

# Pregnancy and viral hepatitis

Greet Boland



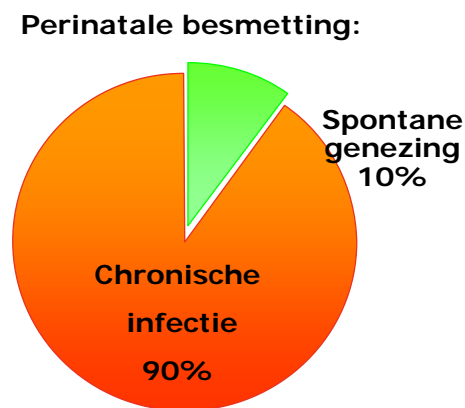
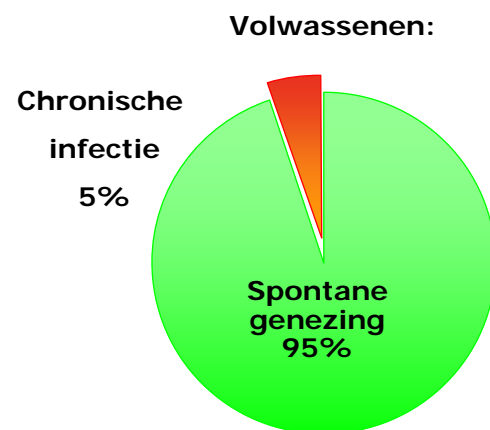
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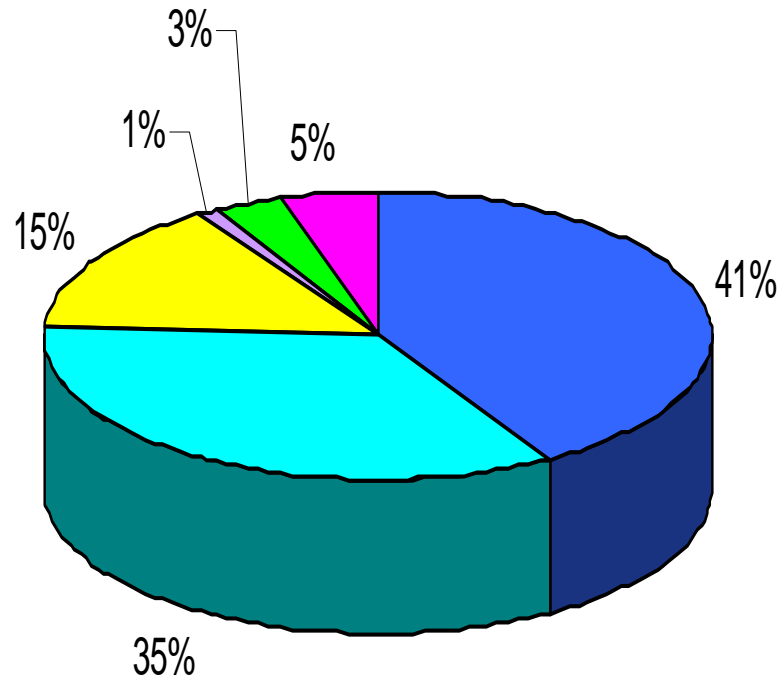
# Introduction

- ▶ Hepatitis B screening is routinely performed in pregnancy
  - ▶ Children from HBsAg-positive mothers receive HBIG (300 IU) and are vaccinated (2,3,4,11 months)
  - ▶ What happens with the mothers?
- ▶ Project, financially supported bij Fonds Nuts-Ohra

# How many pregnancies?

- ▶ Yearly about 200.000 deliveries
- ▶ Lues prevalence: 0.12%
- ▶ HBsAg prevalence 0.35% (n=700)
- ▶ Hiv prevalence 0.06% (n=120 )





■ Afrika ■ Azie ■ Europa ■ Midden Amerika ■ Zuid Amerika ■ Onbekend

Ethnic background HBsAg-positive pregnant women in 2006

# How many perinatal HBV infections?

- Before the postnatal vaccination program: 30% of the children HBV infected
  - HBeAg-negative: 10-30%
  - HBeAg-positive: 90%
- After the introduction of the postnatal vaccination: 1% (?)

HBV DNA levels (log <sub>10</sub> copies/mL)	Mothers			Perinatal HBV infections		
	Study	Control	Total	Study	Control	Total (%)*
Grade 1 (<5.0)	8	11	19	0	0	0 (0)
Grade 2 (5.0–5.99)	10	18	28	0	1	1 (3.57)
Grade 3 (6.0–6.99)	28	30	58	1	0	1 (1.72)
Grade 4† (7.0–7.99)	30	35	65	1	2	3 (4.62)
Grade 5 (8.0–8.99)	24	19	43	3	3	6 (13.95)
Grade 6 (9.0–9.99)	5	9	14	2	4	6 (42.86)
Grade 7 (10.0–10.99)	8	7	15	4	4	8 (53.33)
Grade 8 (≥11.0)	4	4	8	2	3	5 (62.50)
Total	117	133	250	13	17	30 (11.95)

# What happens with the mothers?

- ▶ Before 2008:
  - ▶ ‘Draaiboek hepatitis B-immunisatie bij zuigelingen van hepatitis B-draagsters’ – VKH responsible for reporting to the GGD and informing the physician
  - ▶ Checklist verloskundigen: same
  - ▶ NHG-richtlijn ‘virushepatitis en andere leveraandoeningen’: nothing
  - ▶ CVZ- draaiboek ‘prenatale screening’. Specific for screening and the newborn

# Projectmembers

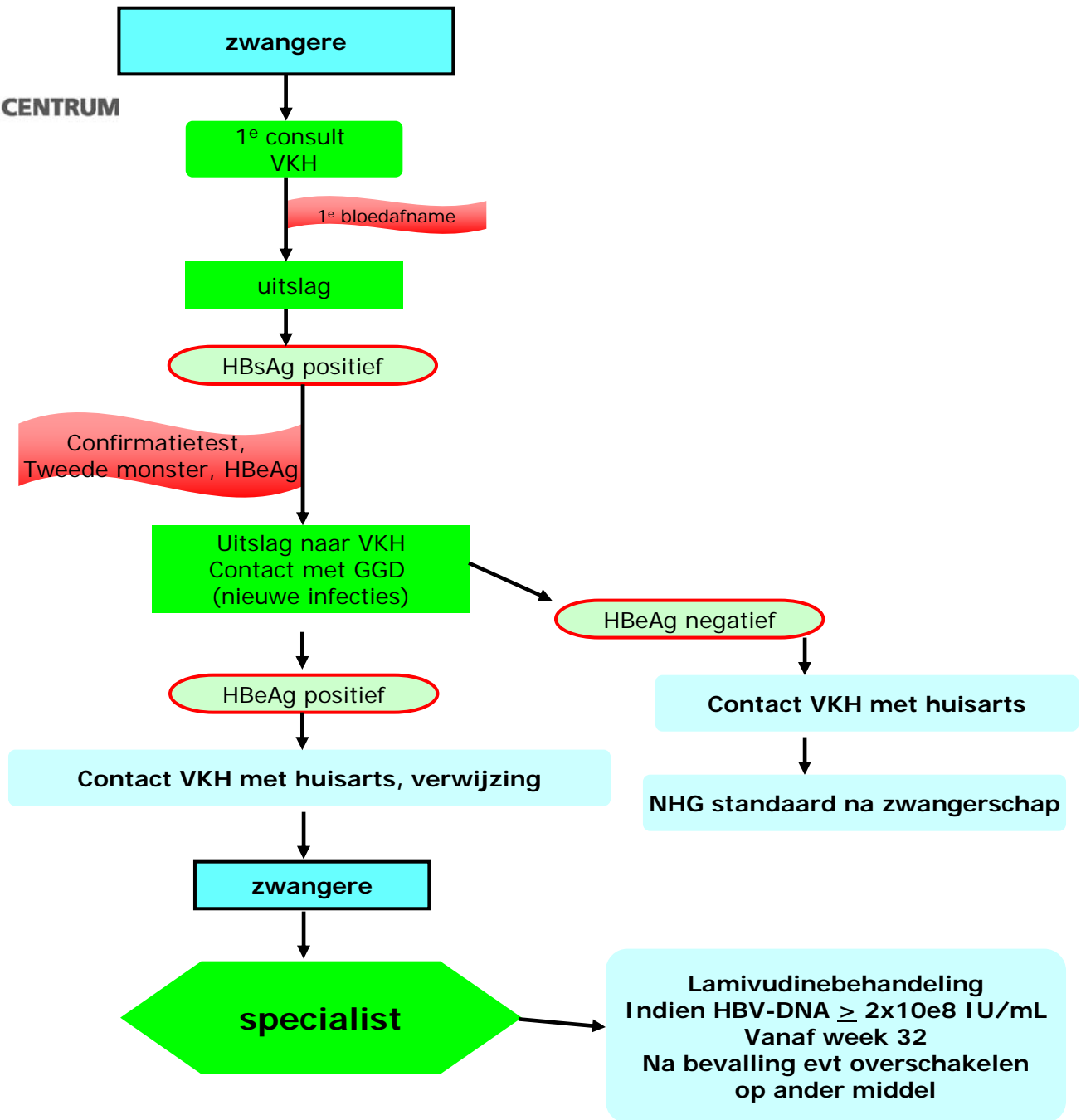
▶ Dorothé Baayen	GGD Amsterdam
▶ Greet Boland	NHC
▶ Hein Boot	Cib
▶ Marlies van Dam	NHC
▶ Ingrid Drijfhout	LVE (Cib)
▶ Annemiek van der Eijck	Virologist
▶ Sander Flikweert (†)	NHG
▶ Anja van Laere	KNOV
▶ Marijke Mostert	GGD / NHC
▶ Irene Veldhuijzen	GGD
▶ Maurice Wouters	Gynaecologists

# What happens with the mothers?

- After 2008:
- Guidelines adjusted
- New 'checklist verloskundigen'
- NHG-richtlijn 'virushepatitis en andere leveraandoeningen': special paragraph 'HBV and pregnancy'
- Guideline treatment HBV: special paragraph 'HBV and pregnancy'

## Changes:

- Responsibility for the obstetrician in controlling if the pregnant woman is tested for HBeAg
- Responsibility for the obstetrician in controlling if the mother-to-be is seen by a specialist
- Pregnancy can be monitored by the obstetrician



## Why lamivudine?

- Used (in higher doses) in pregnant women with hiv
- No experience with adefovir-dipivoxil, entecavir, telbivudine
- Some experience in pregnant women with HBV and high viral load
- Advance: More HBV-positive women see a specialist

## Questions and cautions:

- Toxicity?
- Lamivudine, not officially but unofficially safe during pregnancy
- Flare-up: normal 45% after pregnancy, 60-65% after lamivudine-treatment during pregnancy
- Does it really decrease HBV-transmission? (ref)
- Breast-feeding (OK after 48 hrs)?
- Communication between obstetricians, physician, gynaecologist, mdl-specialist or infectiologist
- Communication: often immigrants (African, Asian)

# Hepatica nobilis

