

**ISTC WORKSHOP on EMERGING and RE-EMERGING
INFECTIOUS DISEASES**

CURRENT STATUS of HEPATITIS B and C in ARMENIA

***Gayane Melik-Andreasyan**
MD, PhD, ScD, Professor*

***The Research Institute of Epidemiology, Virology and Medical
Parasitology after A.B. Alexanian, Yerevan, Armenia***

**September 14-15, 2015
Annecy, France**

World's HBV - infection burden is high

Past/Present Infection

~ 2 bln

Chronically infected

350-400 mln

Over 30 years of age

**Serum HBV DNA levels of $\geq 10,000$ copies/ml (~2000 IU/ml)
strong risk predictor of HCC development**

Mortality

excluding liver disease related death

Adjusted death rates are 3-3,6 times higher than uninfected

Deaths

500,000 – 1,2 mln/year

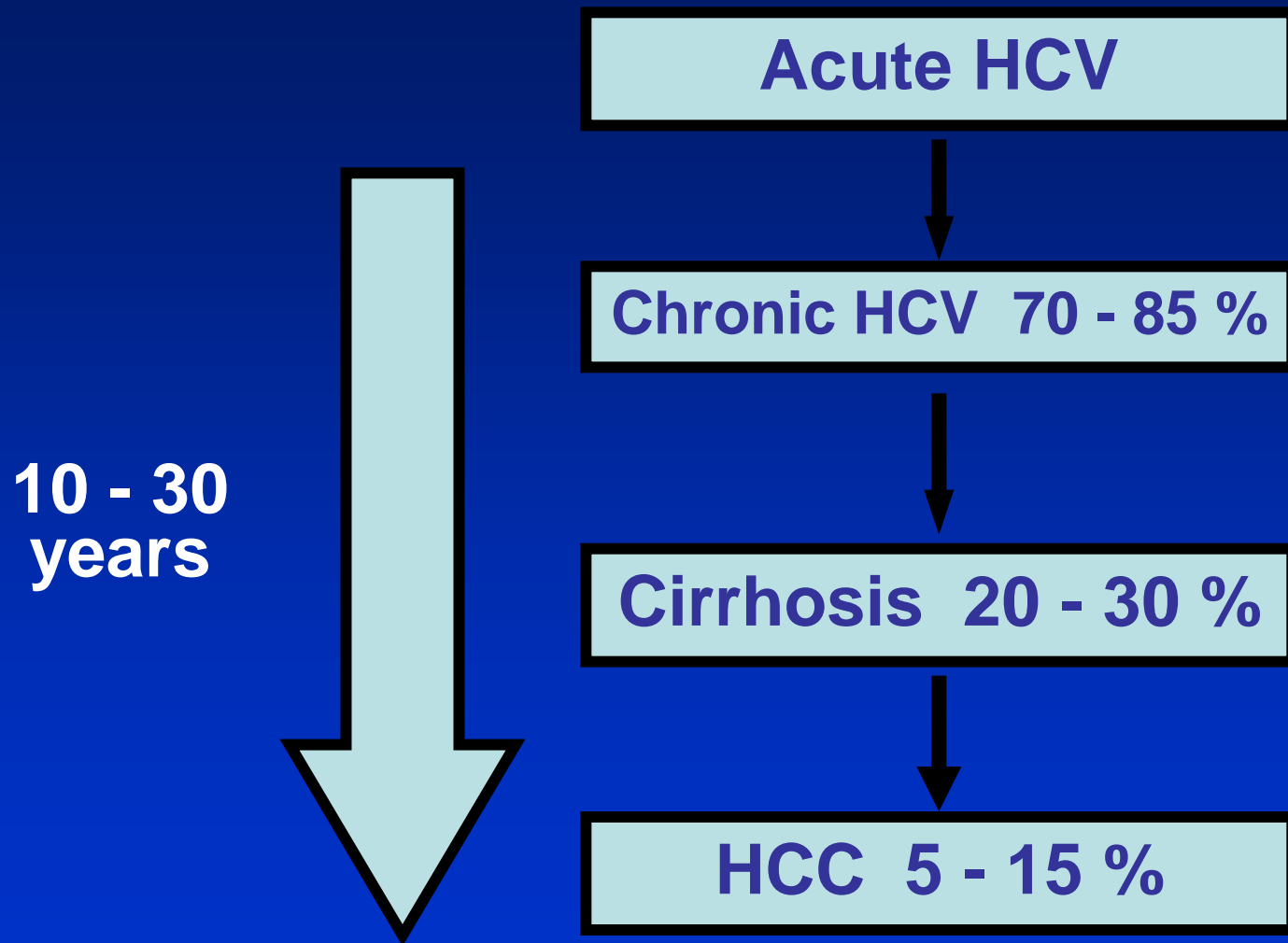
Ranked cause of death

10th worldwide

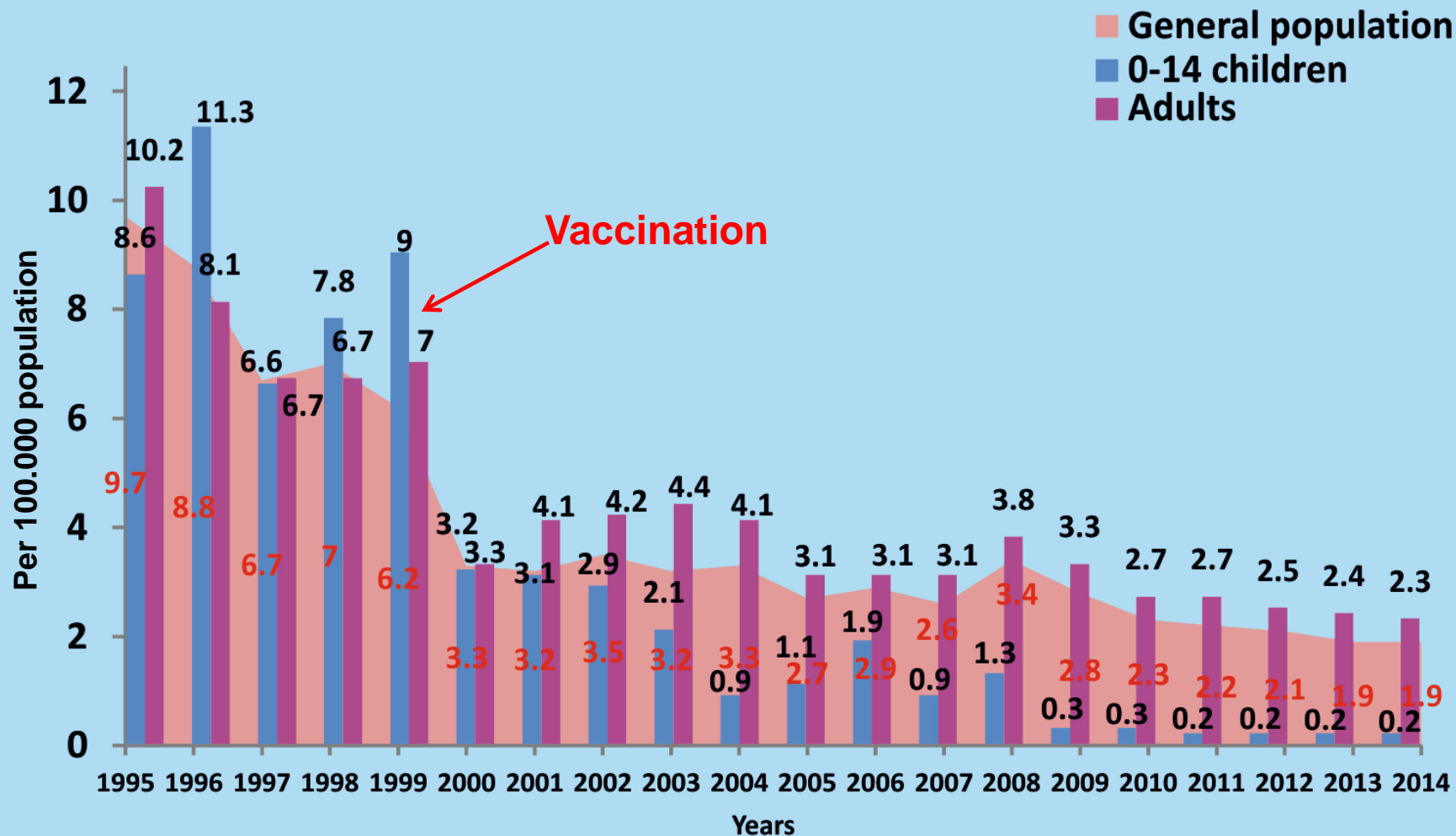
World's HCV-infection burden

- 130 -170 million people chronically infected with HCV
- 3-4 million people are infected each year
- More than 350 000 people die from HCV-related liver diseases each year

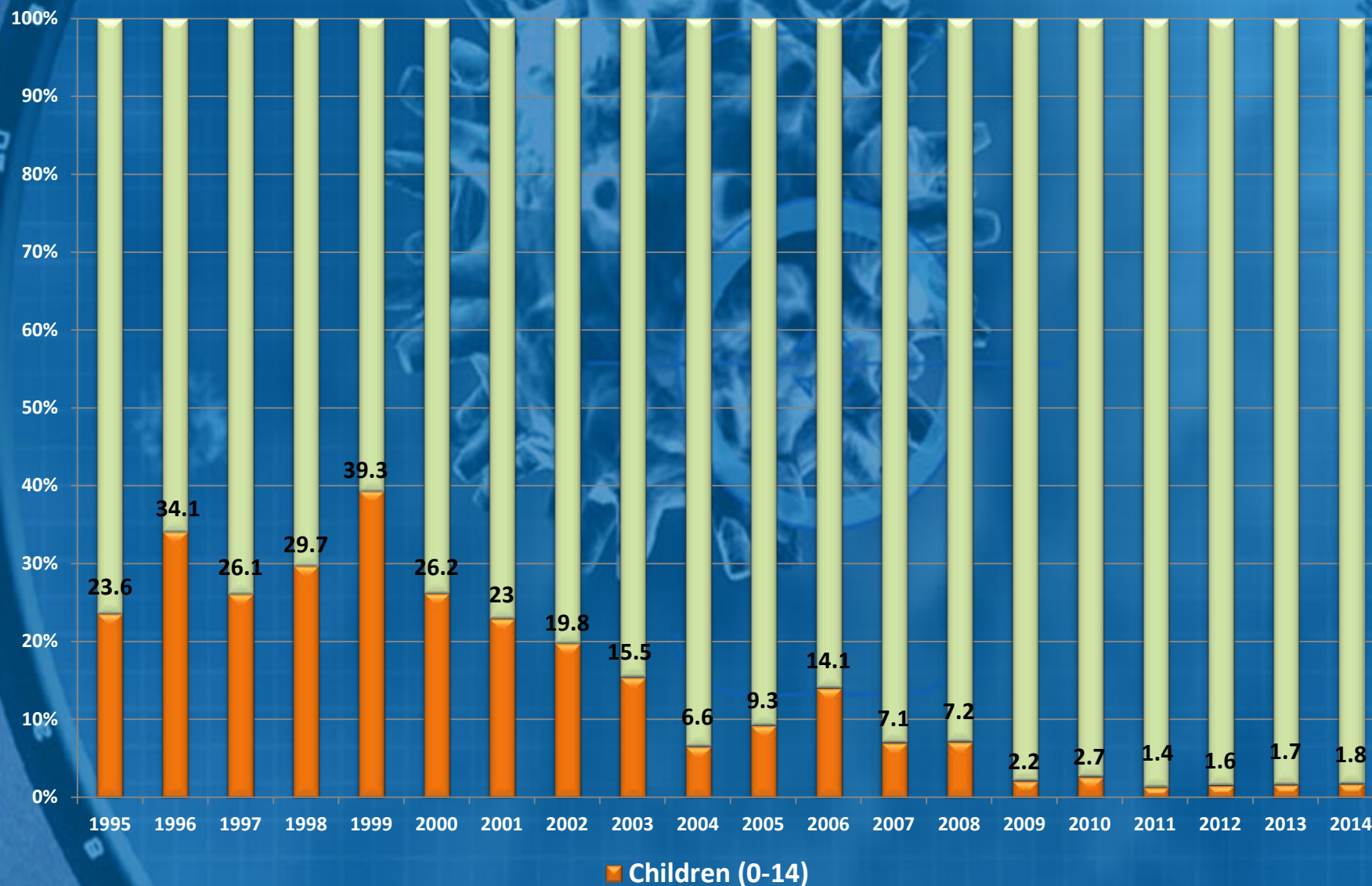
Evolution of HCV infection



Acute Hepatitis B Incidence among Different Age Groups in Armenia

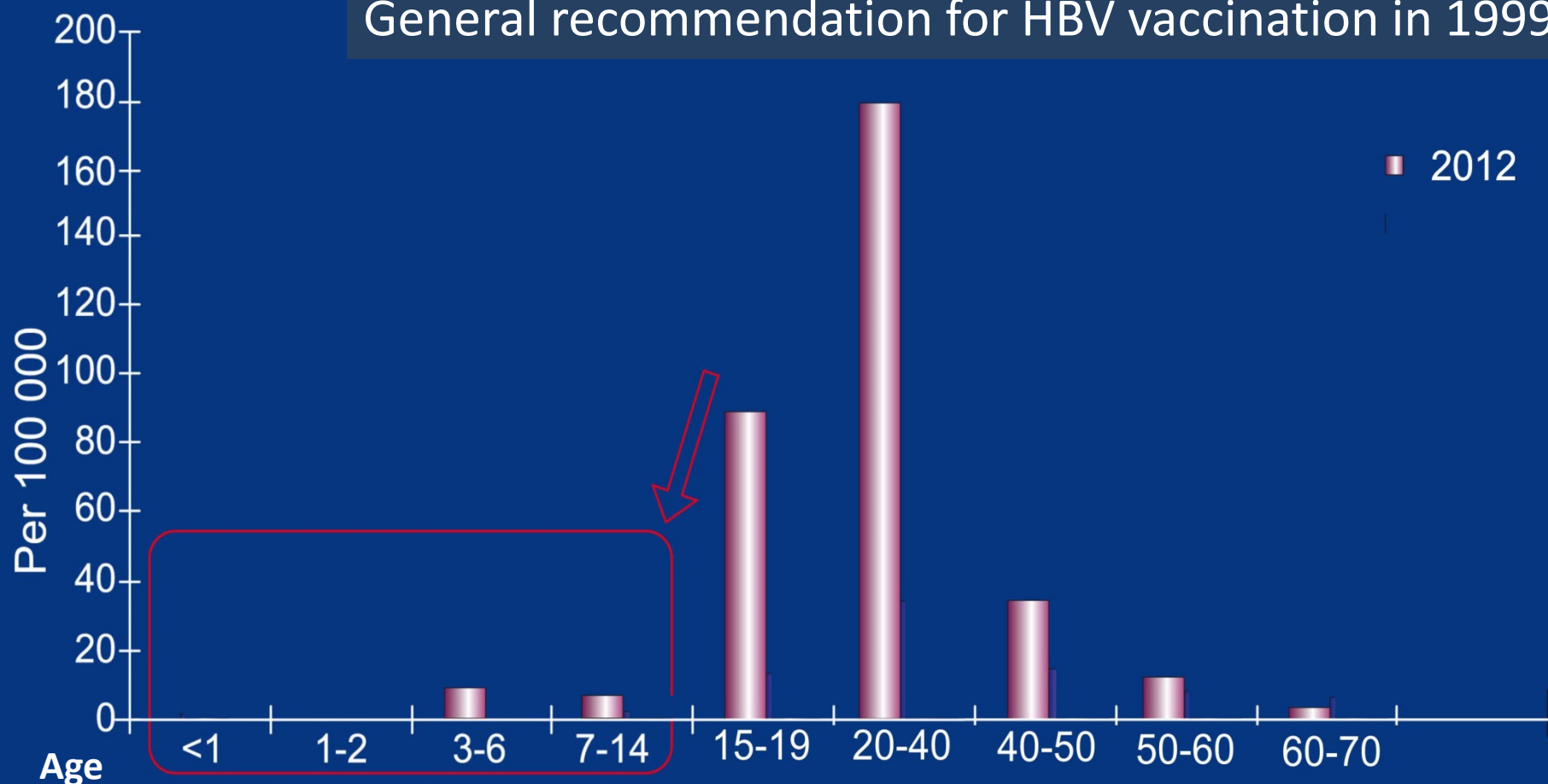


The Proportion Children (0-14) and Adults among Acute Hepatitis B Incidence



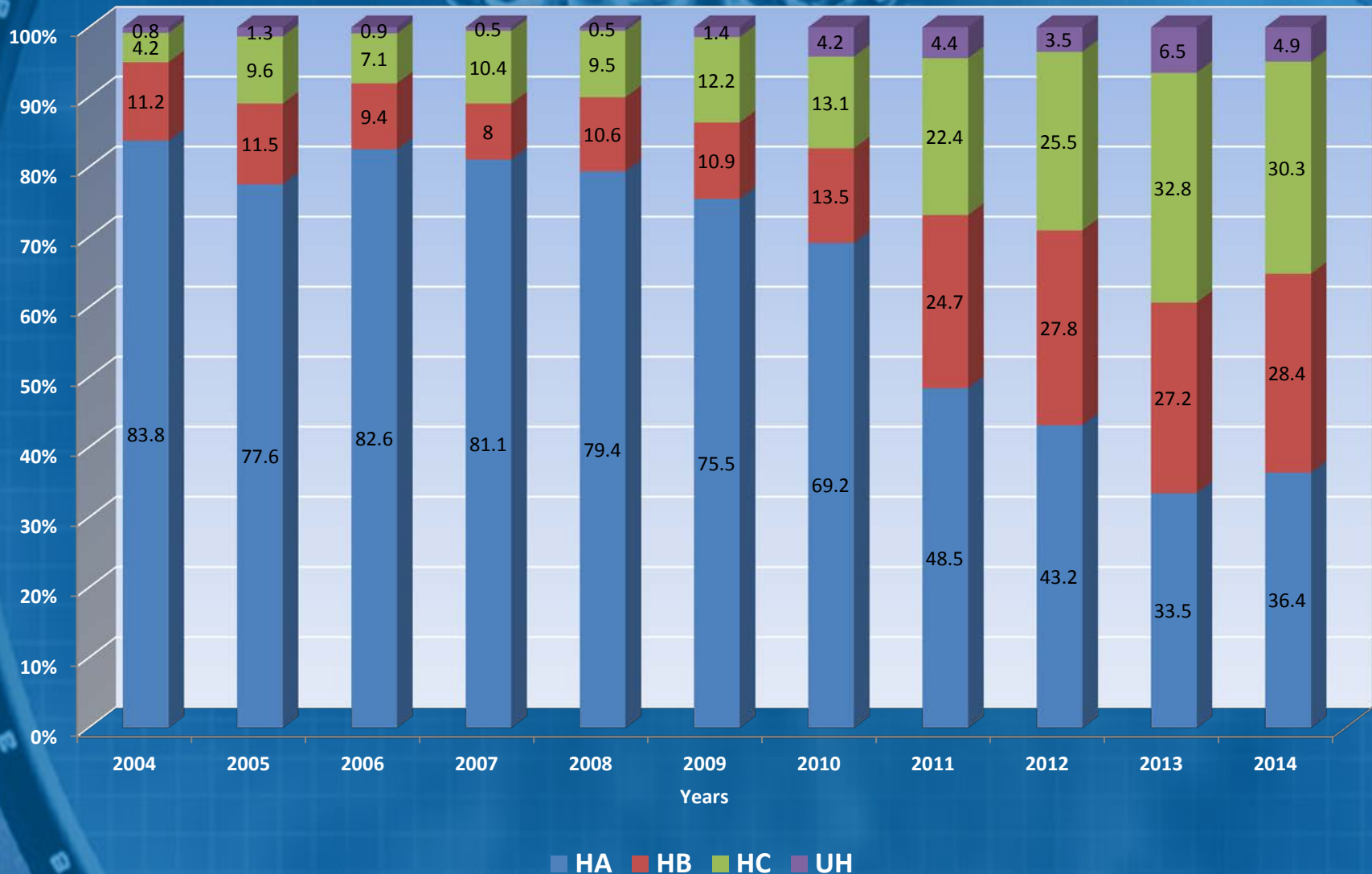
Updating HBV Status in Armenia

General recommendation for HBV vaccination in 1999

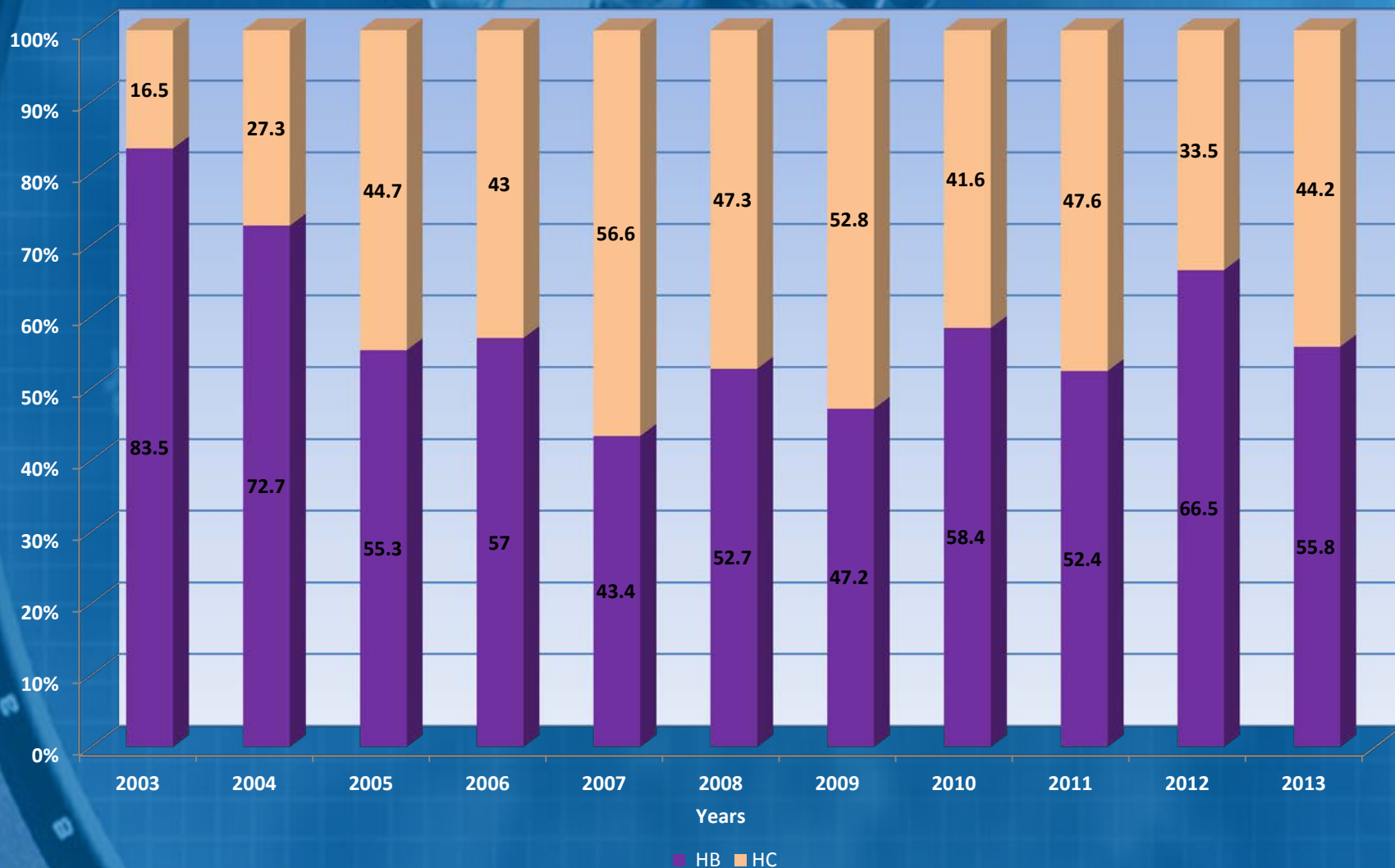


- The age distribution of acute HBV cases had significantly shifted to older age groups peaking among 20-40 years old
- The main route of infection becomes horizontal (e.g. sexual)

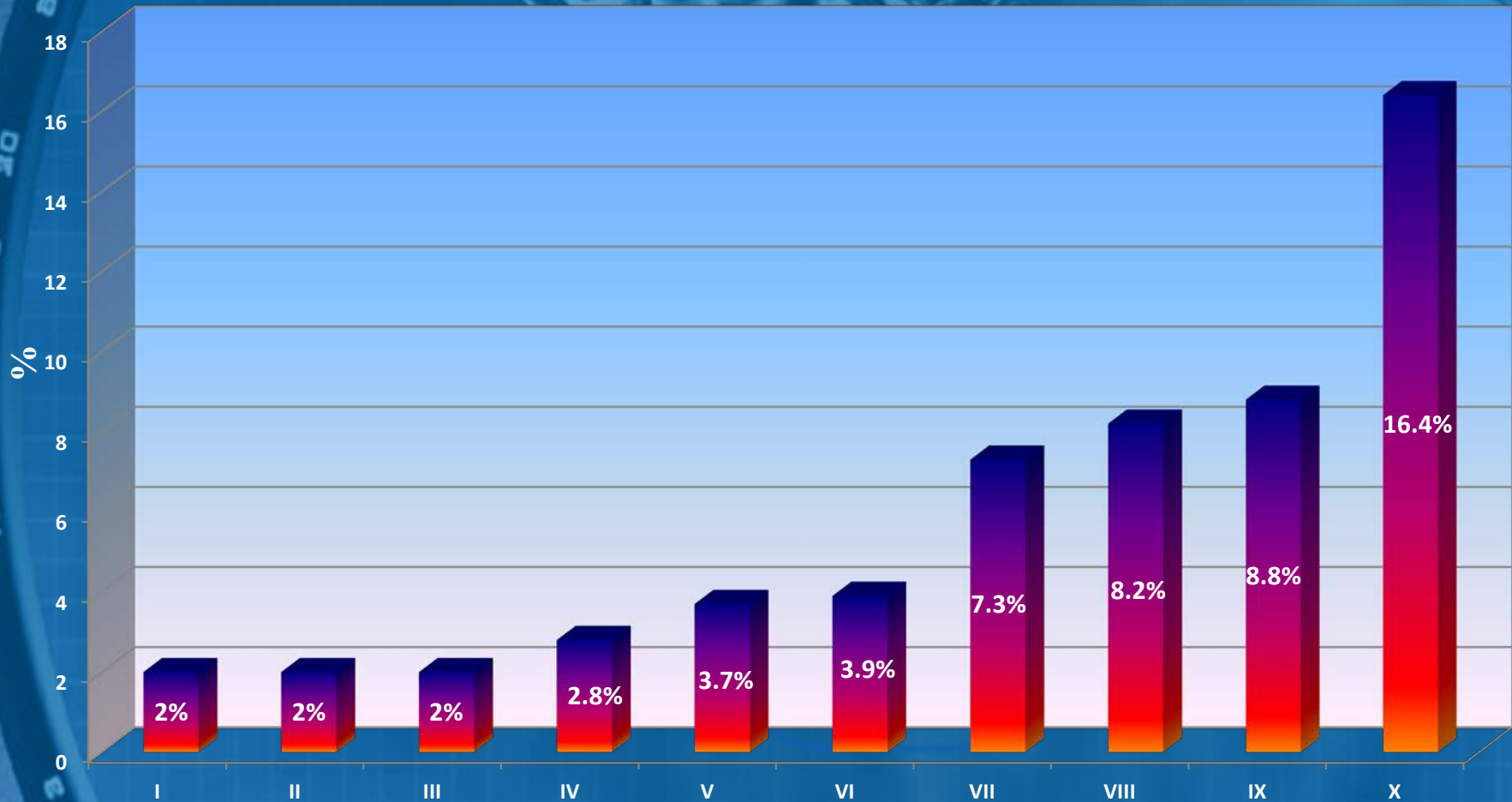
Etiological structure of acute viral hepatitis in Armenia according to the data of official registry



Etiological structure of acute parenteral viral hepatitis in Armenia according to the data of official registry



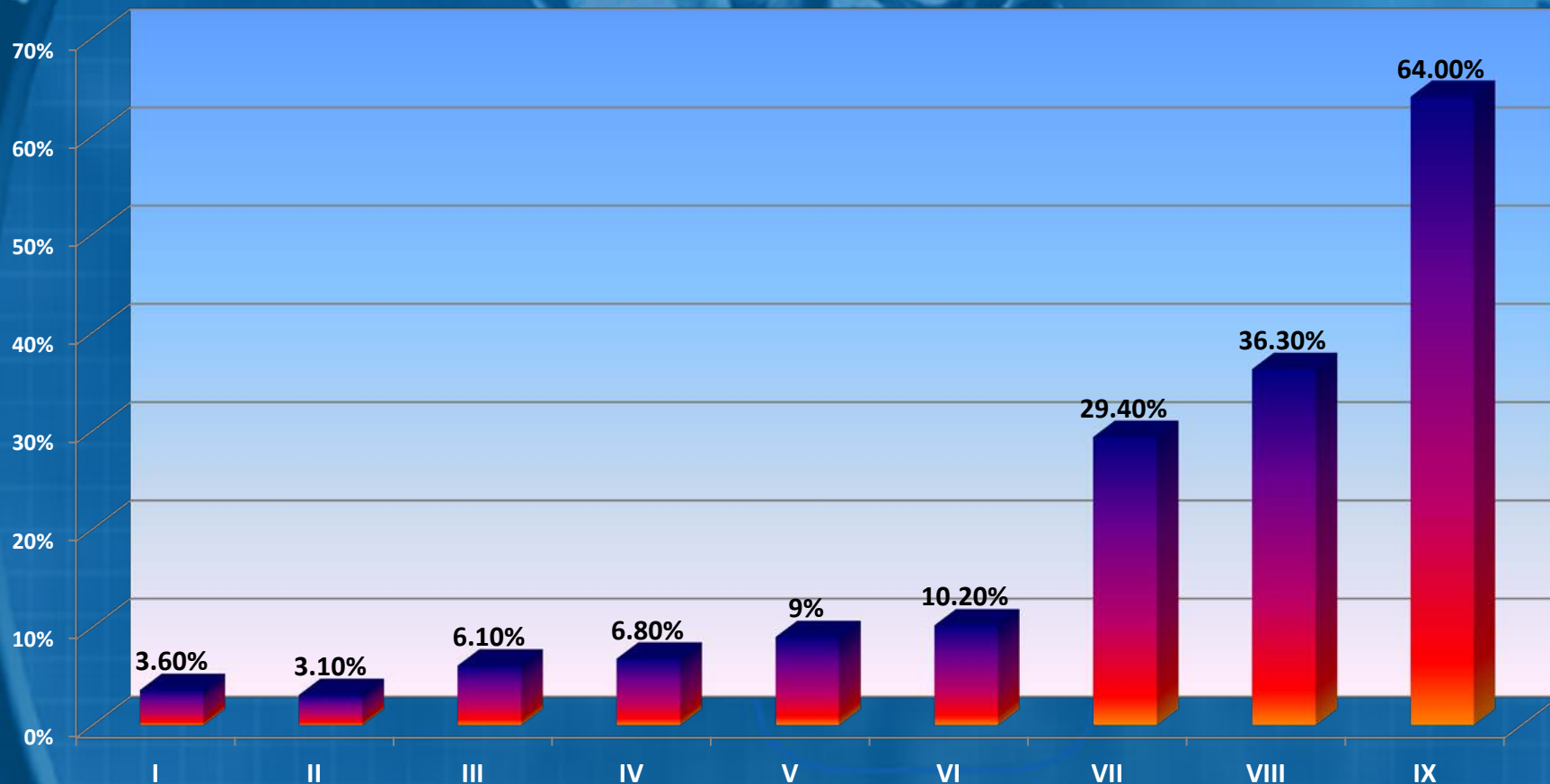
The prevalence of HBsAg among different population groups



I - Healthy population
II - Oncological patients
III - Tuberculosis patients
IV - HIV infected patients
V - Oncohematological patients

VI - Imprisoned persons
VII - Health care workers
VIII - Hemodialysis patient
IX - Injecting drug users
X - STI patients

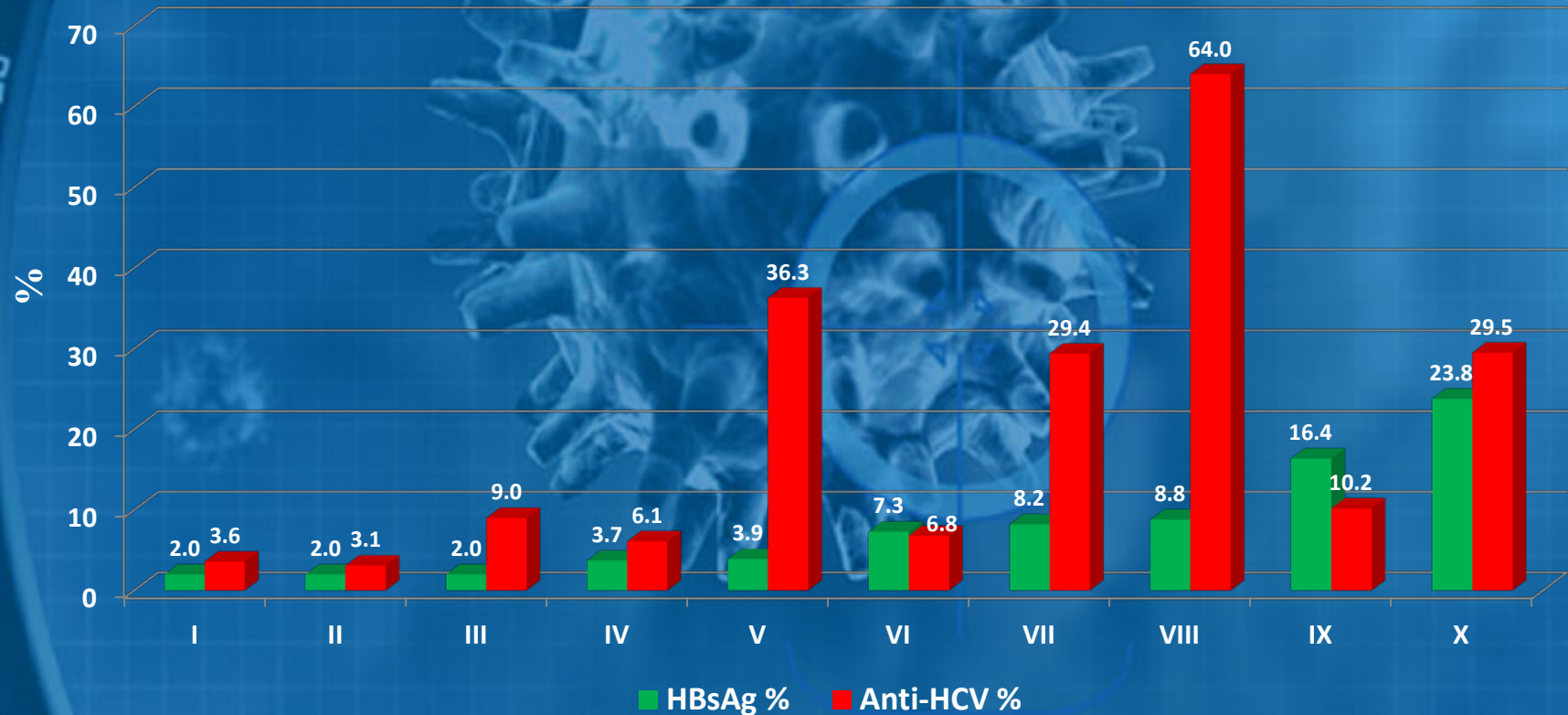
The prevalence of anti-HCV among different population groups



I - healthy population
II - oncological patients
III - oncohematological patients
IV - health care workers

V - Tuberculosis patients
VI - STI patients
VII - hemodialysis patients
VIII - mprisoned persons
IX - injecting drug users

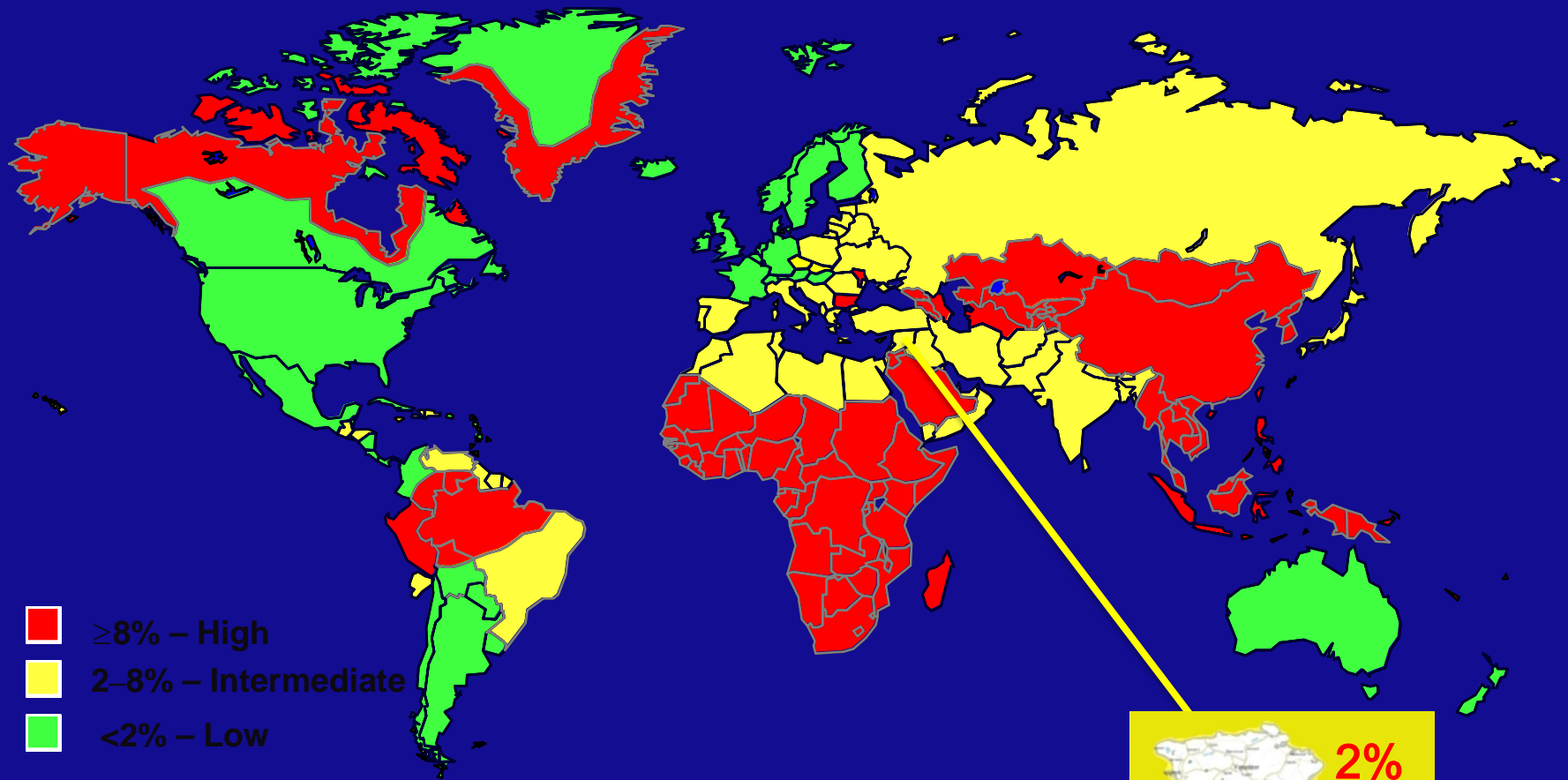
The prevalence of HBsAg and anti-HCV among different population groups



I - Healthy population
II - Oncological patients
III - Tuberculosis patients
IV - Oncohematological patients
V - Imprisoned persons

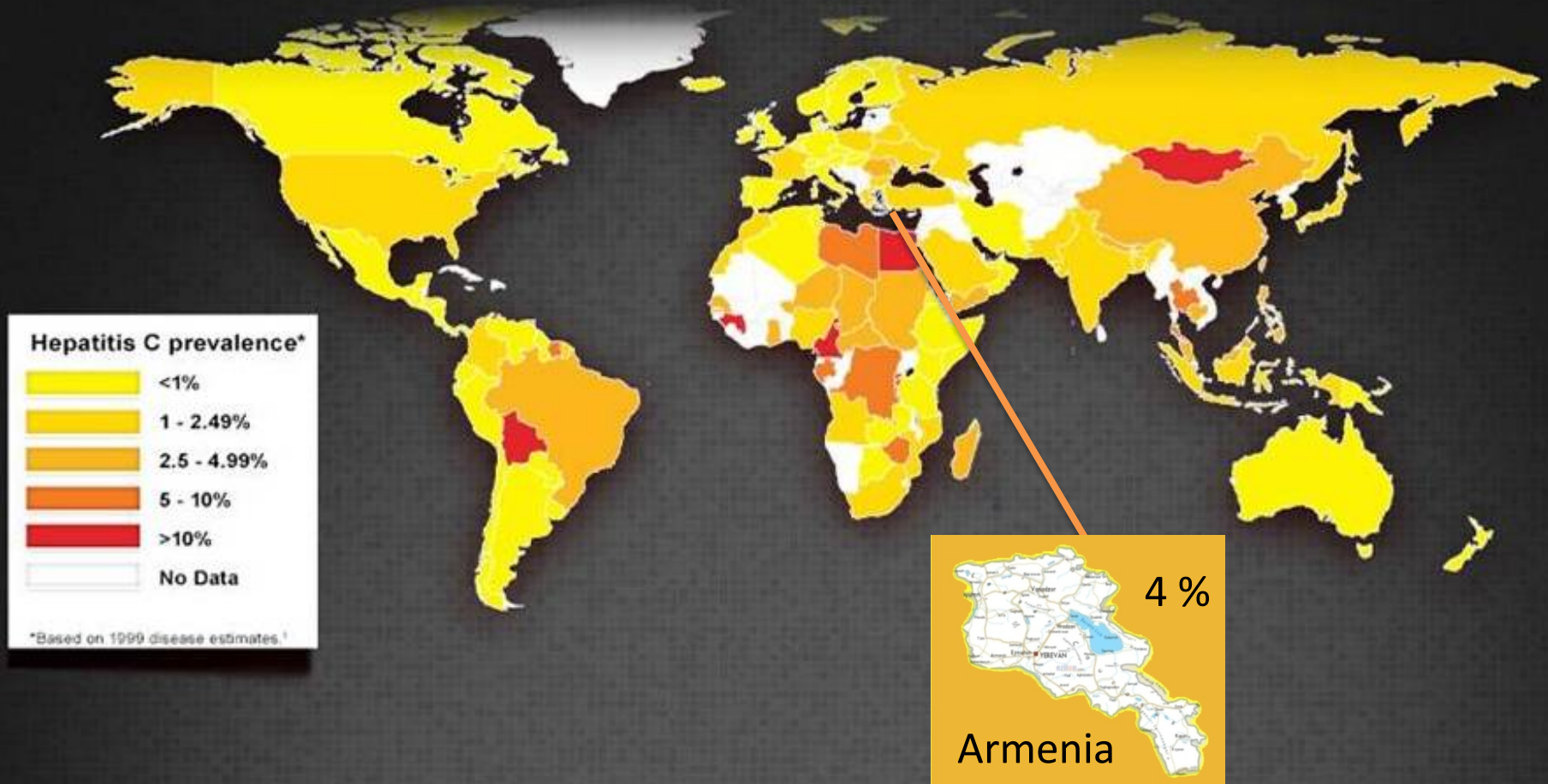
VI - Health care workers
VII - Hemodialysis patient
VIII - Injecting drug users
IX - STI patients
X - HIV infected patients

Geographic prevalence of chronic hepatitis B

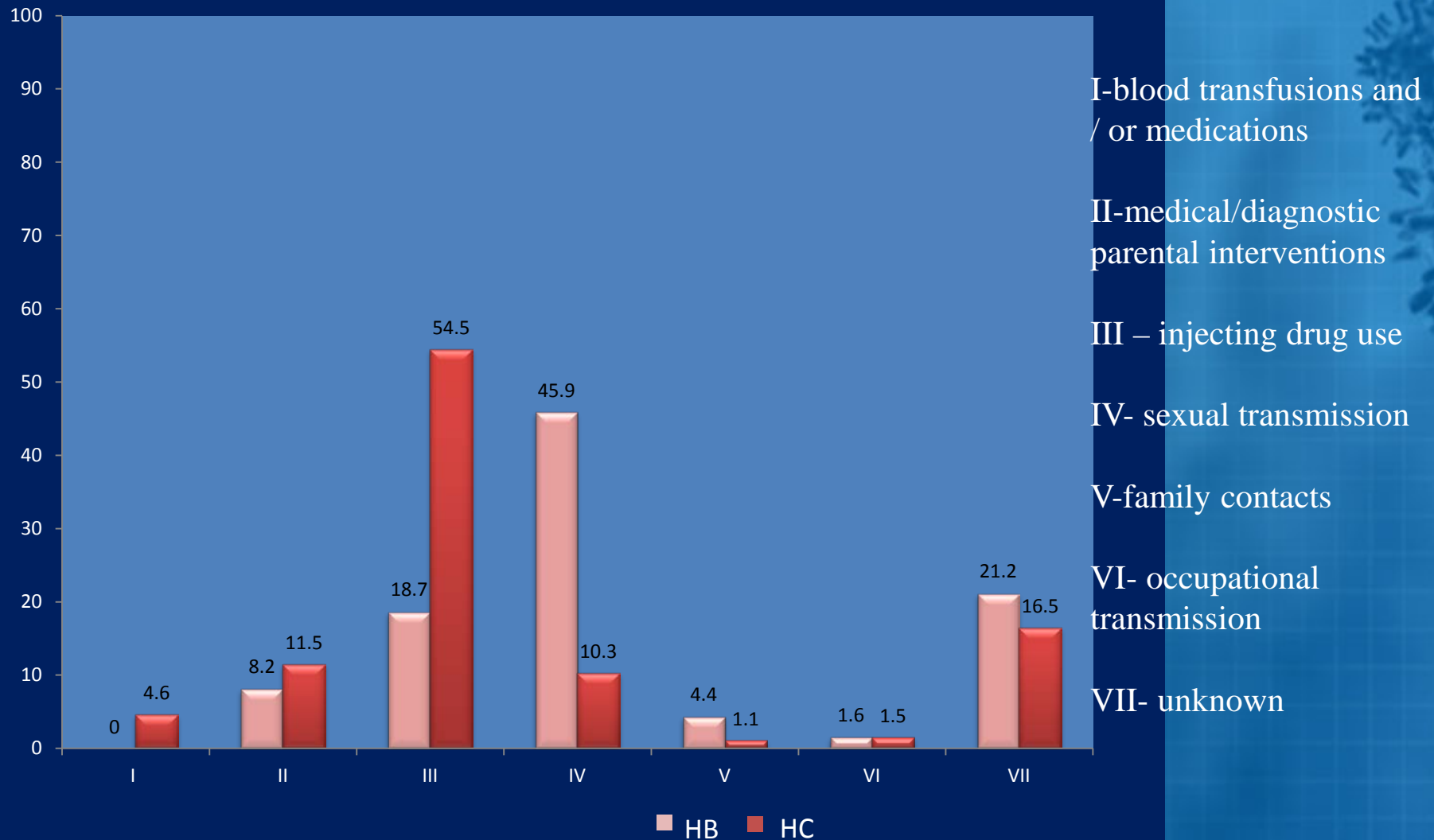


Global Prevalence of HCV

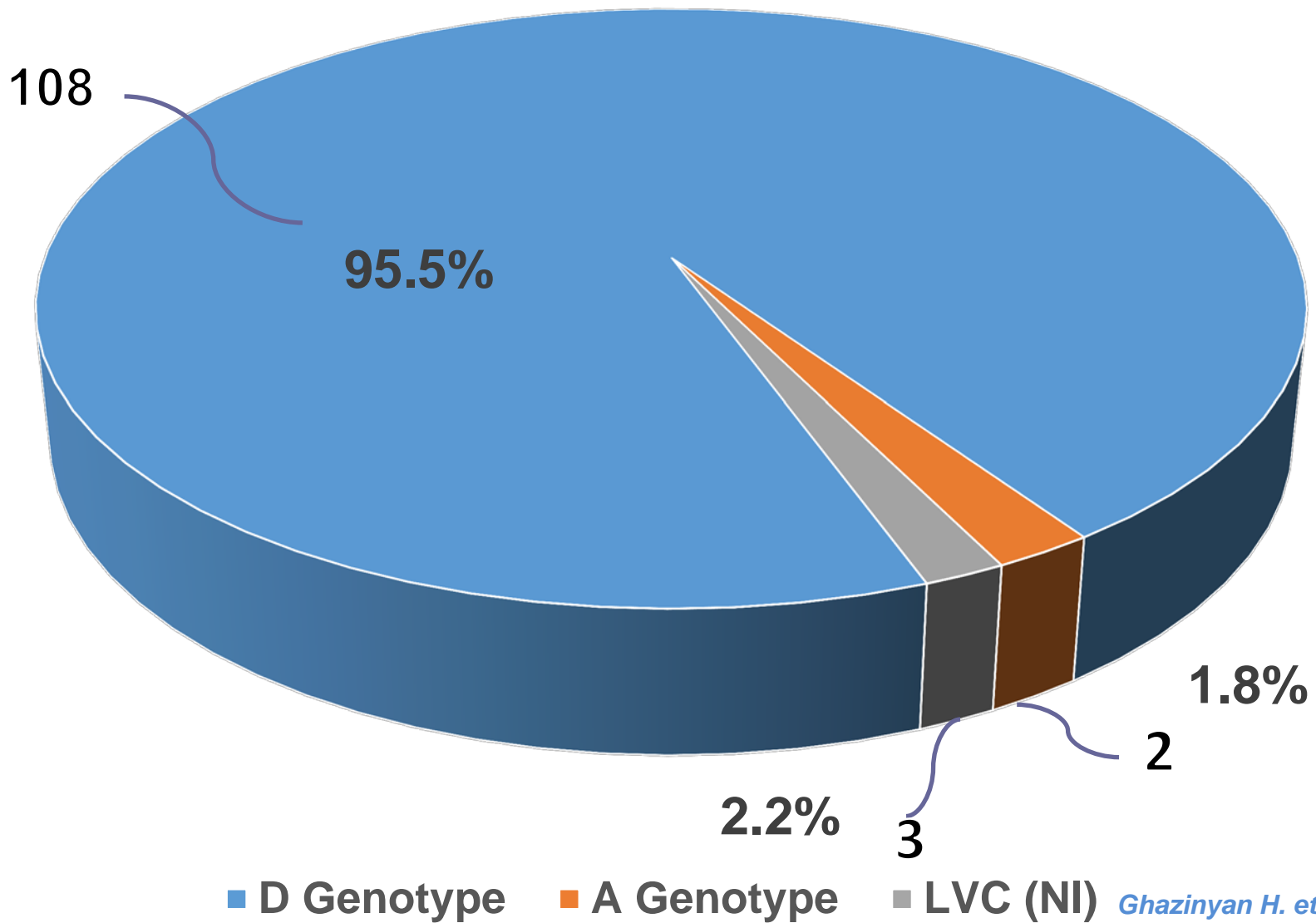
Global Prevalence of HCV¹



Transmission modes of HB and HC



Distribution of HBV Genotypes in Armenia



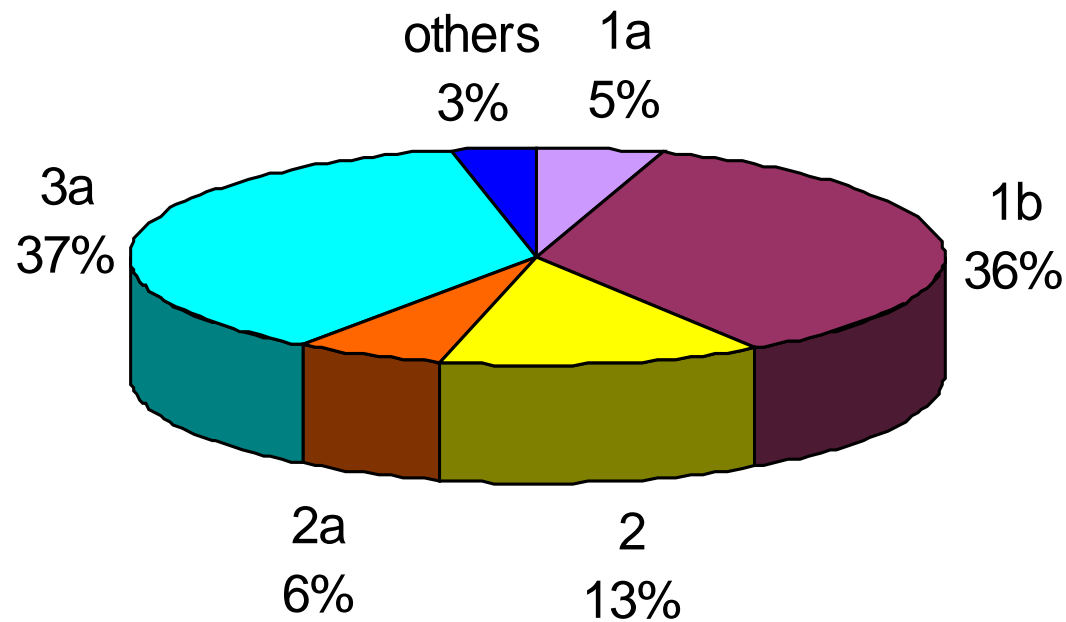
Distribution of HBV Genotypes in the World



*Armenian scientific data 2012

Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan. 2002.6

Distribution of HCV Genotypes in Armenia



Hepatitis Delta

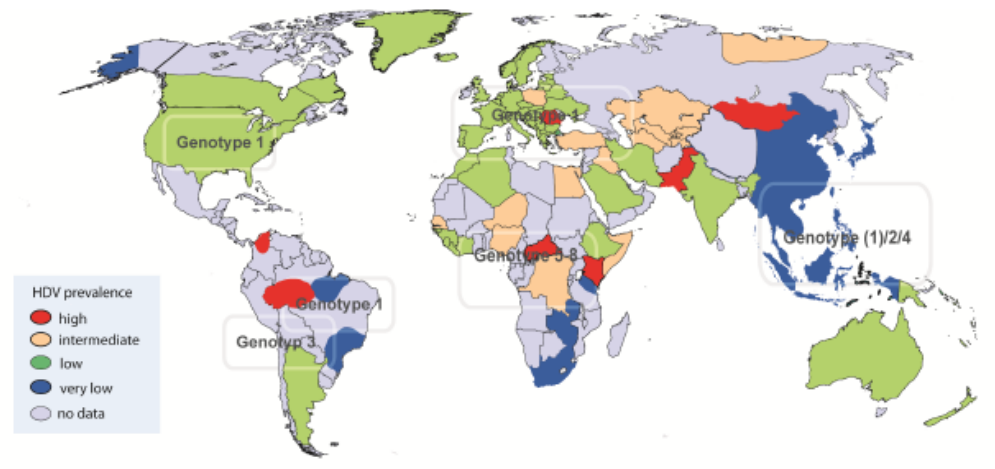
- Hepatitis delta is the most severe form of chronic viral hepatitis
- approximately 15-20 Million individuals world-wide are anti-HDV positive

Rizzetto et al., J of Hepatology 2009

Yurdaydin J Viral Hepatitis 2010

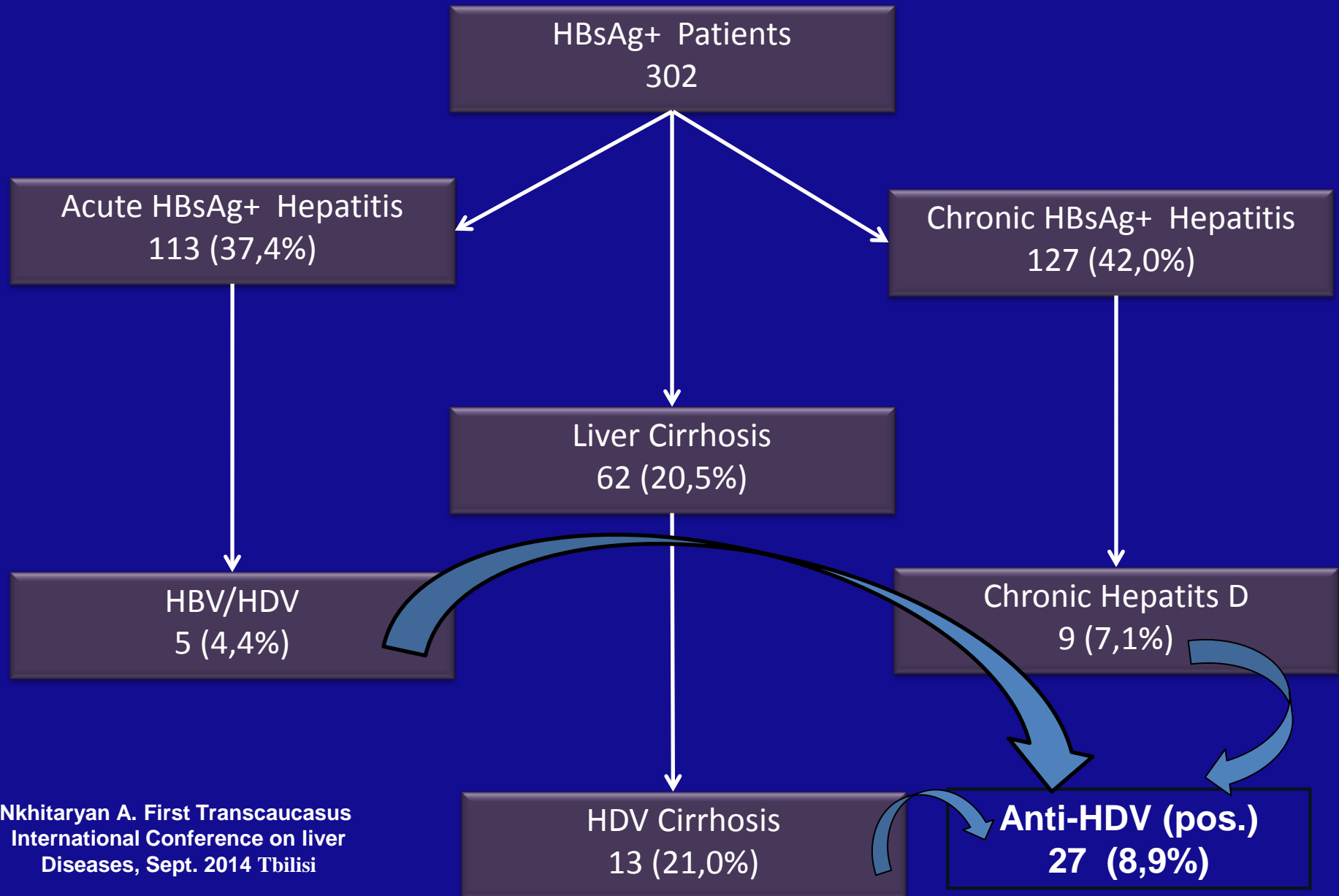
Wedemeyer & Manns Nat Rev Gastroenterol 2010

Hughes et al., Lancet 2011

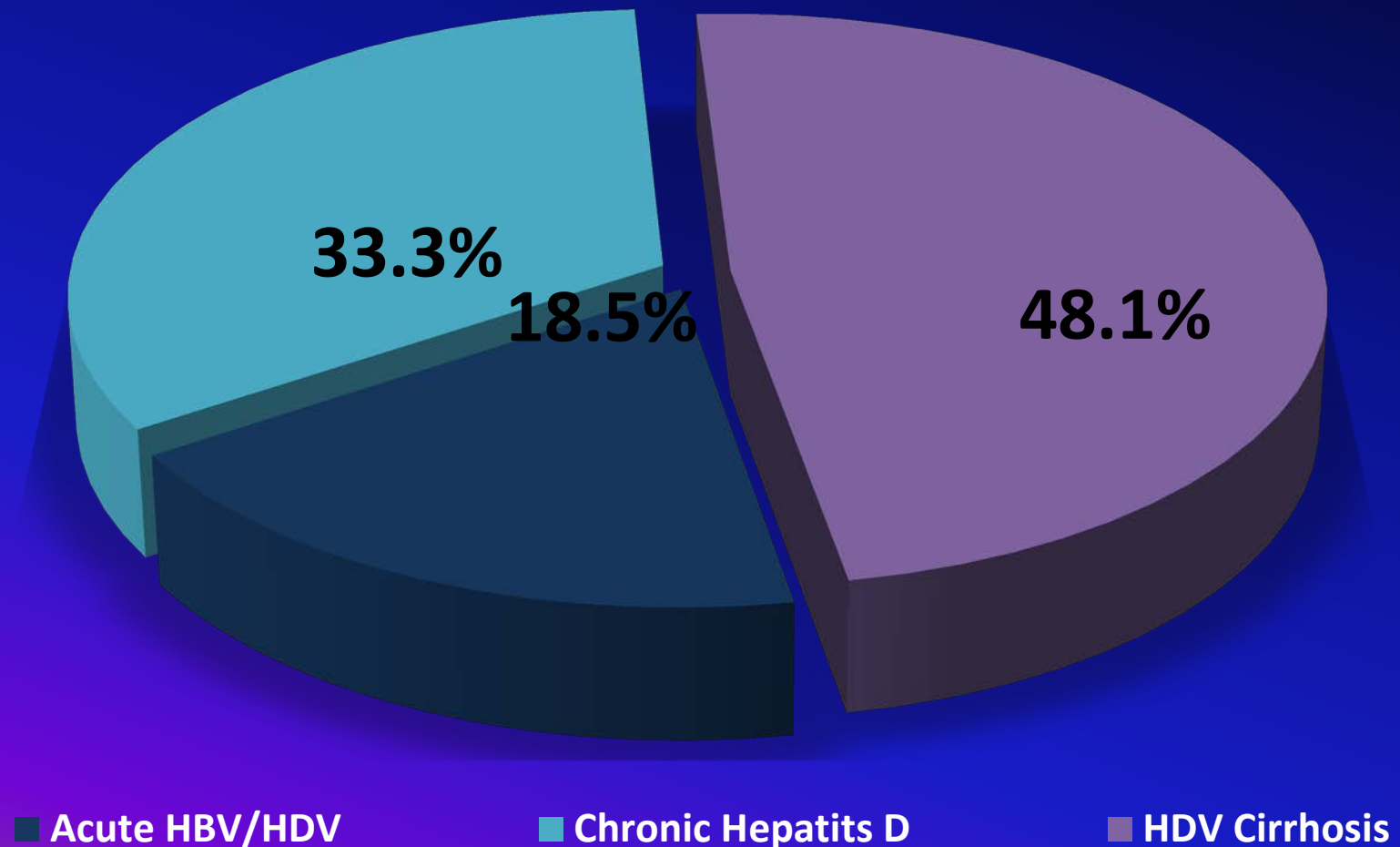


www.hepatitis-delta.org

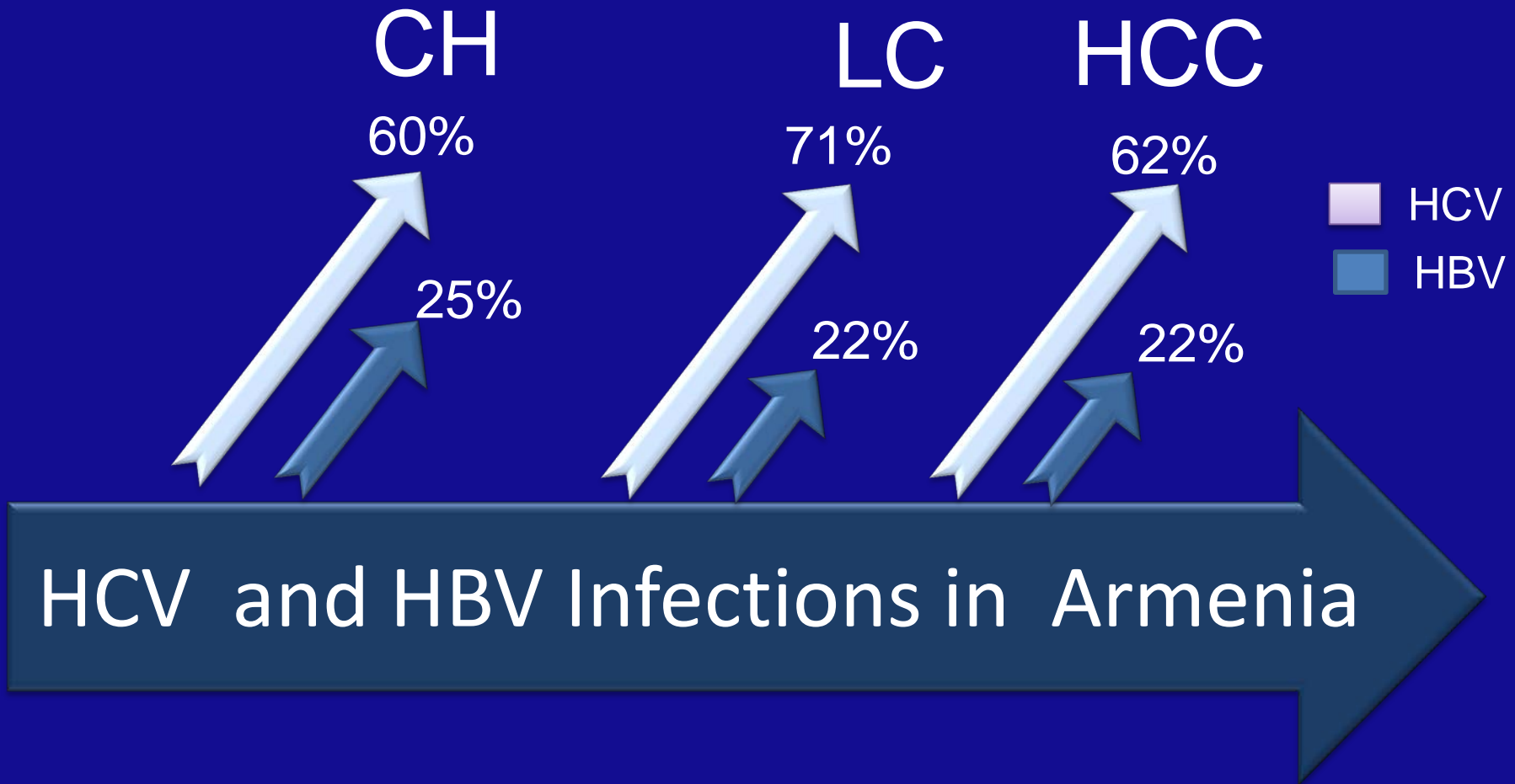
Anti HDAg frequency of HBsAg+ patients (2010-2014)



Clinical variants of Hepatitis D virus infection



The HCV and HBV Journey



CH- Chronic hepatitis

LC- Liver cirrhosis

Ghazinyan H. et al
3rd APASL STC
Nov. 21-23, Cebu Philippines

SUMMARY:

- Armenia was and remains as a country with intermediate prevalence of HCV and HBV
- As area of intermediate endemicity 30% of general population has serological evidence of current or resolved HBV infection
- The predominant genotype of HBV is genotype D
- Certain risk groups have the main role in maintaining the intensity of epidemic process for HCV and HBV
- HCV and HBV are leading causes of liver-related damages



APASL
Single Topic Conference
Focus on the Virus Hepatitis B
3-5 October 2015 Yerevan, Armenia



General Information | Scientific Program | Abstracts | Registration | Accommodation | About Armenia |
APASL Committees | Committees of STC | Contacts |

Website : www.Apaslstc-armenia2015.com



*Greetings
To all
delegates of
meeting*



THANK YOU