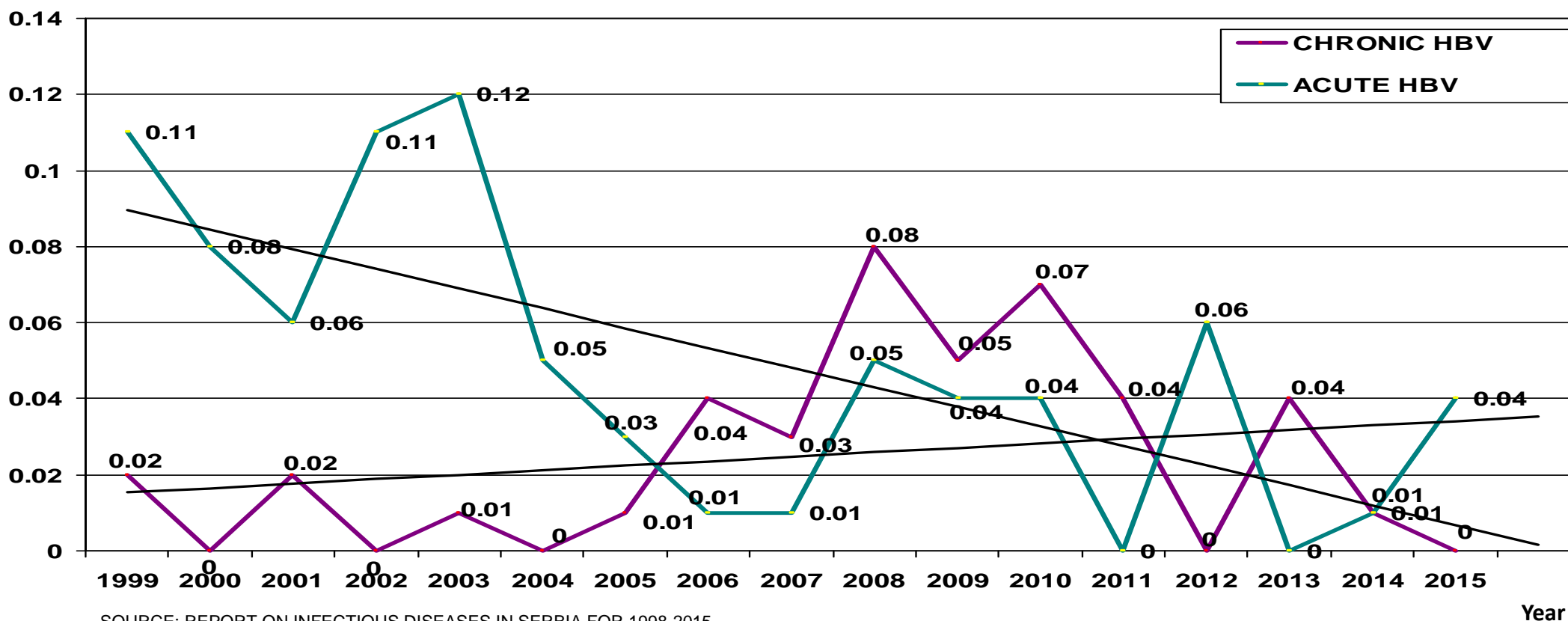
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MORTALITY OF ACUTE AND CHRONIC HBV, REPUBLIC OF SERBIA, 1999-2015



Rate (per 100,000)



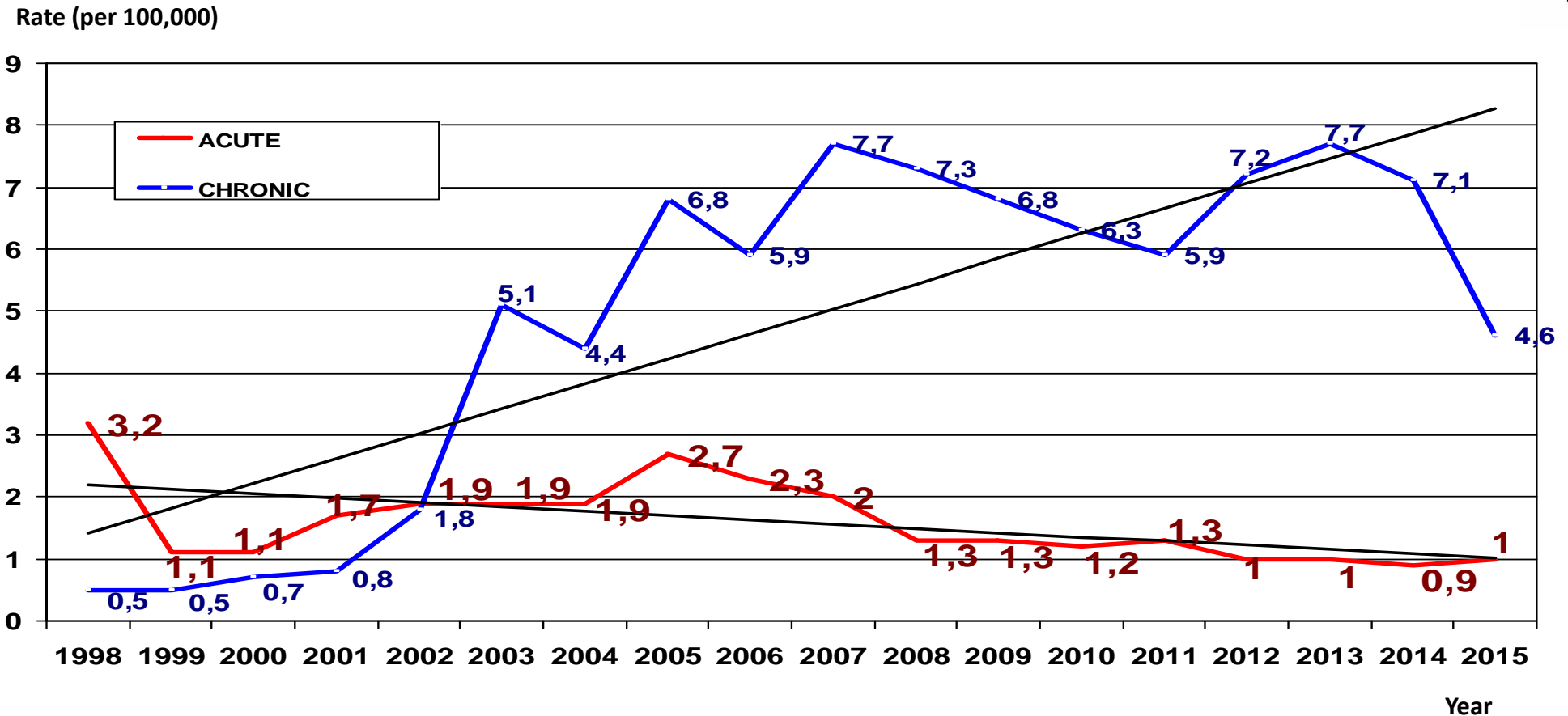
SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 1998-2015



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INCIDENCE OF ACUTE AND CHRONIC HCV , REPUBLIC OF SERBIA, 1998-2015



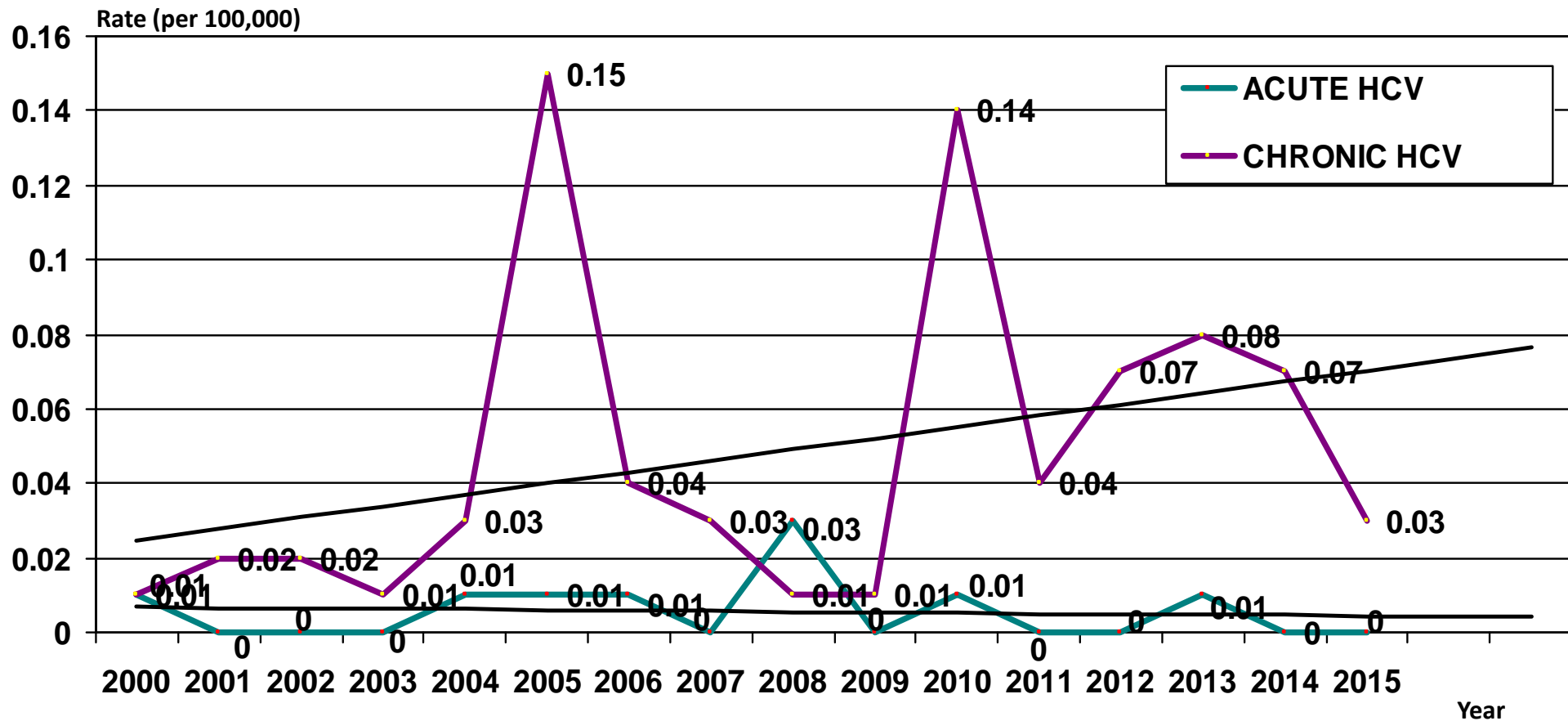
SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 1998-2015



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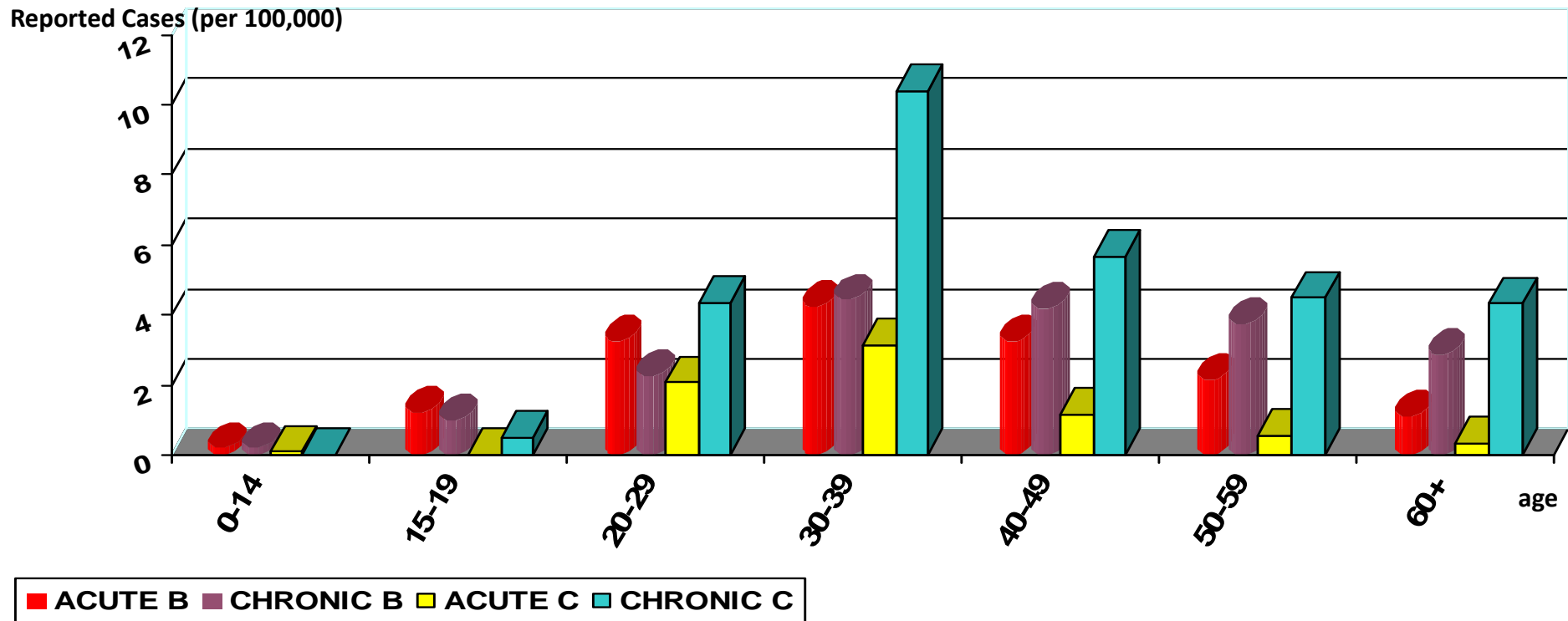
MORTALITY OF ACUTE AND CHRONIC HCV , REPUBLIC OF SERBIA, 2000-2015



SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 2015



AGE-SPECIFIC INCIDENCE OF HEPATITIS B AND HEPATITIS C, REPUBLIC OF SERBIA, 2015



SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 2015



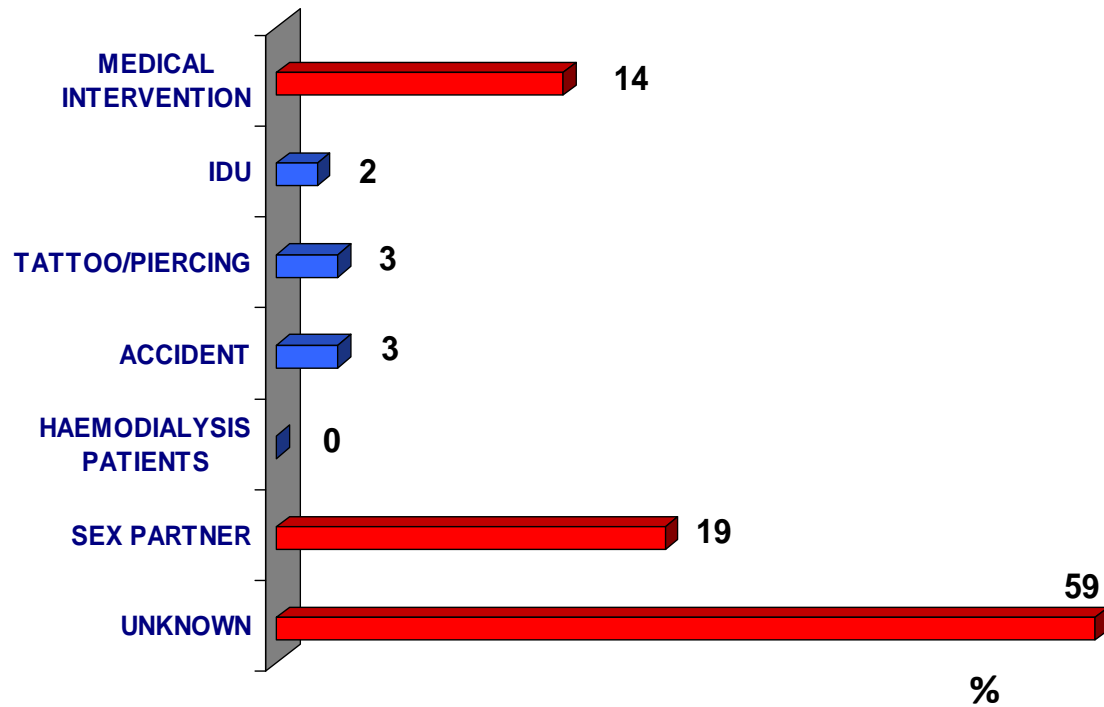
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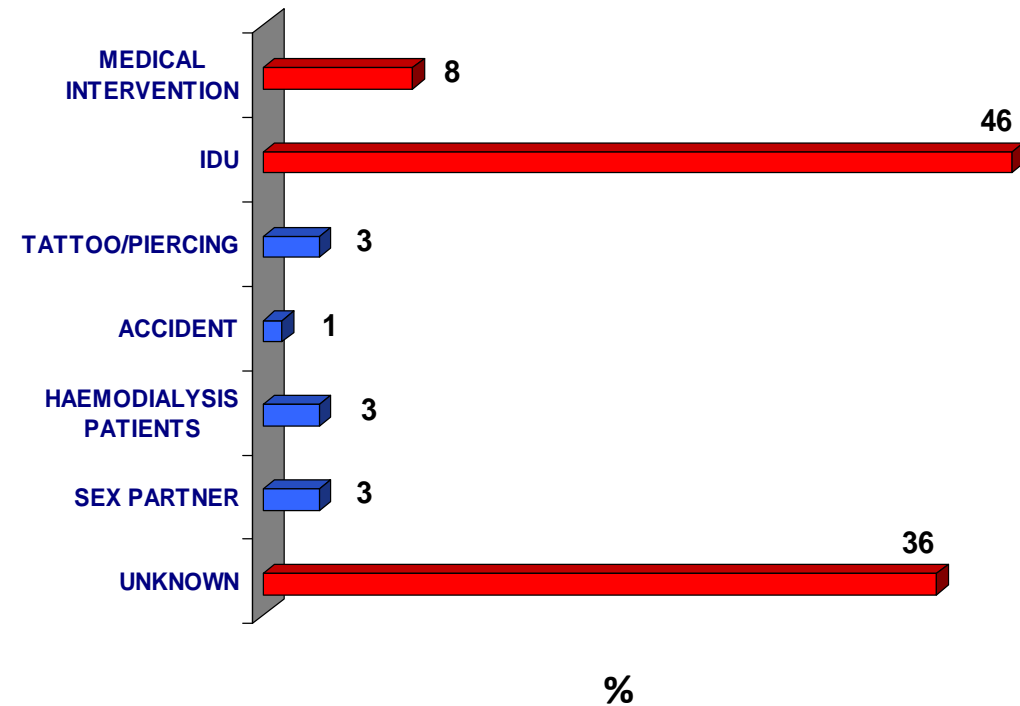
ASSUMPTIVE WAY OF TRANSMISSION IN PATIENTS



PATIENTS WITH ACUTE HBV



PATIENTS WITH ACUTE HCV



SOURCE: REPORT ON INFECTIOUS DISEASES IN SERBIA FOR 2015



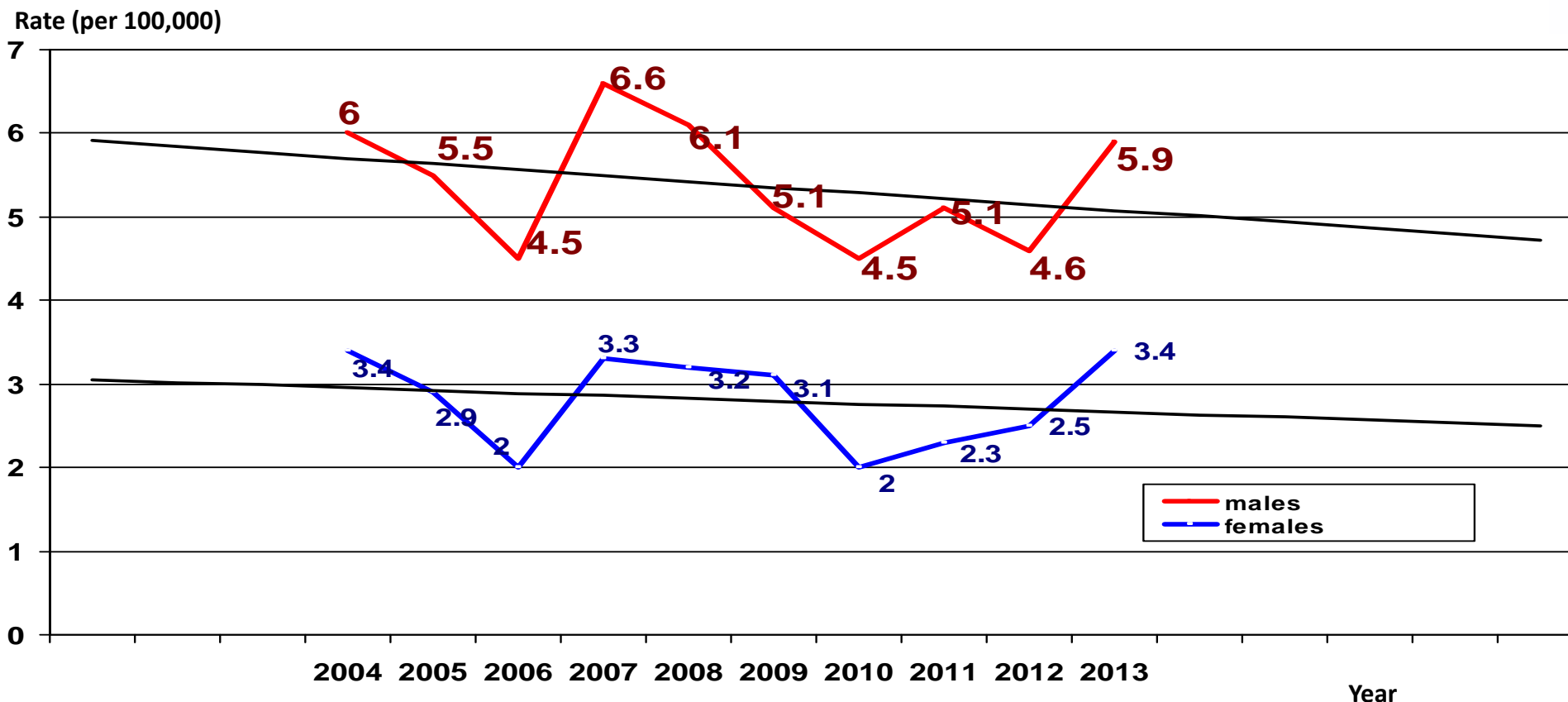
COUNTRY: HEPATITIS BURDEN OF DISEASE



- transmission pattern, HCC, mortality, morbidity, outbreaks/acute cases
- What kind of data are available? Recent? Accurate?
- We haven't recorded outbreaks recent years
- No available data of coinfection, cirrosis and hepatocellular carcinoma, related to hepatitis B and C
- We have only data of liver cancer in general



STANDARDIZED LIVER CANCER INCIDENCE RATES PER 100,000 POPULATION, REPUBLIC OF SERBIA, 2004-2013



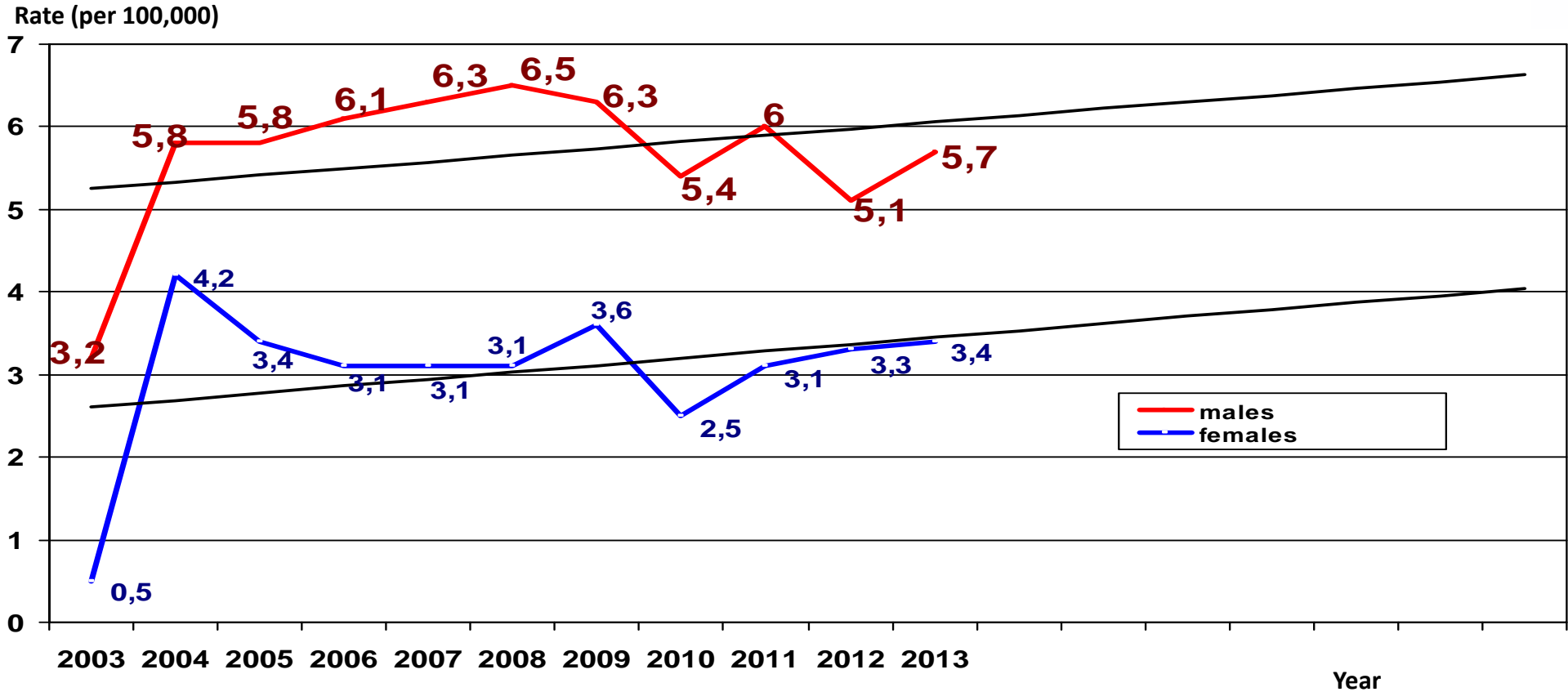
SOURCE: HEALTH STATISTICAL YEARBOOK OF REPUBLIC OF SERBIA 1998-2013



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STANDARDIZED LIVER CANCER MORTALITY RATES PER 100,000 POPULATION, REPUBLIC OF SERBIA, 2003-2013



SOURCE: HEALTH STATISTICAL YEARBOOK OF REPUBLIC OF SERBIA 1998-2013



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SCREENING RECOMMENDED IN FOLLOWING GROUPS:



	Hep B (Yes/No) (if yes, who is screened)	Hep C (Yes/No) (if yes, who is screened)
general population	no	no
<u>Blood donors</u>	yes (everybody)	yes (everybody)
<u>Pregnant women</u>	yes (III trimester of pregnancy)	yes (only who has risk)
Risk groups:		
Injecting drug users	yes	yes
STI clinic patients	yes	yes
<u>Haemodialysis patients</u>	yes (everybody)	yes (everybody)
Health care workers	yes (who are in risk)	yes (who are in risk)
Men having sex with men	yes	yes
Prison population	yes (who has risk)	yes (who has risk)
Migrants	yes (who has risk)	yes (who has risk)
Ambulatory and hospital patients	yes (who has risk)	yes (who has risk)



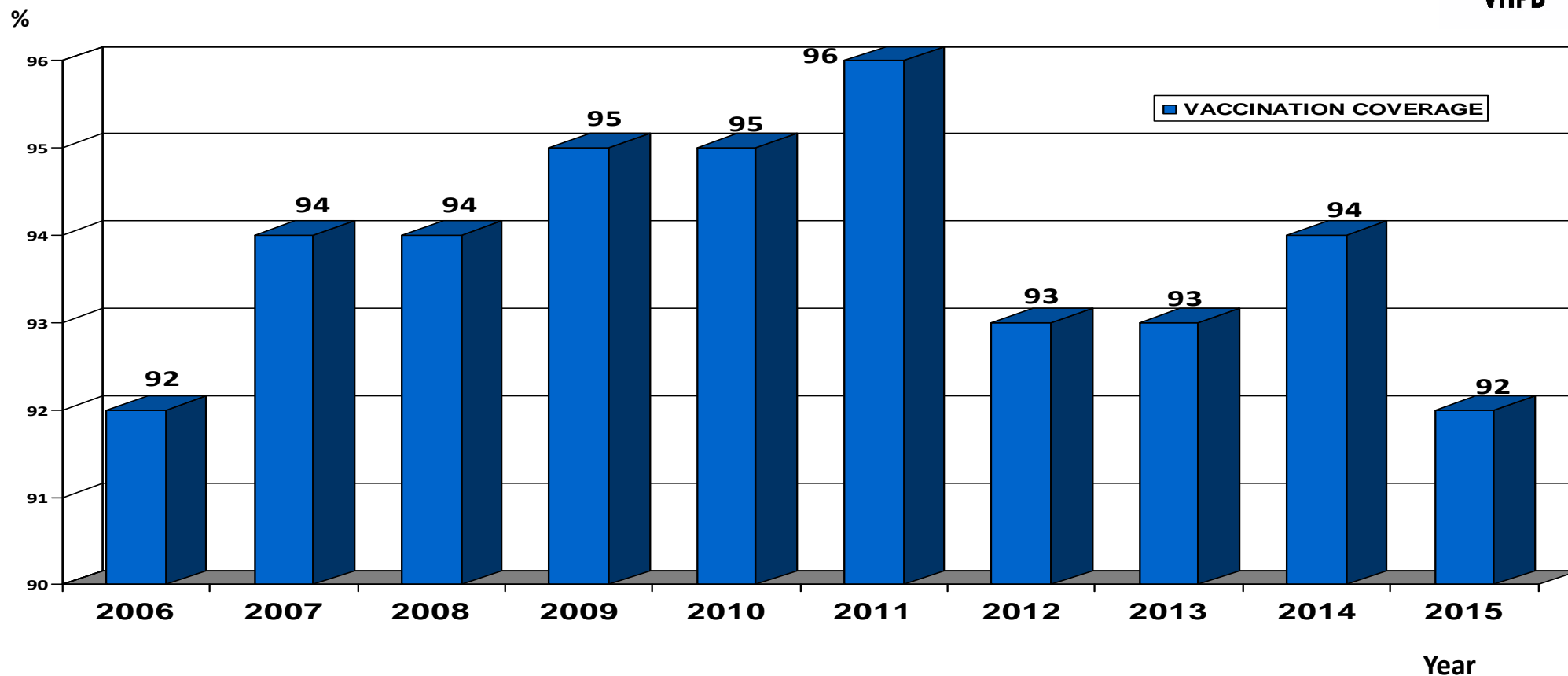
PREVENTION AND VACCINATION PROGRAMS



Hepatitis A	Yes/no	Target (who is vaccinate + age (if relevant))	Since/period
Universal	no		
Risk groups	yes	-travellers to intermediate and high HAV-endemic regions, communal employees (sewage) and other risk groups (older than 16 years)	not routinely (last 12 years)
Hepatitis B			
Universal	yes	-at birth -in age of 12 years	2006
Catch-up			
Risk groups	yes	-health care workers and medical students, haemodialysis patients, haemophiliac, insulin dependent diabetes patients, IDU, contacts with HBsAg+ person, infants born of HBsAg+ mothers, social care institutions residents	1989
Other programs:			



VACCINATION COVERAGE OF HEPATITIS B VACCINE, REPUBLIC OF SERBIA, 2006-2015



TREATMENT HEPATITIS B/C



	Hepatitis B	Hepatitis C
Are there national treatment guidelines for clinicians available	In preparation	In preparation
How many patients need treatment	No reliable data	No reliable data
How many patients are currently treated	No reliable data	Approx. 2000 since 2000.
Which medication is available on the market	Peg-IFN lamivudine tenofovir	Peg-IFN + ribavirin (no IFN-free regimen available)



COUNTRY: NATIONAL HEPATITIS PLAN



NEEDS:

- National Strategy (Serbia has a draft of strategy)
- National Plan (adjustment with WHO)
- National Office
- National register

GOALS:

- education (general population, risk groups, healthcare workers)
- prevention of transmission (to achieve coverage immunization over 95%; increase the immunization coverage in risk categories)
- prevention measures in health institutions and adequate waste treatment
- intensive screening and diagnostic
- improve epidemiological surveillance of acute infection, adoption and use case definition
- epidemiological research and doing questionnaire for investigating risk factors
- form patient register (register cases of coinfection, cirrosis and hepatocellular carcinoma)
- harmonize the criteria for implementation post exposure prophylaxis (**register accidents**)
- Increase the number of patients on therapy.



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