

National immunization programme, immunization coverage and impact in Estonia: focus on hepatitis

19th – 20th of November 2015, Riga

Content

- History of HepB immunization in Estonia
- Current Immunization Programme
- Immunization coverage in Estonia (focusing on hepatitis)
- Immunization impact (focusing on hepatitis)
- Conclusions

History of HepB immunization

- Screening of pregnant women since 1996

Vaccination of risk groups since 1996:

- Neonates of HBsAg positive mothers
- Occupational risk groups (healthcare workers, rescue workers, police etc.)

Universal vaccination :

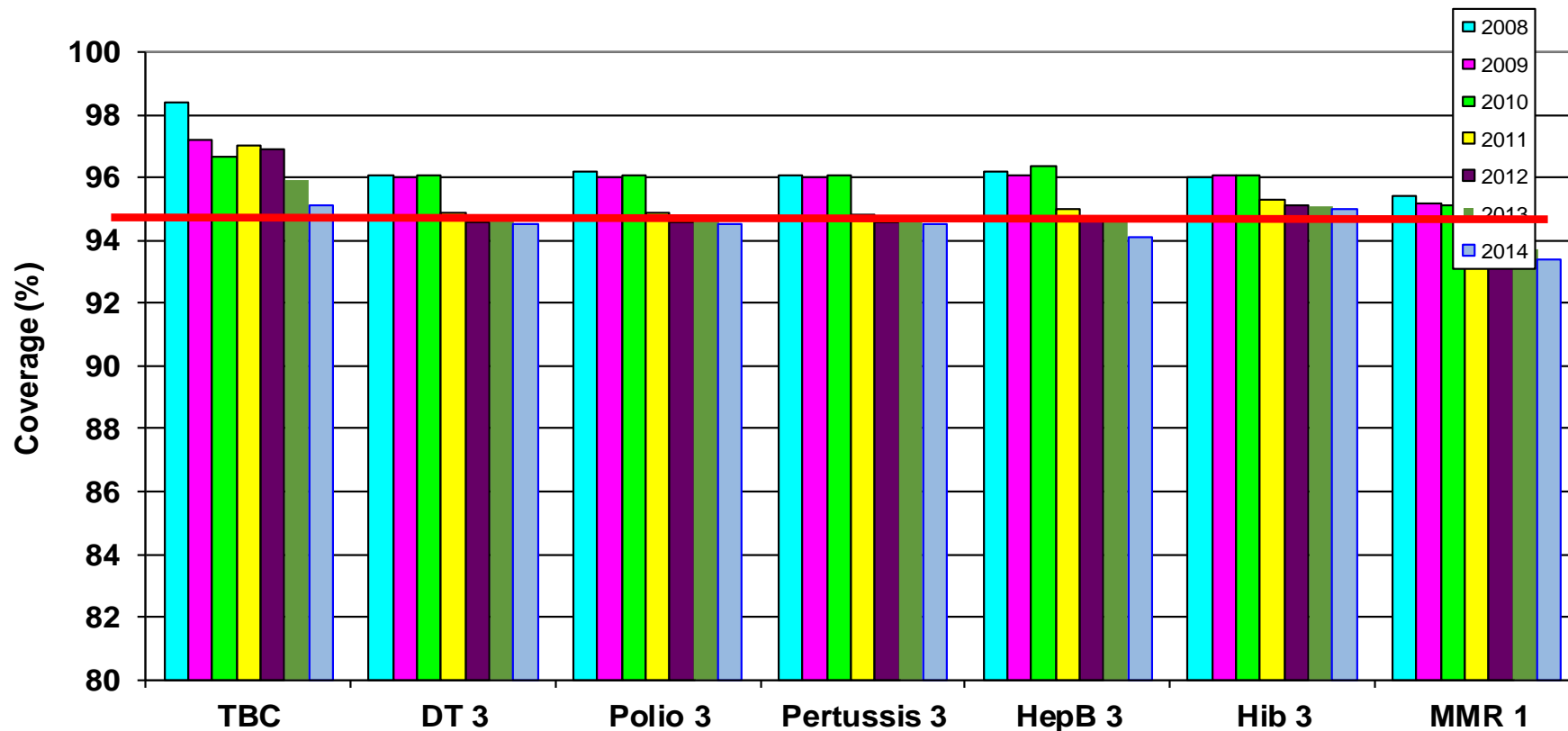
- 13 year-old children since 1999
- New-borns since 2000 in Tallinn and since 2003 countrywide

Immunization programme

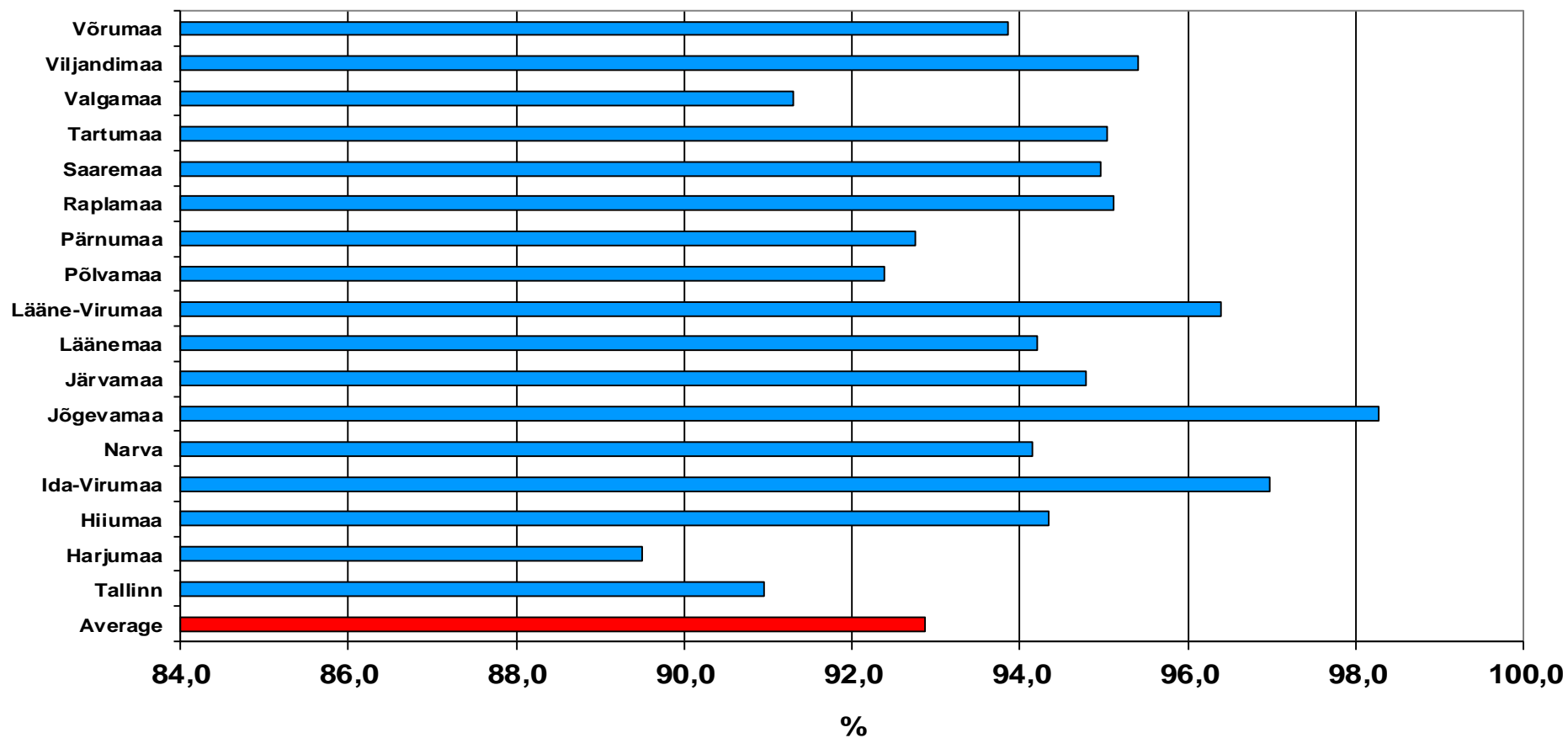
(Regulation of the Minister of Social Affairs nr 2, 8.01.2014)

- 12 hours HepB 1
- 1–5 days BCG
- 1 month HepB 2
- 2 months RV1
- 3 months IPV 1, DTPa 1, Hib 1, RV2
- 4,5 months IPV 2, DTPa 2, Hib 2; RV3*
- 6 months IPV 3, DTPa 3, Hib 3, HepB 3
- 1 year MMR 1
- 2 years DTPa 4, IPV 4, Hib 4
- 6-7 years DTPa 5, IPV 5
- 12 years HepB 1,2,3*
- 13 years MMR 2, HepB 1,2,3**
- 15-16 years dTpa 6
- 17 years dT 7***
- 25, 35.. years (every 10 years) dT 7

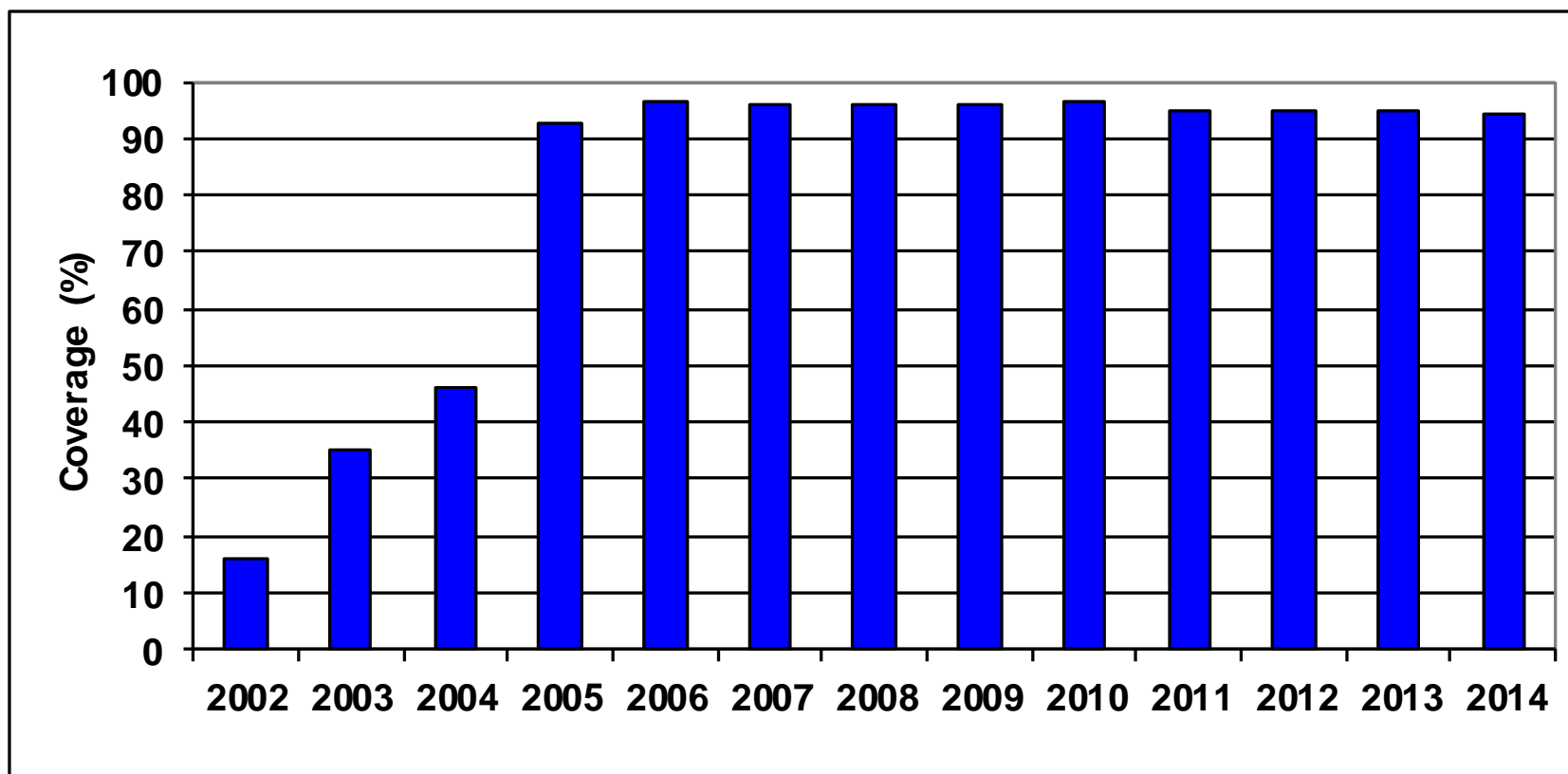
Vaccination coverage in 2 year-old children, 2008-2014



Vaccination coverage (HepB3) in counties in 1 year-old children , 2014



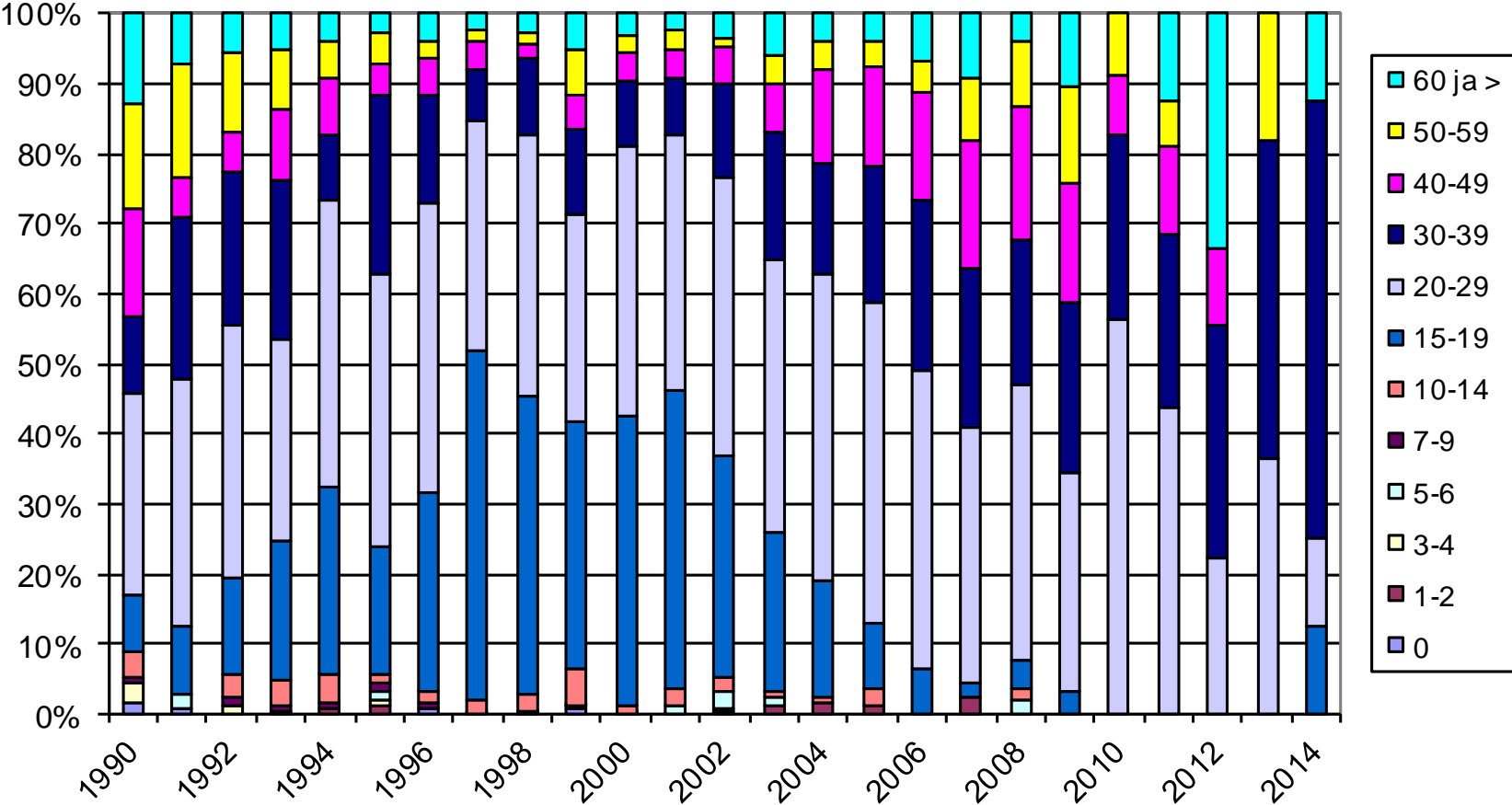
Vaccination coverage (HepB3) in Estonia in 2 year-old children, 2008-2014



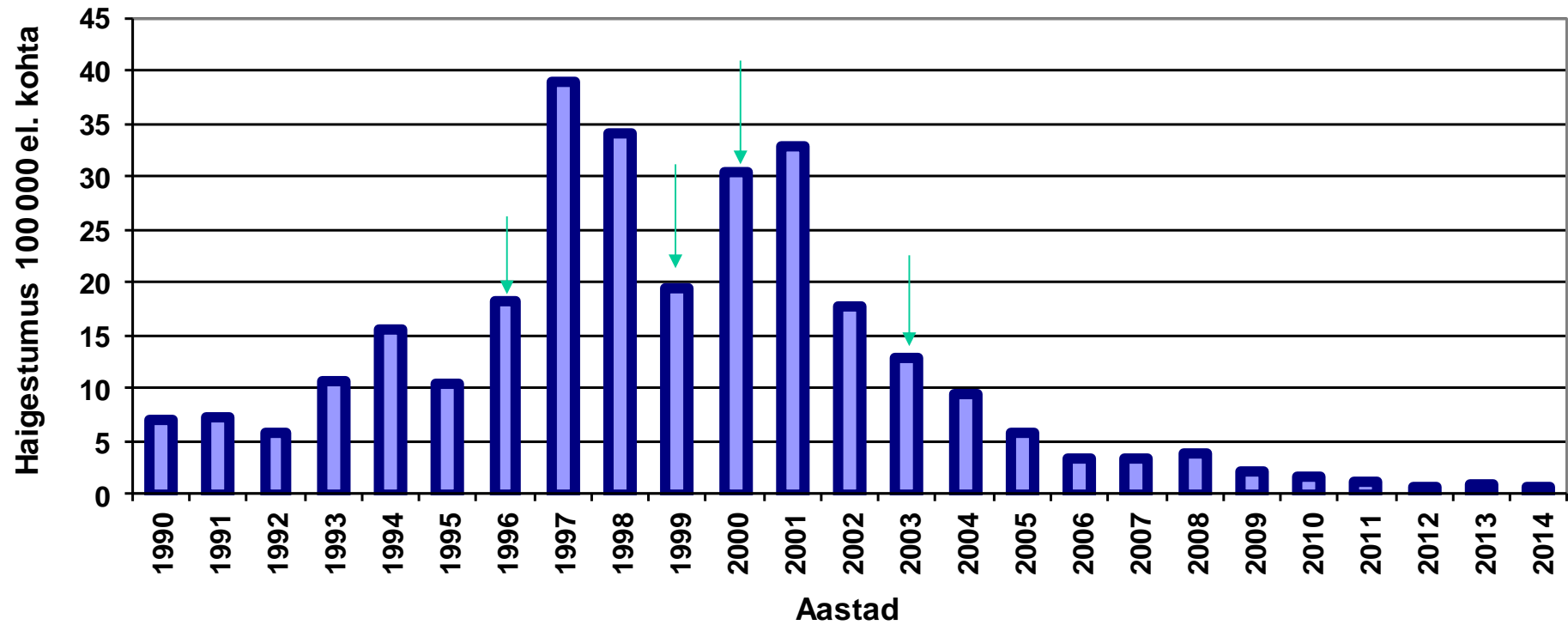
Percent of refusals to vaccinate in age group 0-14 y, 2012-2014

Vaccinations	Refused to vaccinate		
	2012	2013	2014
Diphtheria-tetanus	2,1%	2,5%	2,8%
Pertussis (0-10year-old)	2,6%	2,9%	3,2%
Mumps Rubella Measles	2,5%	2,8%	3,1%
Polio	2,1%		2,8%
Hepatitis B	2,8%	3,2%	3,5%
<i>Haemophilus influenzae b</i>	1,8%	2,5%	2,5%
Tuberculosis	1,4%	2,1%	1,9%

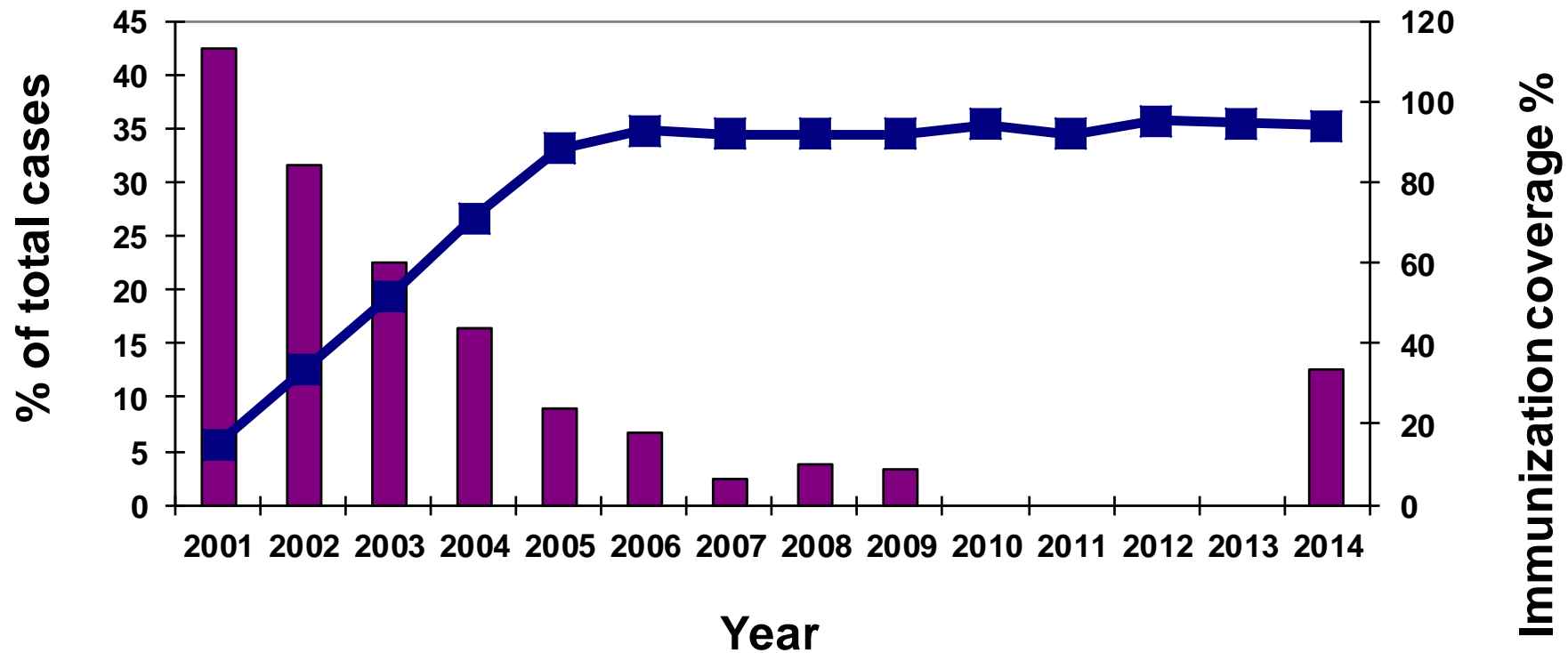
Acute HepB cases age distribution in Estonia, 1997-2014



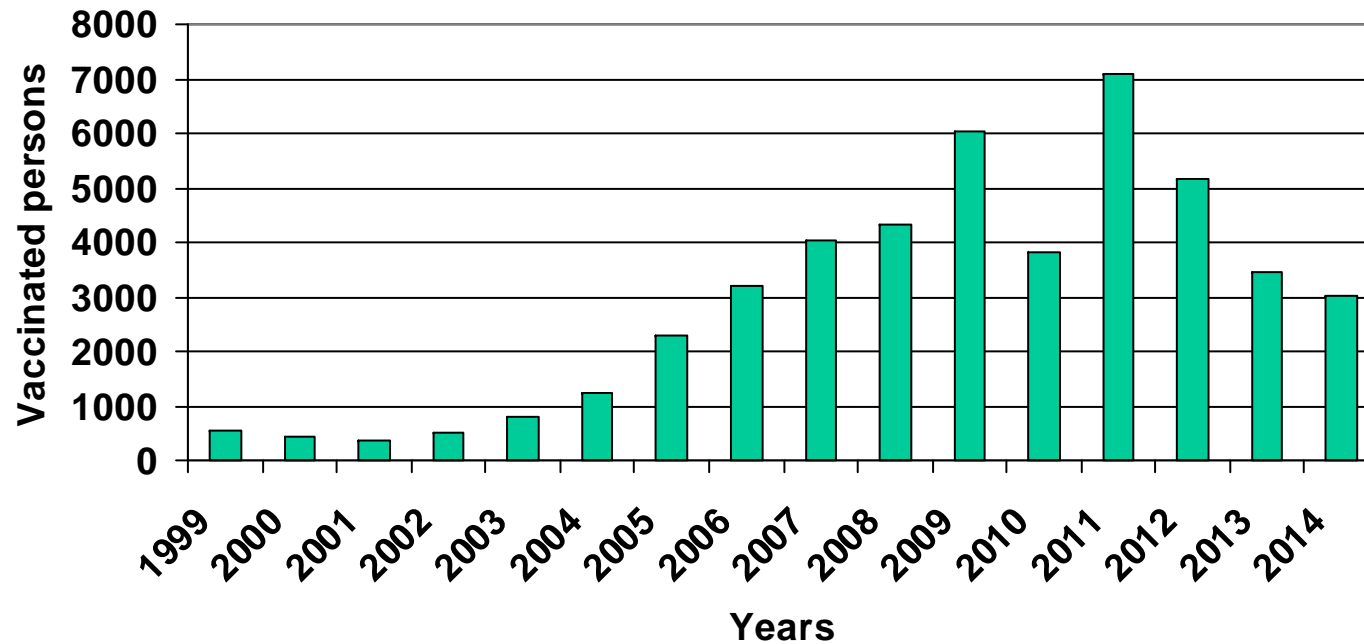
Acute HepB incidence in Estonia, 1990-2014



Hepatitis B: the percentage of 15-19 year-old teenagers of total incidence and vaccination coverage, 2001 – 2014



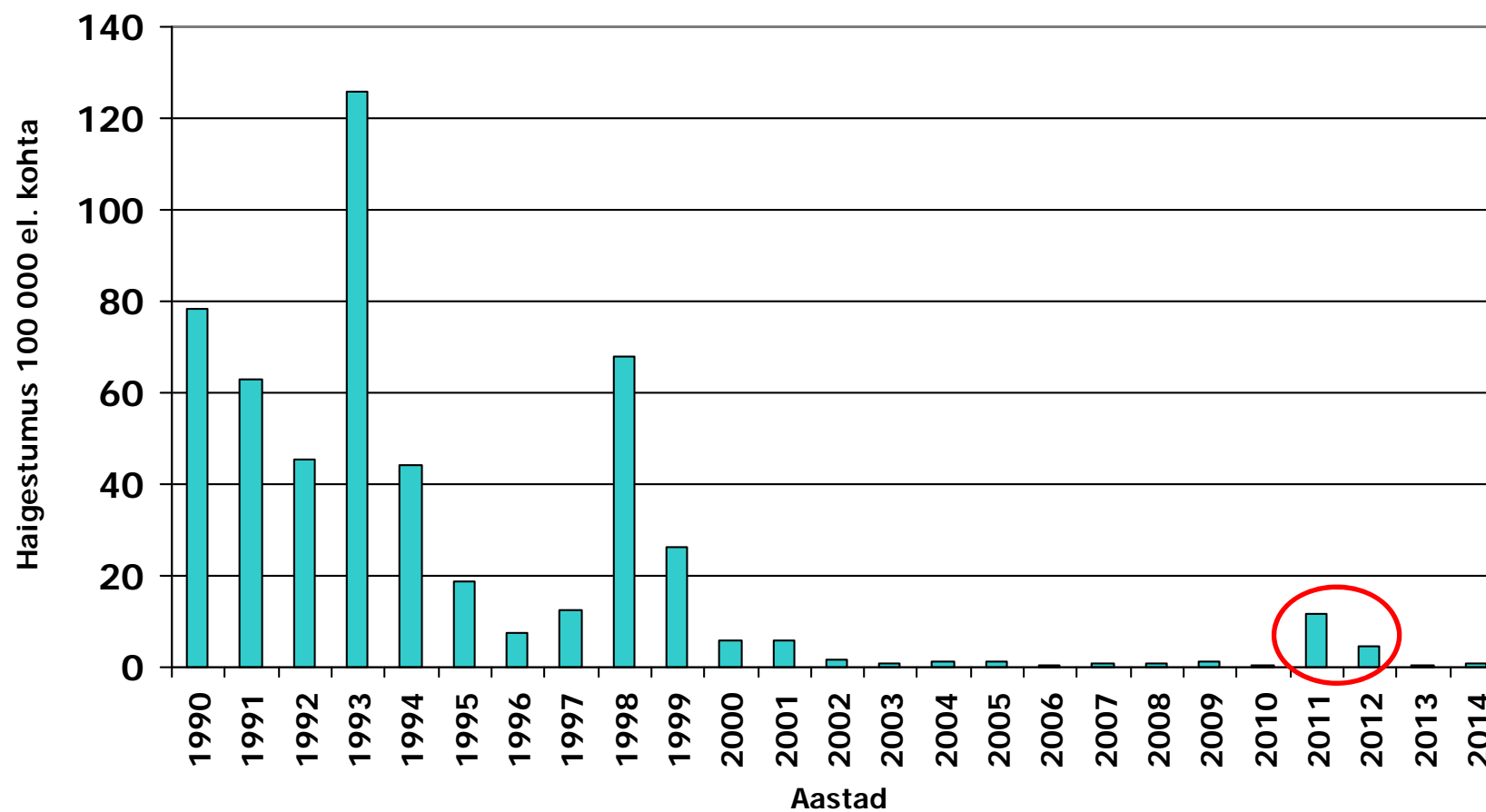
Hepatitis A. Number of vaccinated persons in Estonia, 1999-2014



Vaccination during Hepatitis A outbreak in Viljandi County, 2011 – 2012

Year	0-14 year-old	15-17 year-old	Adults	All
2011	512	60	1379	1951
2012	267	50	1040	1357

Acute Hepatitis A incidence, 1990-2014



Conclusions

- Countrywide, free of charge, universal HepB vaccination;
- HepB vaccination of new-borns during the first 12 hours of life, catch-up vaccination of children at any age;
- High vaccination coverage in all age groups;
- After introduction of universal vaccination there has been a significant decrease in incidence of HepB in all age groups;
- Since 2010 there have been no cases of acute HepB in children.

Problems during the last 5 years:

- increased incidence of refusals to vaccinate
- slowly decreasing vaccination coverage

Future

- We will continue universal vaccination of newborns and catch-up vaccination of children at any age
- Switch to hexavaccine?

THANK YOU!

