

# Evaluation of a hepatitis B selective vaccination programme in Norway

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## Hepatitis B in Norway

- Low prevalence of carriers
- Very few carriers outside defined risk groups



## The philosophy behind the Norwegian immunisation programme

- Protect persons at increased risk of infection
- High priority to infants / children, with high risk of becoming carriers if they are infected
- In that way keep the number of carriers low
- Thus avoid increasing the need of a general vaccination programme



# Indications for hepatitis B vaccination in Norway

- Persons who
  - are household members of hepatitis B carriers
  - have a life style which increase the risk of hepatitis B infection
  - have a disease increasing the risk of hepatitis B infection
  - are under 25 years of age and have parents from high or medium high endemic regions
  - have an occupation increasing the risk of hepatitis B infection



## Hepatitis B vaccine for the four first groups

- Is given free of charge
- Must be ordered from the NIPH
- Is ordered by a named patient prescription system, which makes it possible to calculate the number of doses given to each group

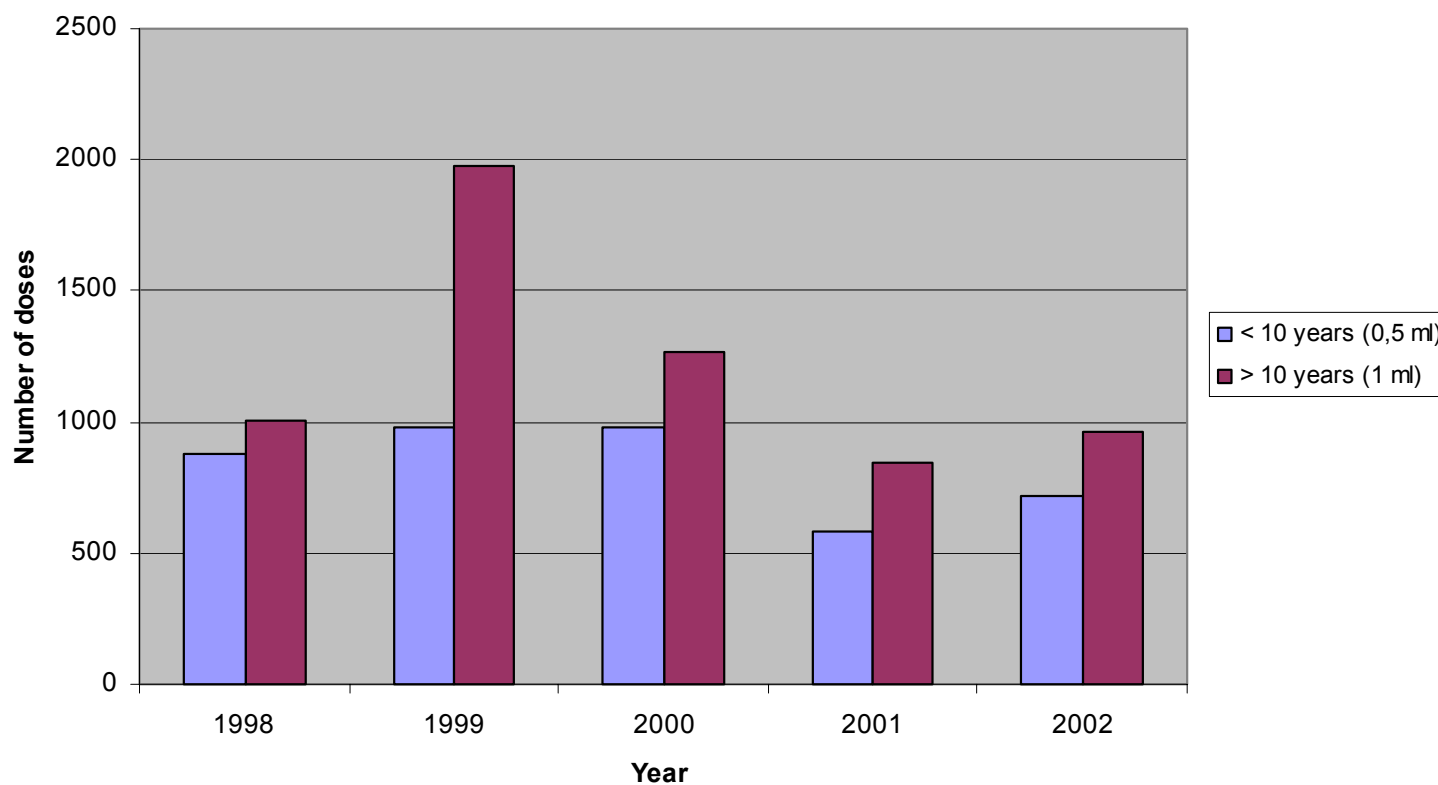


## Household members of hepatitis B carriers

- Most of the carriers are immigrants from high endemic countries
- The number of “new” carriers depends to a large extent on the political situation – how many refugees will come to Norway, and from which countries. In 1998/99 a high number of persons from Kosovo resulted in a high number “new” carriers



# Hepatitis B vaccine given to household members of hepatitis B carriers



## Conclusions – household members

- As the numbers vary from year to year, and many of them leave the country after a short time, vaccine coverage in this group is difficult to calculate
- The use of vaccine fluctuate with the number of immigrants in a way that indicate rather good coverage



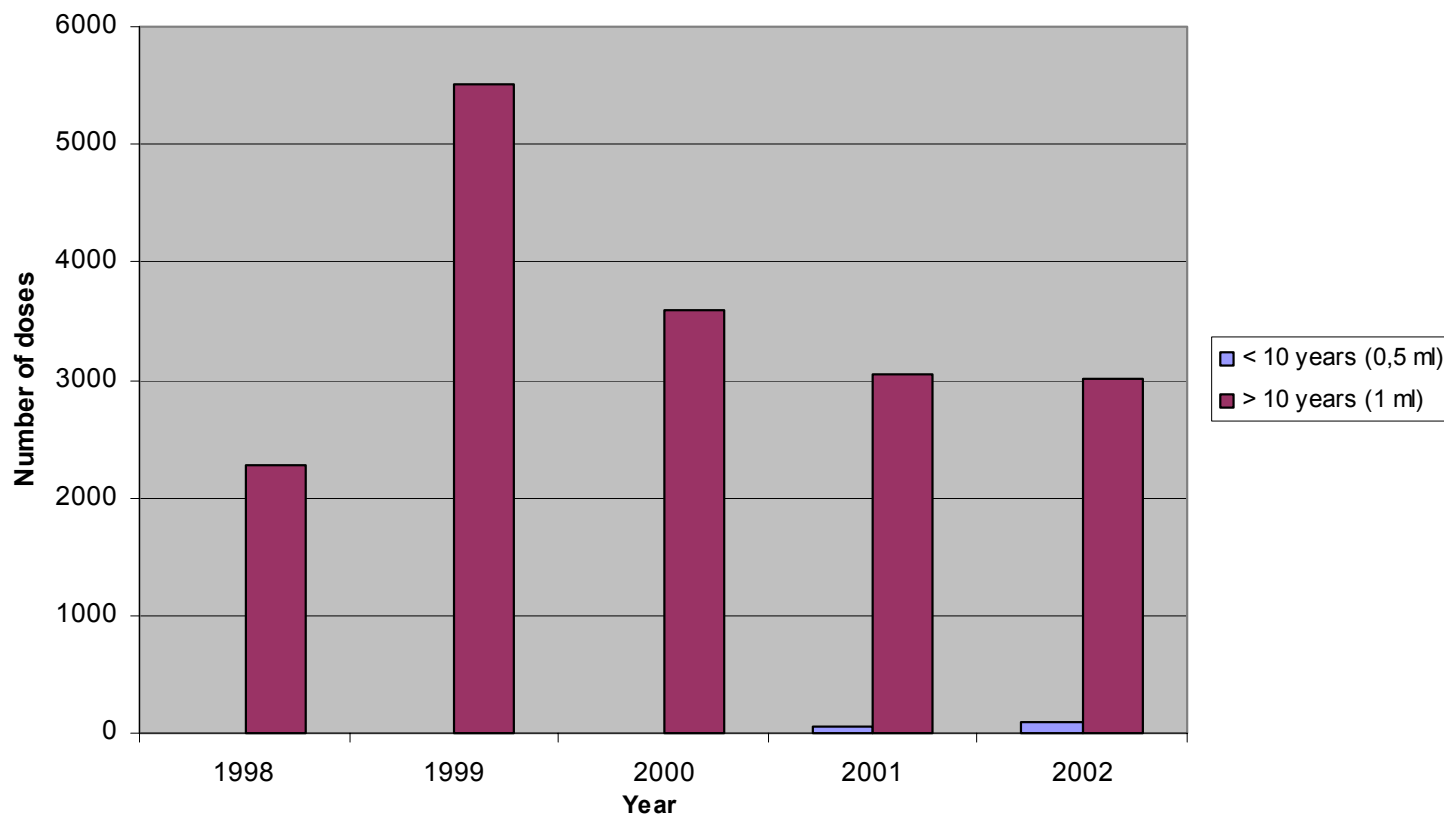


## Persons with life style leading to increased risk of hepatitis B infection

- Drug users
  - About 1000 persons recruited each year
  - Hepatitis B outbreak with top 1998/99
  - Large vaccination campaigns targeting this group organised in 1999 and 2000
- Men having sex with men
- Prostitutes



# Hepatitis B vaccine given to persons with life style leading to increased risk of infection



## Conclusions – drug users

- Even this group can be reached through targeted campaigns
- In ordinary years the vaccine used is just sufficient to immunise the estimated number of “new” drug users
- As we know that a lot of established drug users are not immunised, this is not enough to make the situation better



## Children with parents from countries outside the low endemic area

- The recommendation to immunise all children with parents from countries outside the low endemic area was first given in 1992
- Priority: Infants and teenagers
- Presented as a special offer for children with higher risk than ordinary in Norway
- Increasing focus on the recommendation since 1996
- From 2002 defined as part of the vaccination programme

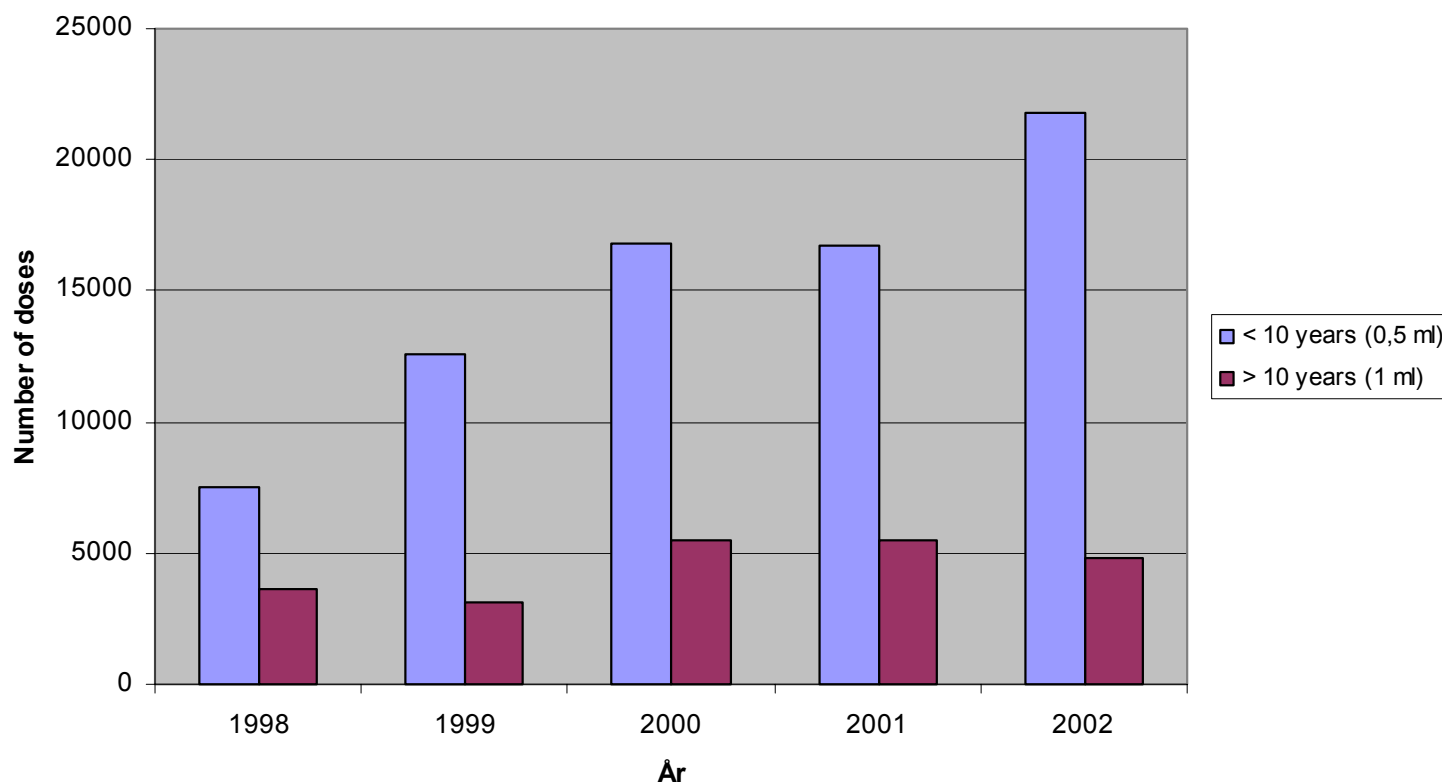


## How many children are in the target group?

- About 3000 children with at least one parent from medium or high endemic country are born in Norway each year
- The total target group varies with the number of immigrants, and the native country of the immigrants



## Hepatitis B vaccine given to persons with parents from high endemic regions



## Conclusions – children of immigrants

- In 1998 (and earlier) this programme only reached a small part of the target population
- Increasing coverage during the last three years, from about 60% (-00, -01) to about 70% (-02)
- A selective programme like this can cover an acceptable part of the target population, but the impact is difficult to evaluate

