

# Travel vaccinations for children

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900 mio people travel every year  
and the number is increasing  
7 % are children ~ 60 mio children  
I DK pediatricians are not directly  
involved in travel vaccines, but we  
are often asked for advice and many  
of our patients travel.

# Risk assessment

- Purpose of travelling
- Length of stay (days, months, years) and character of the trip (arranged holiday, visiting family and relatives (VFR), parents leave, "backpackertrip", posting of parents)
- Chronic disease in the child
- Age of the child → variable immunity and age-based behaviour.  
(breastfed/formulafed, curious toddlers, teenagers)

# Destination

- Specific infectious diseases  
→immunizations
- Prophylactic medications
- Prevention of vector-borne diseases
- Sun, food and water safety

- First of all make sure the routine vaccination programme is up-to-date
- The risk of contracting whooping cough or measles is much higher than getting japanese encephalitis or yellow fever.

# The Danish Childhoodvaccination programme

- 3, 5 and 12 months DiTeKiPol-Hib + PCV13
- 15 months and 4 years MMR
- 5 years DiTeKiPol booster
- 12 years HPV x 2

# The childhood vaccination programme

- Can be accelerated, EPINYT 6, 2011
- DiTeKiPolHib from 2 months
- MMR from 9 months
- PCV 13 from 6 weeks

## Travelling toddlers

Small children at home and abroad mostly develop high fever for the same reasons (URI etc.) but other reasons should be considered

The risk of diarrhoea is much higher than for more exotic diseases

Consider Rotavirus immunization (at 6, 10 and 14 weeks of age)

Encourage to continue breastfeeding



# Malaria

- Fever
- Children sometimes have respiratory or gastrointestinal symptoms (stomach ache, diarrhoea) → miss the diagnosis

Instruct parents to go and see a doctor if fever in high endemic malaria areas.

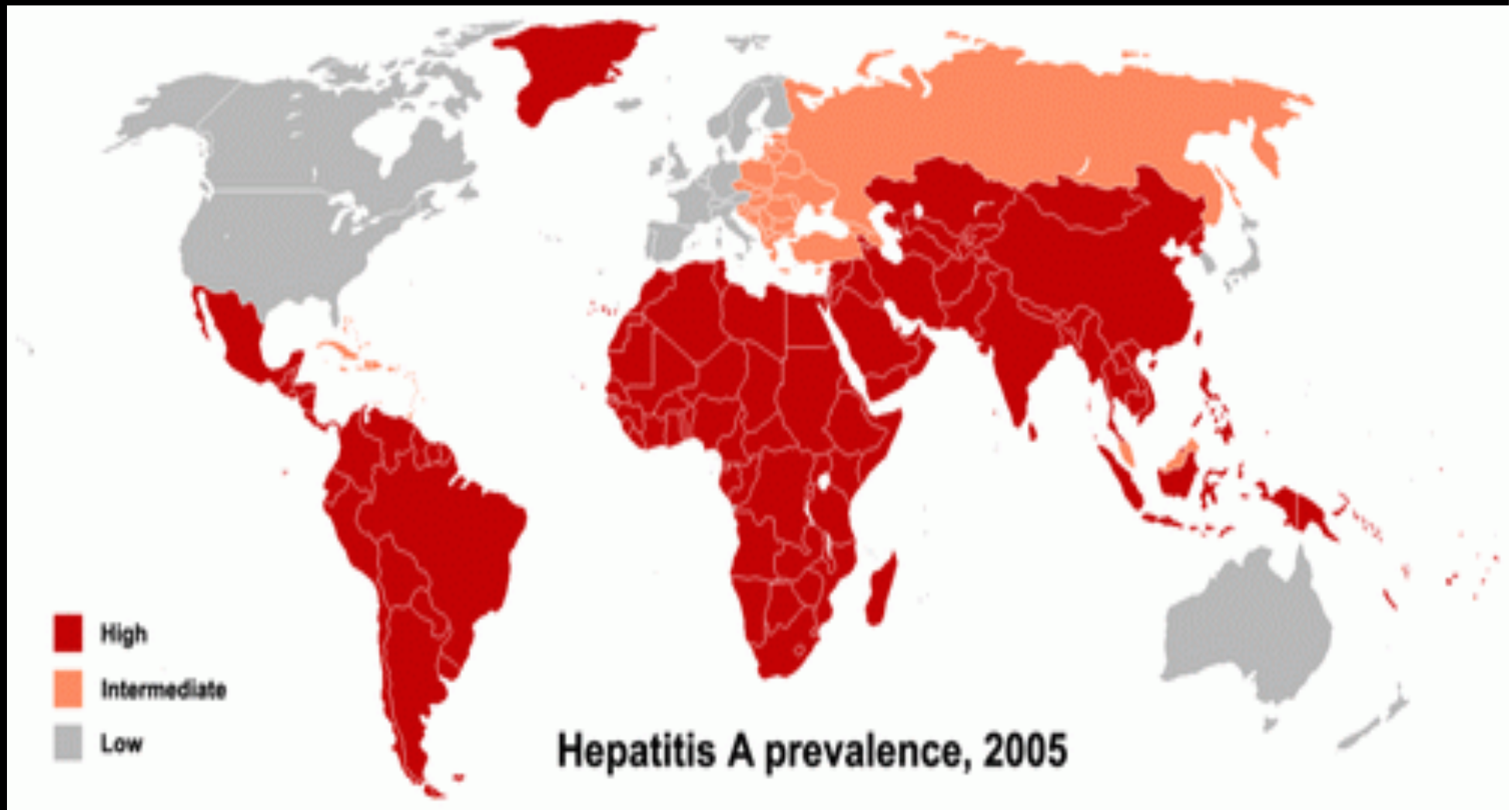
# Malaria

- Cover the skin with clothes
- Impregnated bednets
- Repellants containing (DEET, Autan) not for children < 2 months
- Do not apply to the hands of toddlers ( )
- Avoid mosquito biting hours

# Malaria prophylaxis

- Chloroquine, mefloquine and Atovaquone/proguanil safe from 5 kg
- Doxycycline for children > 8 years
- The tablets can be crushed

# Hepatitis A



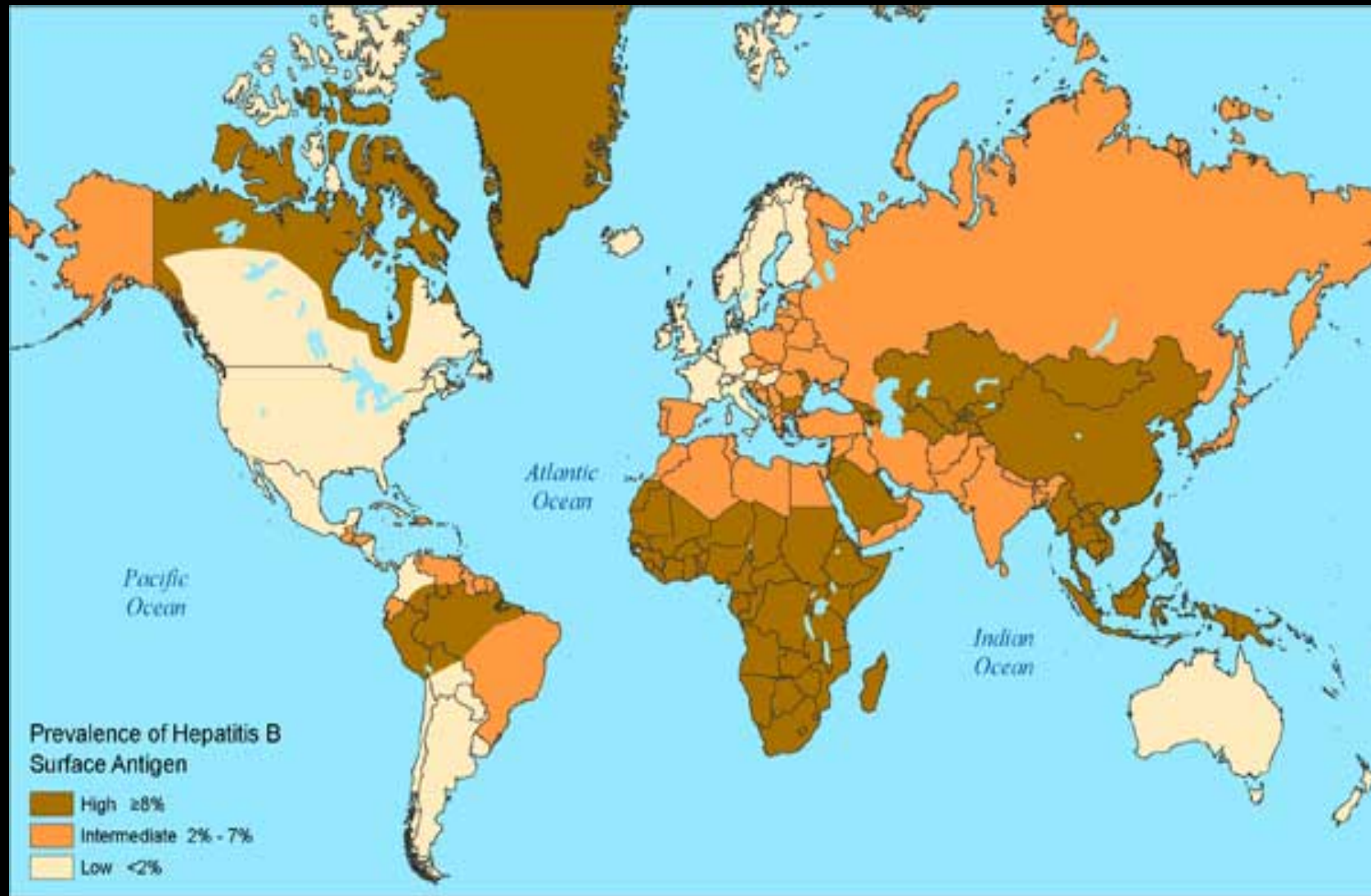
# Hepatitis A

- Children < 6-8 years rarely gets symptoms, though probably more than assumed in the past (10 % of children below 6 years)
- Prior to the hepatitis A vaccine, children were given immunoglobulin from 10-12 years
- Havrix og Twinrix can be given from 1 year of age
- Very few adverse events
- To prevent spread in families and institutions (outbreaks)
- In some European countries it is a free

# Hepatitis B vaccination

- Hepatitis B part of the childhood vaccination program almost globally
- The risk of chronic infection is higher the younger the age at transmission
- Studies show significant horizontal transmission in children
- Can be given to newborns

# Hepatitis B



# Rabies

- Indicated when travelling/posted in remote areas where rabies is endemic
- For children > 1 year
- Can be playing with animals without telling the parents
- Vaccine is given on day 0, 7 og 28, and further to vaccinations should be given post-exposure



# Meningococ A/C/W/Y

- In the meningitis belt in Sub-Saharan Africa
- Children > 1 year 1 dose
- Children 2 months – 1 year should receive 2 doses min. 1 month interval

# BCG

- Protects against invasive TB (miliary TB og TB meningitis)
- Can be given from birth
- Recommended for long-term stay in high endemic areas with close contact to the locals

# Yellow fever

- Live-virus vaccine
- Requirement for some countries in Africa and South America
- Can be given from 9 months of age
- At outbreaks- with caution from 6 months of age
- Use repellent

# Typhoid fever vaccine

- For typhoid endemic countries
- Typhim Vi Polysaccharid vaccine for children > 2 years of age
- Oral live-attenuated vaccine from 6 years
- Efficacy 50-80 %

# Other vaccines to consider

- Japanese encephalitis vaccine  
(from 1 year of age)
- Influenzae
- TBE
- Cholera

# Case

- A family with two children 7 months and 2 ½ years of age are going to travel in India for 2 months.
- They are going to stay in hotels but also in local homes
- What would you recommend?

- MFR
- Polio
- Typhoid vaccination
- Rabies ?
- TB ?

Advice on dengue

ORS

- A family with a child of 6 months are going to Uganda for 4 months, when the child is 10 months
- What would you recommend?



- DiTeKiPolHib og Prevenar
- Yellow fever?
- Hepatitis A
- Hepatitis B?
- MMR?
- BCG?
- Malariaprophylaksis?

# Tak

