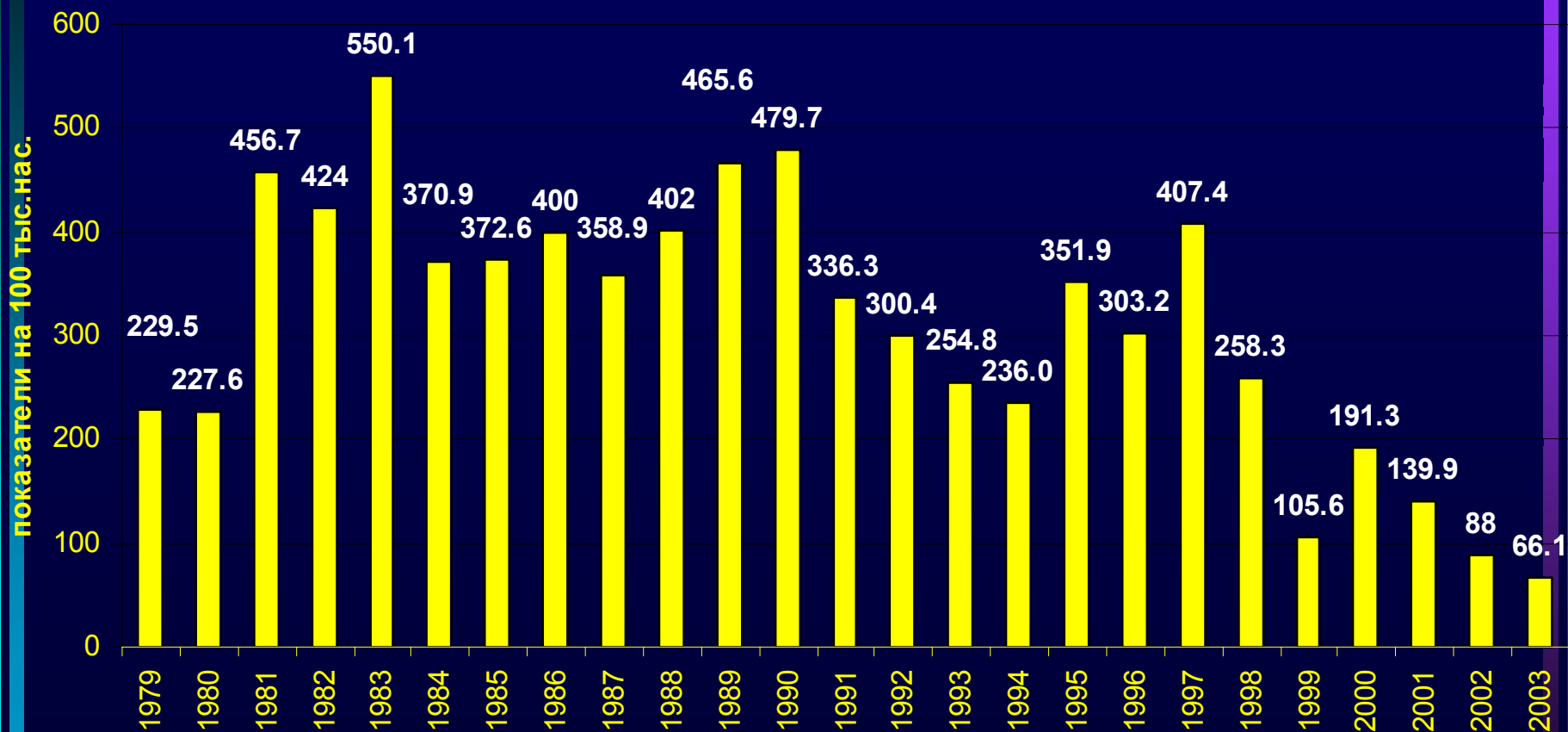


# Hepatitis B Immunization Program in the Republic of Kazakhstan

Republican Sanitary  
Epidemiological  
Station, Kazakhstan

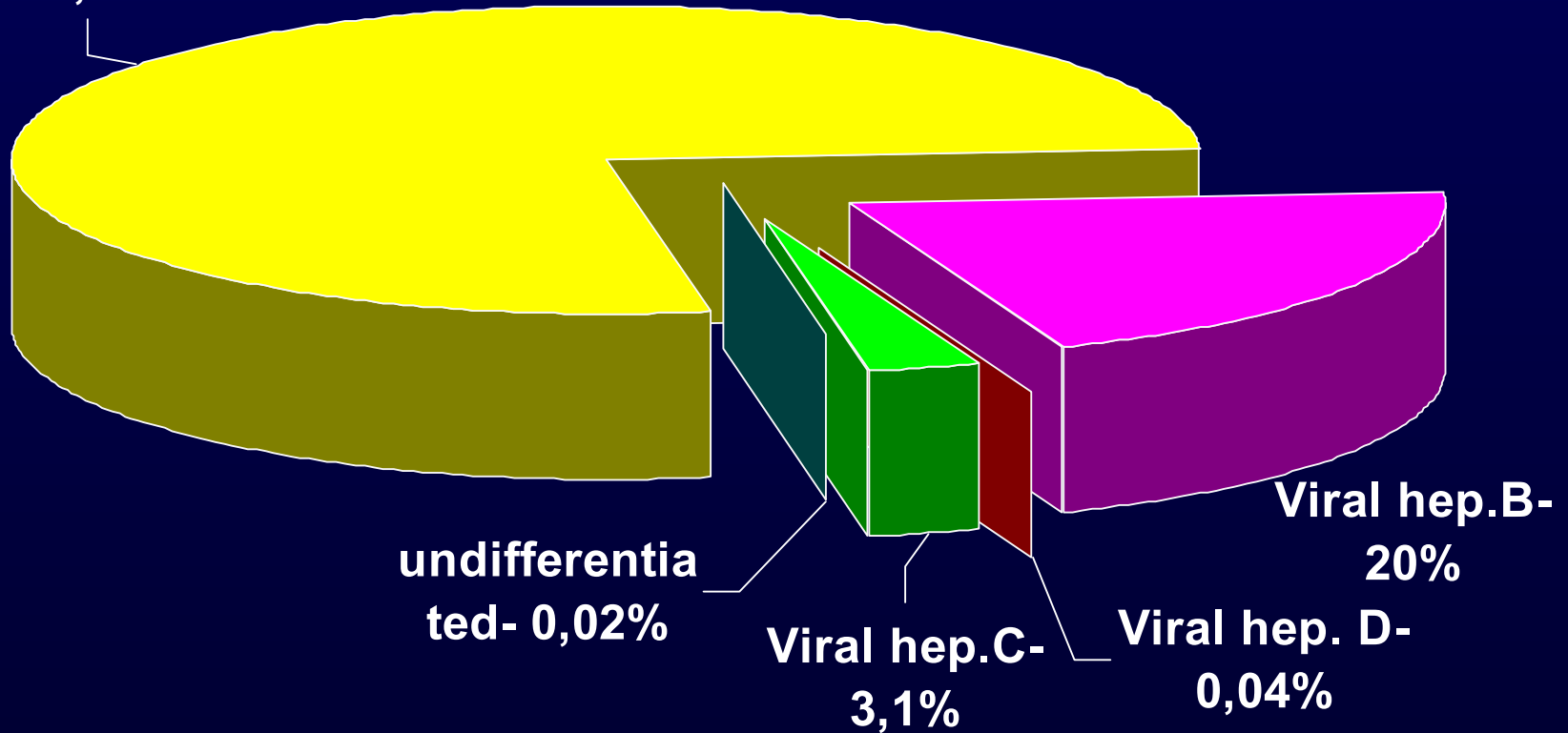


# Incidence of acute viral hepatitis by years, 1979 – 2002, Kazakhstan.

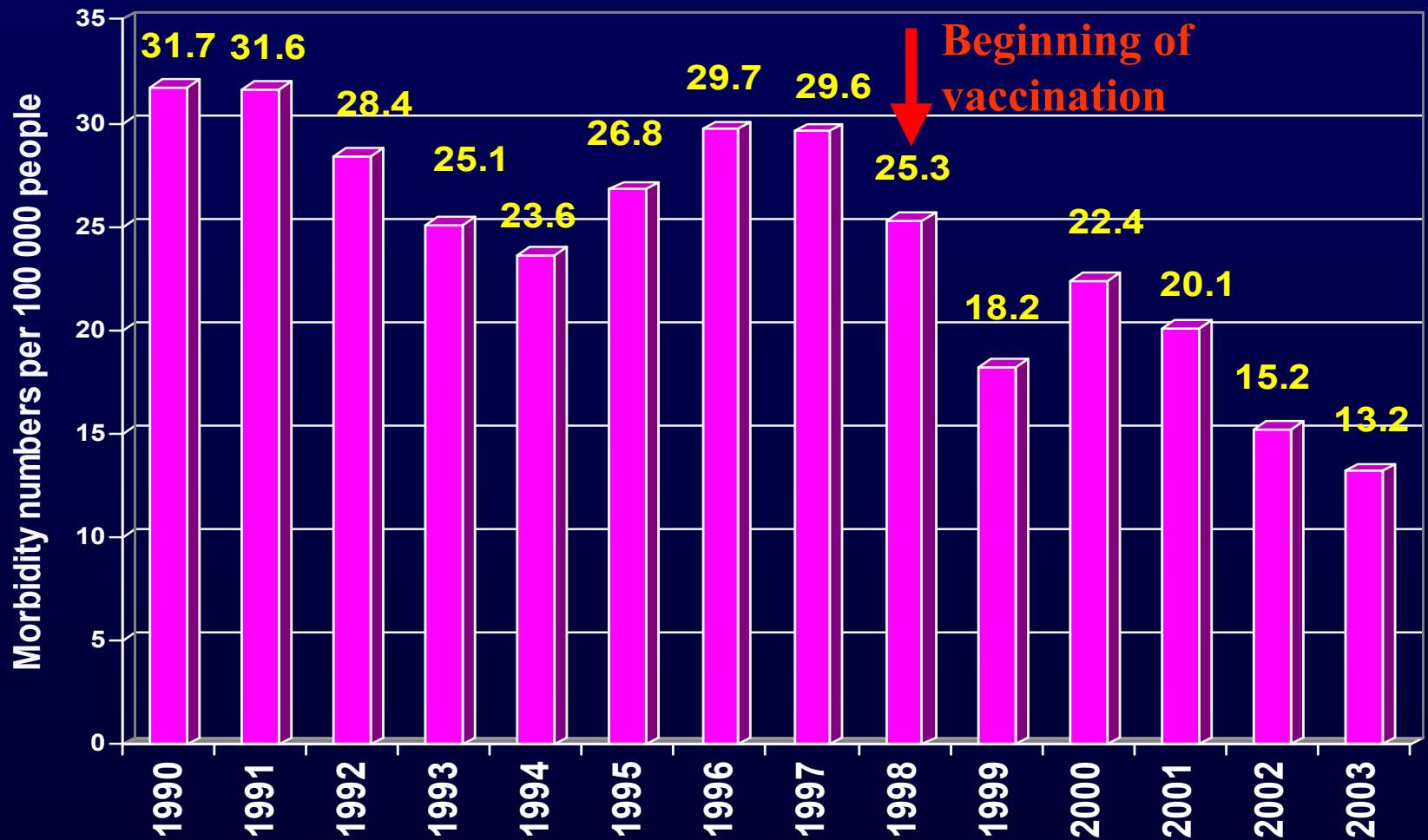


# Etiology of acute viral hepatitis, Kazakhstan, 2003

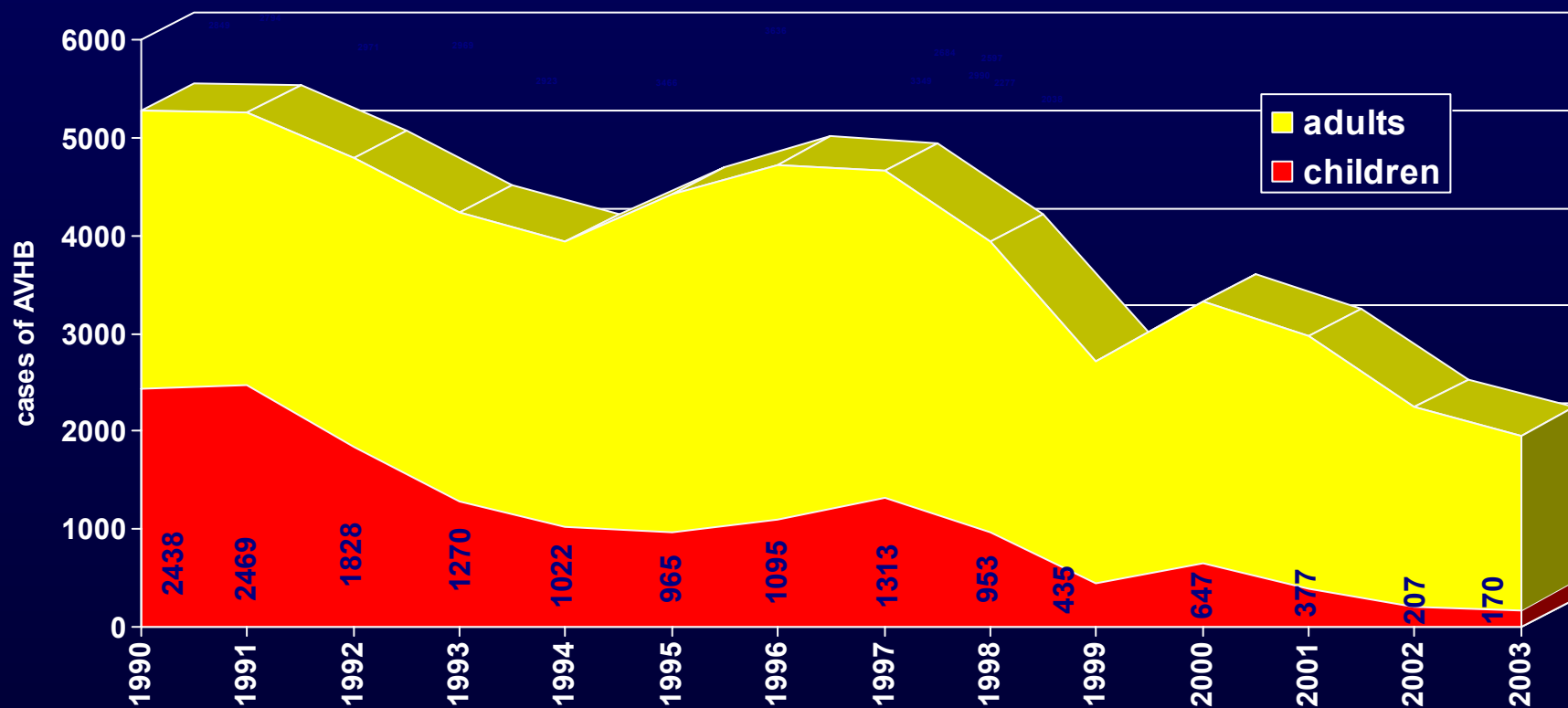
Viral Hep.A -  
76,2%



# Incidence of acute viral hepatitis B, Kazakhstan, 1990 - 2003.



# Cases of acute viral hepatitis B by children and adults, Kazakhstan, 1990-2003



# Normative documents currently in force

- Ukase of the President of RK  
# 3956 as of May 26th, 1998
- Prikaz of the Ministry of Health, RK,  
# 404 as of August 15<sup>th</sup>, 1997

# **Vaccination scheme for newborns currently accepted in Kazakhstan**

**0 - 2 - 4  
months**

# **Vaccination scheme for older people**

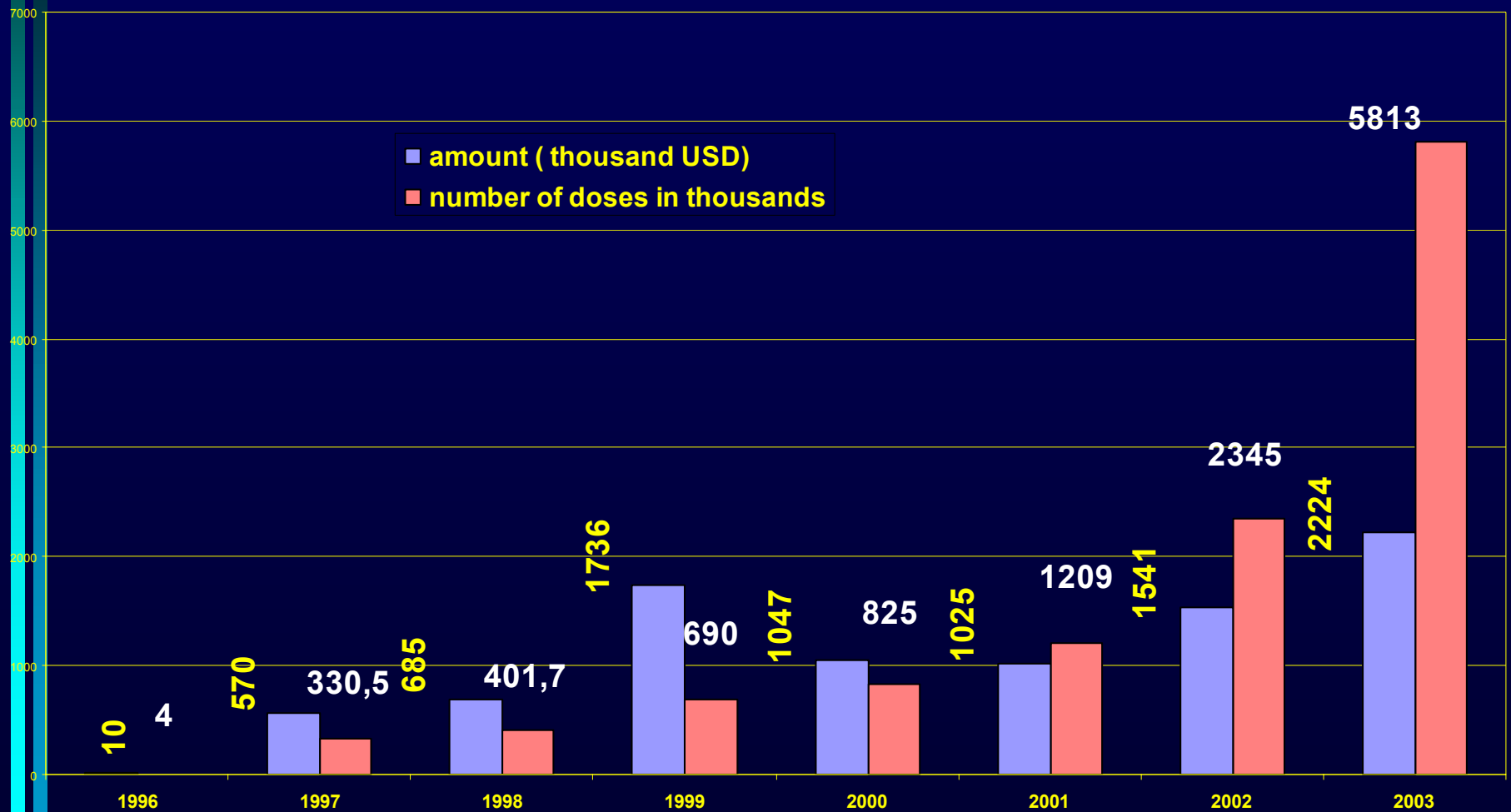
**0 - 1 - 6  
months**

# Vaccines used in Kazakhstan immunization program

- «Engerix» - Belgium
- «Euvax-B» - Korea
- «Hepavax Gen» - Korea
- «Heberbiovac» - Cuba



# Purchases of hepatitis B vaccine, Kazakhstan



## Hepatitis B-3 coverage among children under 1 year of age, Kazakhstan, 1998-2003

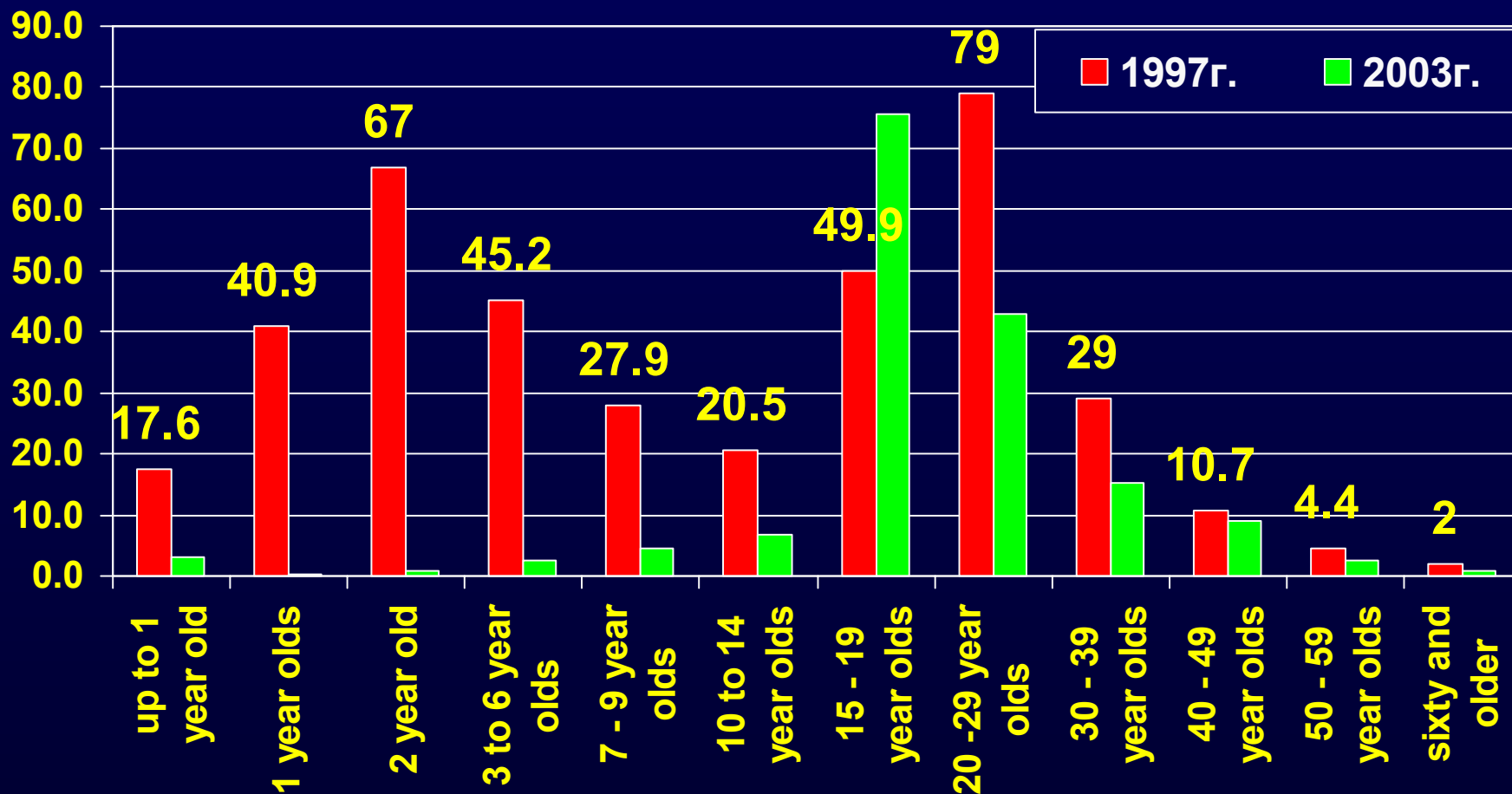
<b>Years</b>	<b>Total number of children under 1 year of age</b>	<b>Vaccinated with the three doses of HepB vaccine</b>	<b>Coverage</b>
<b>1998</b>	<b>219240</b>	<b>213364</b>	<b>97,3%</b>
<b>1999</b>	<b>213879</b>	<b>204265</b>	<b>95,5%</b>
<b>2000</b>	<b>215376</b>	<b>212566</b>	<b>98,7%</b>
<b>2001</b>	<b>216743</b>	<b>213208</b>	<b>98,3%</b>
<b>2002</b>	<b>223855</b>	<b>220564</b>	<b>98,5%</b>
<b>2003</b>	<b>227380</b>	<b>221342</b>	<b>97,3%</b>
<b>Total</b>	<b>1 316 473</b>	<b>1 285 309</b>	<b>97,6%</b>

## **“Catch up” hepatitis B vaccination coverage, Kazakhstan, as of 01.01.2004**

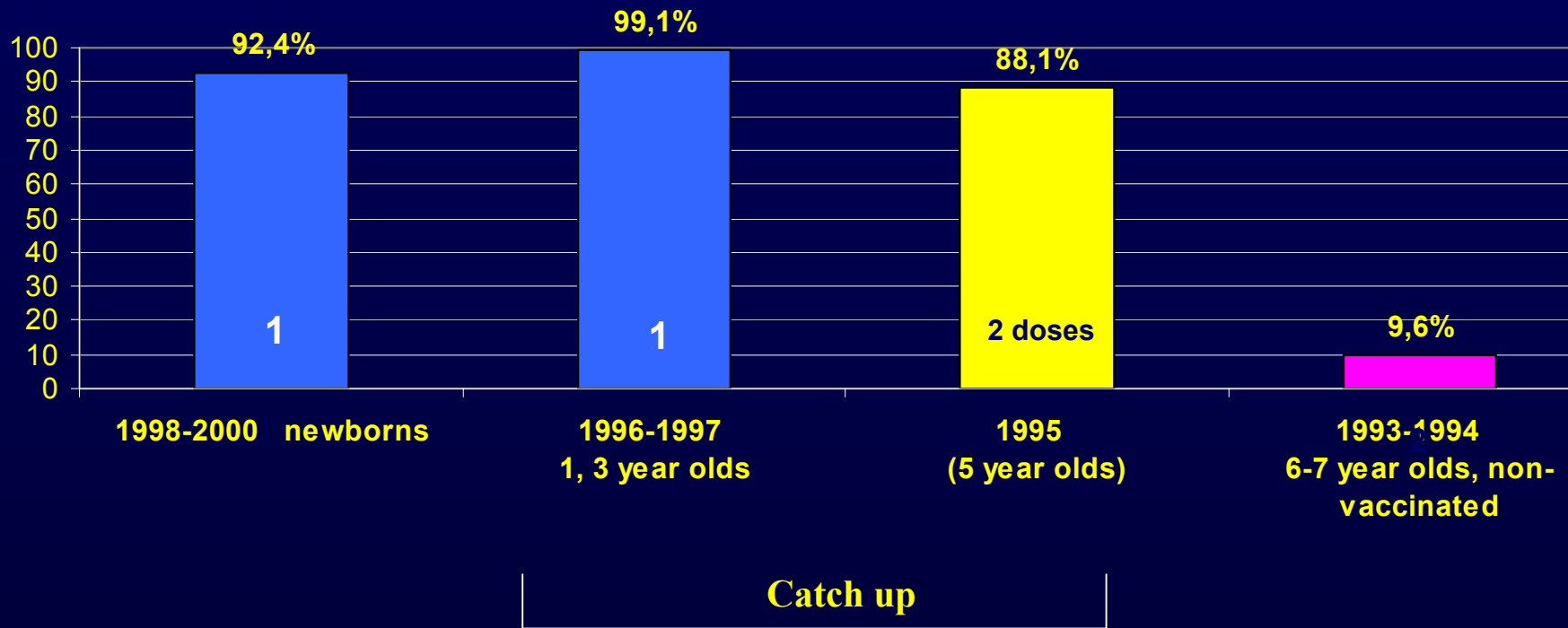
<b>Groups</b>	<b>Number of people</b>	<b>Vaccinated with the three doses of hep.B vaccine</b>	<b>Coverage</b>
<b>Children born in 1997</b>	<b>225244</b>	<b>213981</b>	<b>95,0%</b>
<b>Children born in 1996</b>	<b>243626</b>	<b>234368</b>	<b>96,2%</b>
<b>Children born in 1995</b>	<b>261311</b>	<b>183378</b>	<b>95,2%</b>
<b>Medical workers</b>	<b>173815</b>	<b>139806</b>	<b>80,4%</b>
<b>Medical students</b>	<b>19849</b>	<b>12448</b>	<b>62,7%</b>

# Incidence of acute hepatitis B in the different age groups in 1997 and in 2003, Kazakhstan

на 100 тыс.



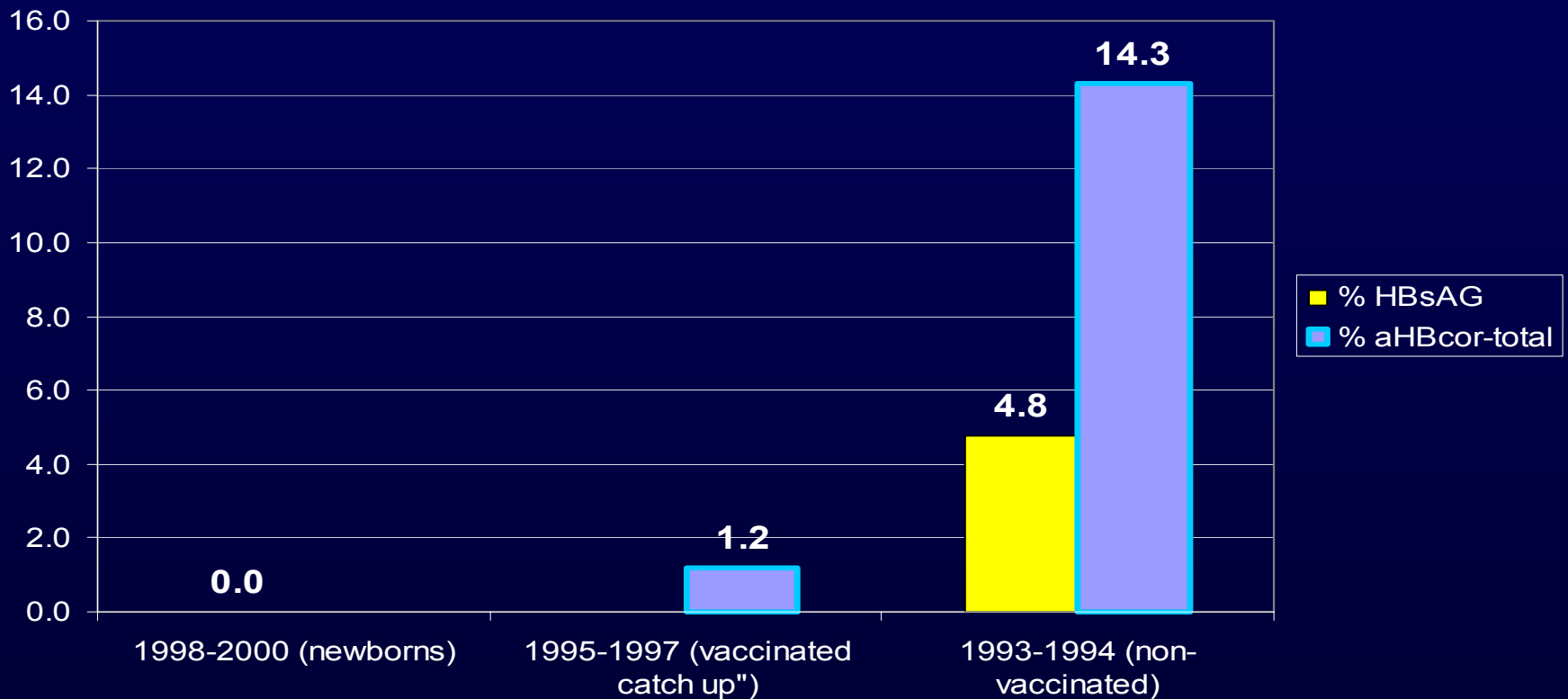
# Anti-HBs prevalence among vaccinated and non-vaccinated children, Almaty, 2001



**P<sub>1-2</sub> = 0.001**

**N=351**

# Identification of anti-HBcor total and HBsAg among children vaccinated and unvaccinated against HBV, Almaty, 2001



**N=351**

# Conclusion

- **As a result of the implementation of the Hepatitis B Immunization Program 3 800 000 people were vaccinated with three doses of vaccine in the years 1998 – 2003**
- **The high hepatitis B coverage of newborn babies, catch up immunization of older children, adolescents and other “risk groups” that was achieved by the year 2004 helped us reduce the incidence of acute viral hepatitis B by 2,4 times as compared with the pre-immunization period, and by 6,4 times among children**
- **The high effectiveness of hepatitis B was immunization program was evaluated and confirmed**
- **The immunization program in Kazakhstan was developed and implemented thanks to the support of international organizations**

## Objectives for the future

- Continue the routine immunization of newborns, adolescents and risk groups
- Attain the high level of immunization coverage of all the groups of population
- Hold epidemiological surveillance of viral hepatitis B as a vaccine regulated infection



# Acknowledgements

- CDC, Central Asian Region
- WHO, European Regional Bureau
- Global Alliance for Vaccine and Immunization