

National Program and Epidemiology of Hepatitis C in The Netherlands

VHPB meeting 13-14 November 2008

Rotterdam, The Netherlands

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Amsterdam



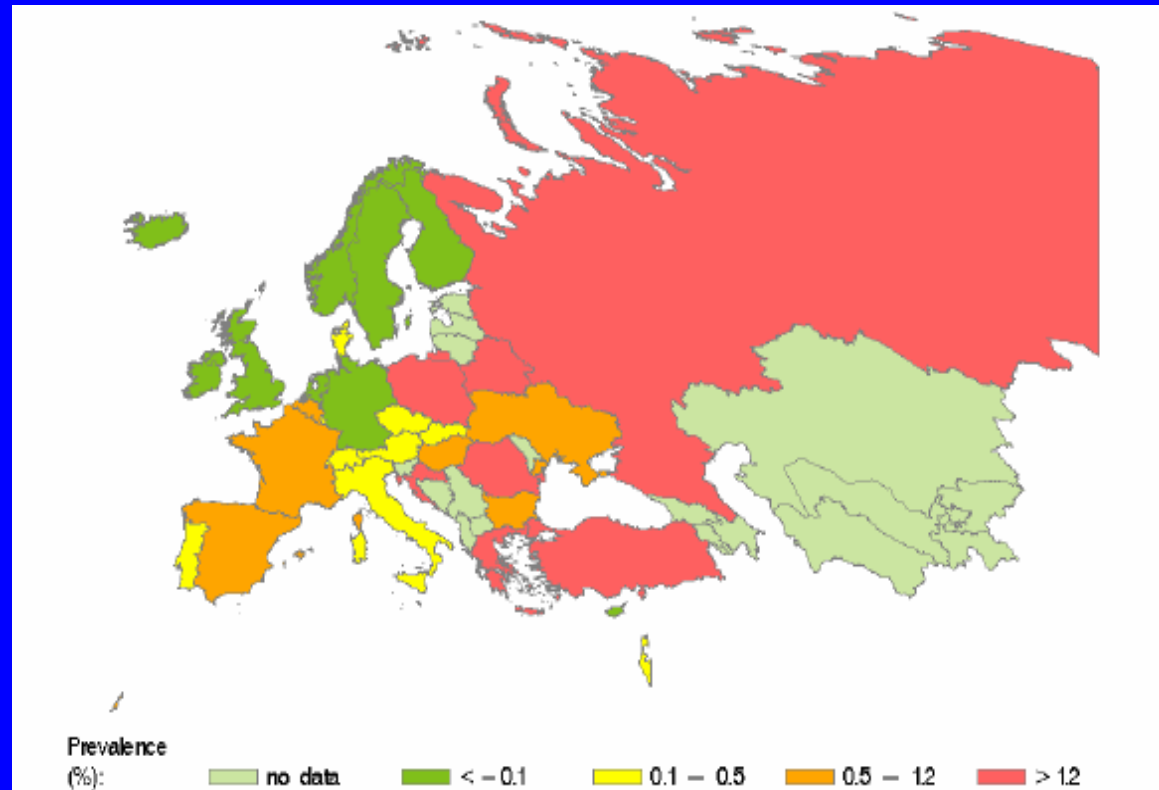
170–200 Million (M) Carriers Worldwide



World Health Organization. Weekly epidemiological record. 1999;74:421–428.

HCV Prevalence Europe

WHO European region 53 countries
0.1 - 4.5 %



Overall 1.29% HCV prevalence rates in the 21 countries according to national sources

Austria	0.75%	Italy	3.00%
Belgium	1.00%	The Netherlands	0.25%
Czech	0.20%	Norway	0.60%
Denmark	0.70%	Poland	1.50%
Finland	0.60%	Romania	4.50%
France	0.84%	Russia	1.45%
Germany	0.55%	Spain	1.50%
Greece	1.05%	Sweden	0.50%
Hungary	0.80%	Switzerland	0.75%
Rep. Ireland	0.71%	Turkey	1.00%
		United Kingdom	0.55%

HCV Prevalence in The Netherlands

1997 Health Council

anti -HCV + ve 0.1 – 0.4%

Inhabitants 16 milion

Anti – HCV + ve 16,000 - 65,000

HCV – RNA + ve (70%) 11,000 - 46,000

Under estimation!

General Population Studies

Year	n	% anti-HCV+ve
1995 ¹	7,373	0.08
2004 ²	1,355	0.6
2006 ³	2,200	0.2

1. Veldhuizen et al. 1999
2. Basten et al 2007
3. Slavenburg et al. 2008

HCV in Blood Donors

<u>Year</u>	<u>New</u>		<u>Repeat</u>	
	n	(‰)	n	(‰)
2007	3	(1.1)	1	(0.03)
2006	5	(1.6)	5	(0.12)
2005	10	(3.3)	1	(0.02)
2004	12	(2.8)	3	(0.07)
2003	9	(2.6)	0	(0.00)

Prevalence

Incidence

C. v/d Poel Sanquin. 08

Risk Groups HCV Infection Netherlands

Risk Group	HCV-infected (%)
o IV Drug	50-80
o Recipient blood products	
- hemophilia (before < 87)	55
- hemophilia (after > 87)	0
- screened blood (after 91)	0
o Perinatal	
- HIV-ve	4
- HIV+ve	20
o Sexual	
- heterosexual	very low
- MSM and HIV+ve	20
o Immigrants 1st generation	1-20

Recipients HCV positive Blood Components

Blood Product

	HCV-RNA+ve anti-HCV+ve	HCV-RNA-ve anti-HCV+ve
Recipients	n/total (%)	n/total (%)
	26/32 (81%)	0/140

Vrielink, Reesink et al. Lancet 2005



Sexual Transmission HCV

Heterosexual partners

Couples	50
M/F	9/41
Median age, year (range)	38 (18-69)
Median duration	
Sex. relationship, year (range)	13 (0.25-46)
Sex. transmission, n, (CI)	0 (0-7%)

No HCV transmission in 50 couples with 713 person years of unprotected sexual intercourse!

Incidence HCV Infection in MSM

Amsterdam Cohort Studies

Period	Incidence per 100 PY	
	HIV+ve	HIV-ve
1984-1999	0.08	0.00
2000-2003	0.87	0.00

10 fold increase!

Van de Laar et al. 2007



HCV Prevalence Immigrants

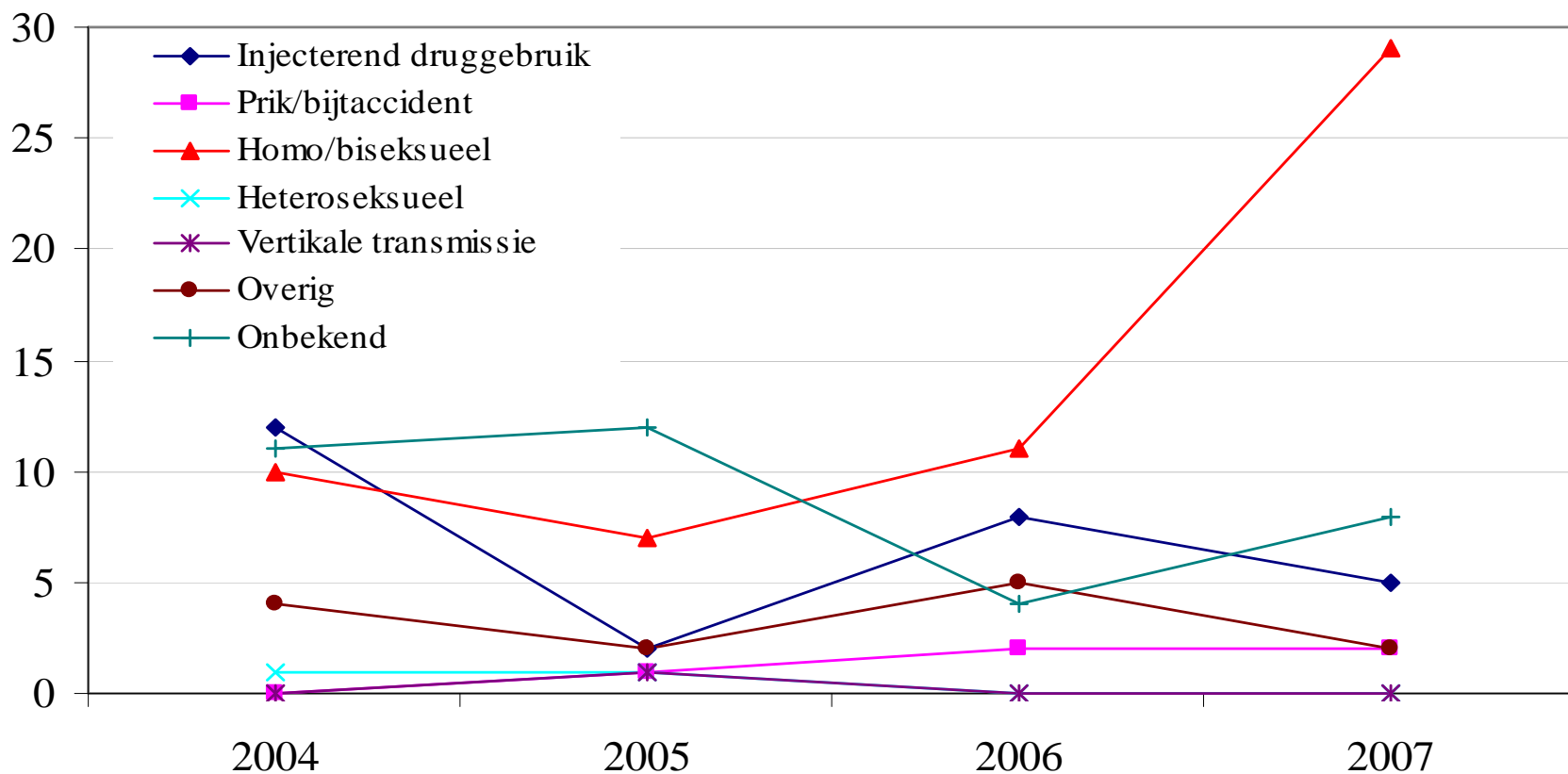
Country	First Generation (N)	Prevalence WHO (%)	HCV + ve (n)
Surinam	187,990	5.5	10,339
Turkey	194,319	1.5	2,915
Indonesia	133,503	2.1	2,804
Egypt	10,709	18.1	1,938
Morocco	166,464	1.1	1,831
China	29,422	3.0	883
Vietnam	11,901	6.1	726
Thailand	8,374	5.6	469
Congo (Dem.Rep)	5,723	6.4	366
USA	18,723	1.8	337
Total			12,600

Surveillance HCV Netherlands

- o 1999 – 2003 obligated reporting *
 - 600-700 cases per year
- o 2004 acute infections only
 - 25-45 cases per year
 - under reporting due to asymptomatic course (80%)

* Op de Coul et al. 2005

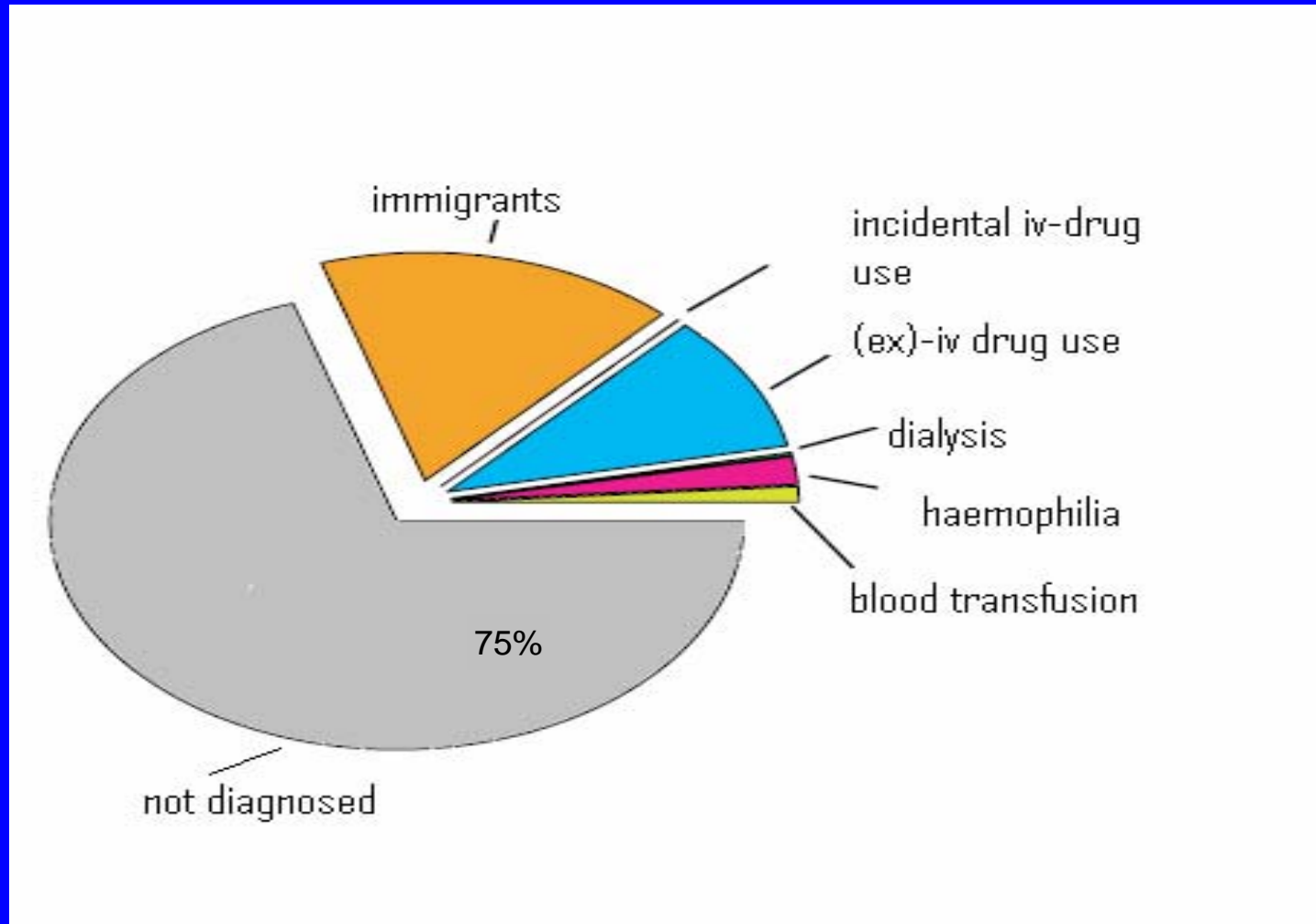
Reported Acute HCV Infections



Source: RIVM, 2008



75% HCV patients in The Netherlands not yet diagnosed



Kretschmar et al. 2004



Surveillance HCV Infections

The Netherlands

- o Health Council 1997:
 - information general population (risk groups)
 - epidemiological studies
- o Health Council 2004:
 - improved treatment options
 - information risk groups
 - epidemiological studies

National Hepatitis Centre

Objectives

Structural activities

Projects

past

current

ideas

Objectives

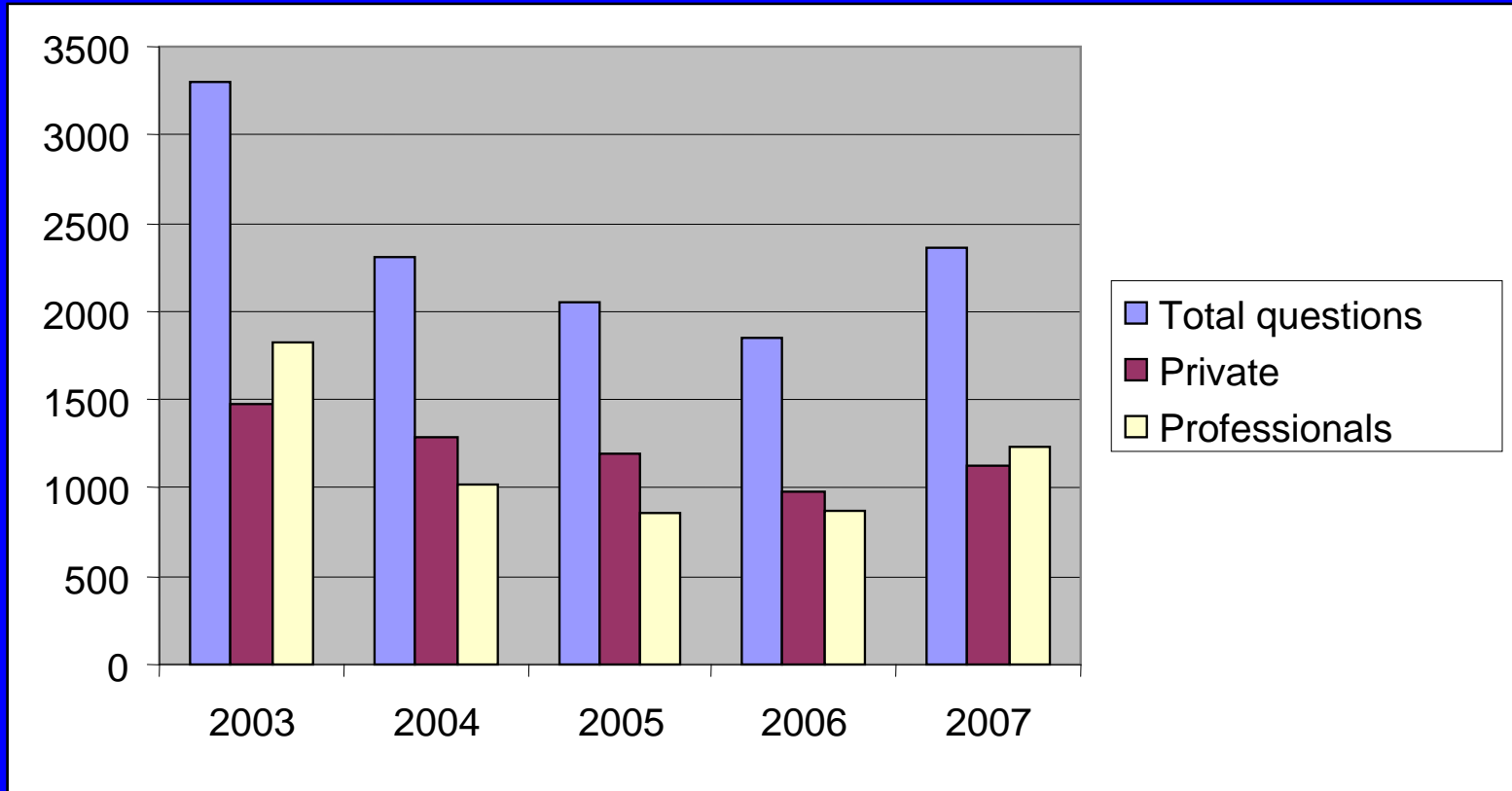
Knowledge centre for viral hepatitis. Draw attention to hepatitis and its effects on individuals and the society

1. Collect and spread scientific knowledge and information;
2. Counseling, activities for prevention and promotion of professionalism;
3. Coordination and encouraging of studies and projects.

Media

- www.hepatitis.nl
- Information telephone line
- Email
- Newsletter
- Brochures
- On request presentations
- Projects

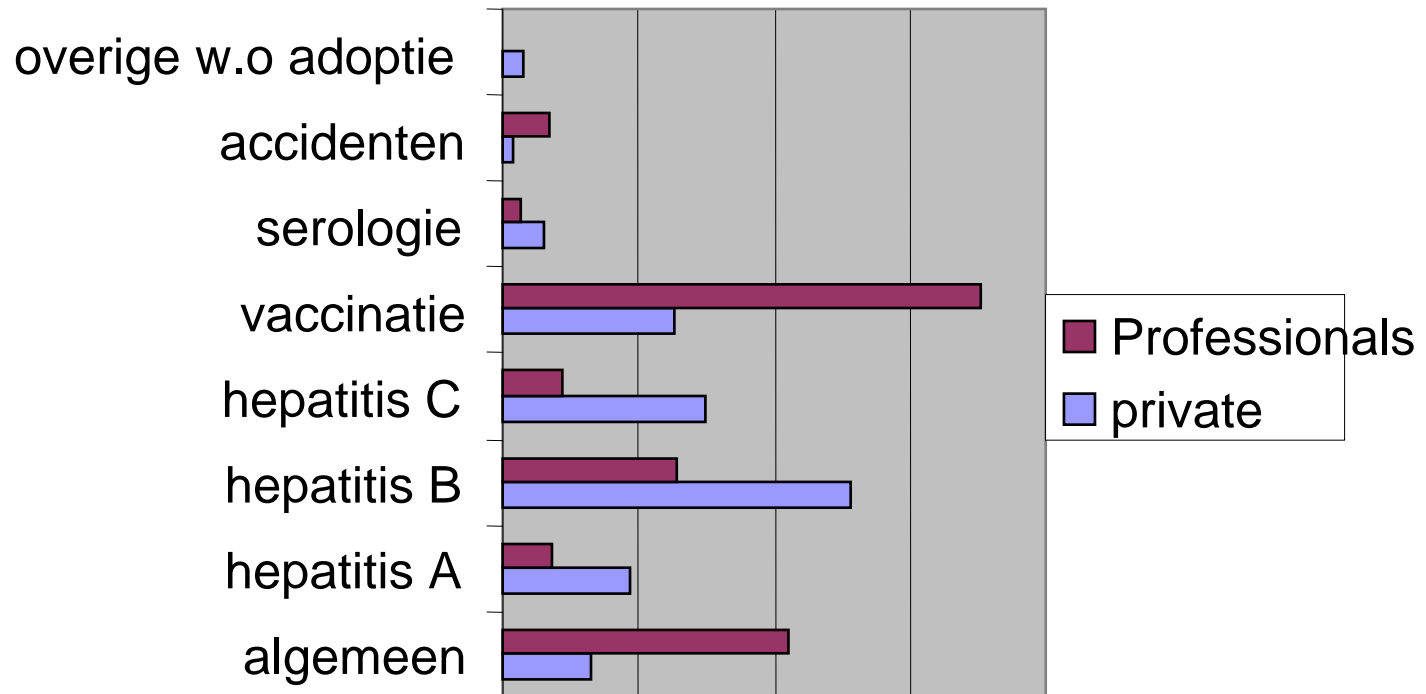
Questions



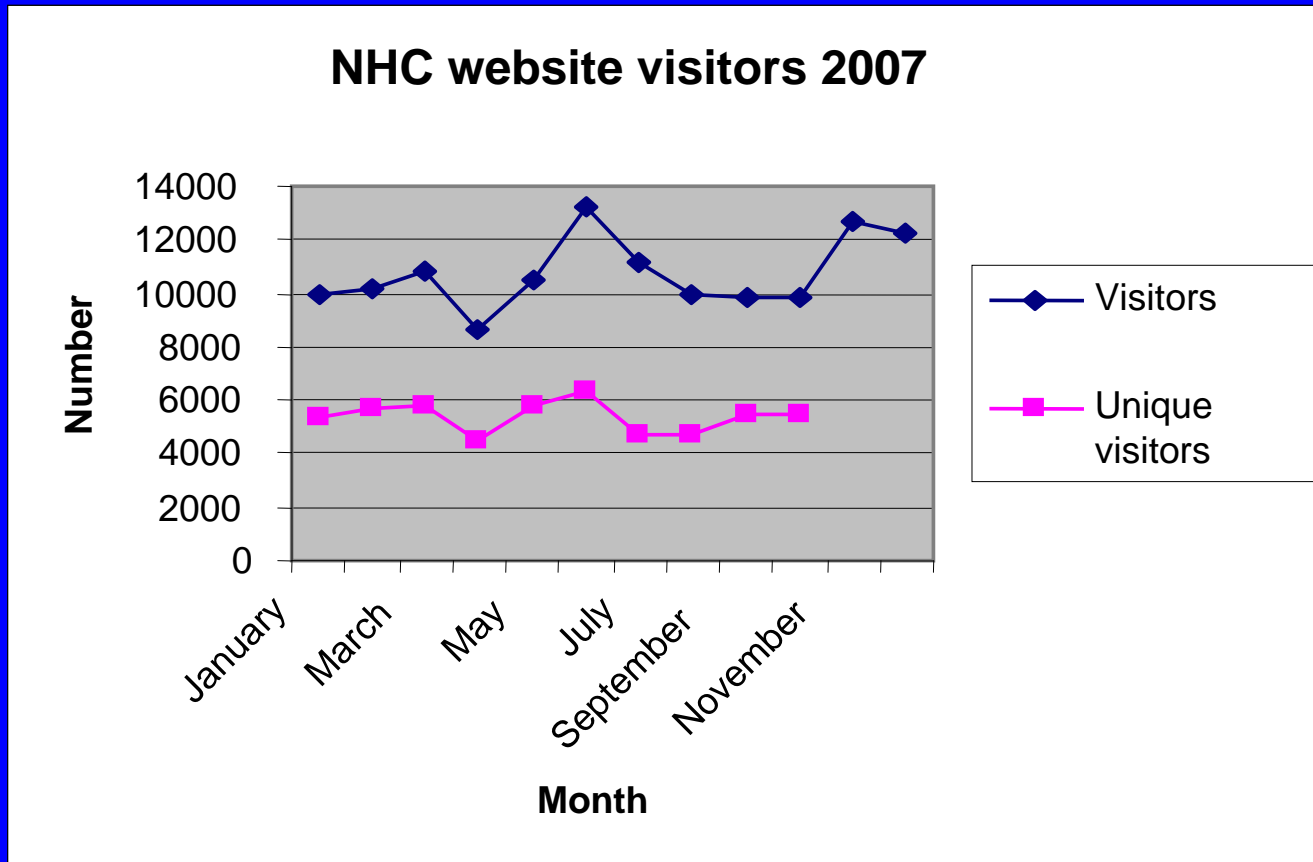
Number of questions by email and telephone

Subjects

Onderwerpen van vragen



Number of visitors website



Past projects

- Hep A and B vaccination liver patients
- Advise on student vaccination
- Hepatitis B in adoption children
- Inquiry hepatitis B awareness
- Organisation expert meetings hepatitis C
- Needle-stick accidents
- Professional risk for hepatitis A

Ongoing Pilot Projects

Surveillance HCV infections

- 2007 Hept.test Project
(GGD Zuid Limburg/Amsterdam)
- 2007 a) Information general population and risk groups
b) Training GP's about HCV
(NIGZ, NHC, NHG, Julius Centre, Trimbos, Mainline,
GGD's Rotterdam etc.)
- 2007 Prevalence studies
- pregnant women
- STD-clinics
- Tatoing shops
- immigrants (AMC/GGD Amsterdam)
- 2009 2nd Pienter Study (RIVM)

OOIT EEN
BLOEDTRANSFUSIE
GEHAD?

OOIT GEOPEREERD IN
HET BUITENLAND?

WEL EENS
GEPRIKT AAN EEN
INJECTIENAALD?

HEEFT U
EEN TATTOO OF
PIERCING?



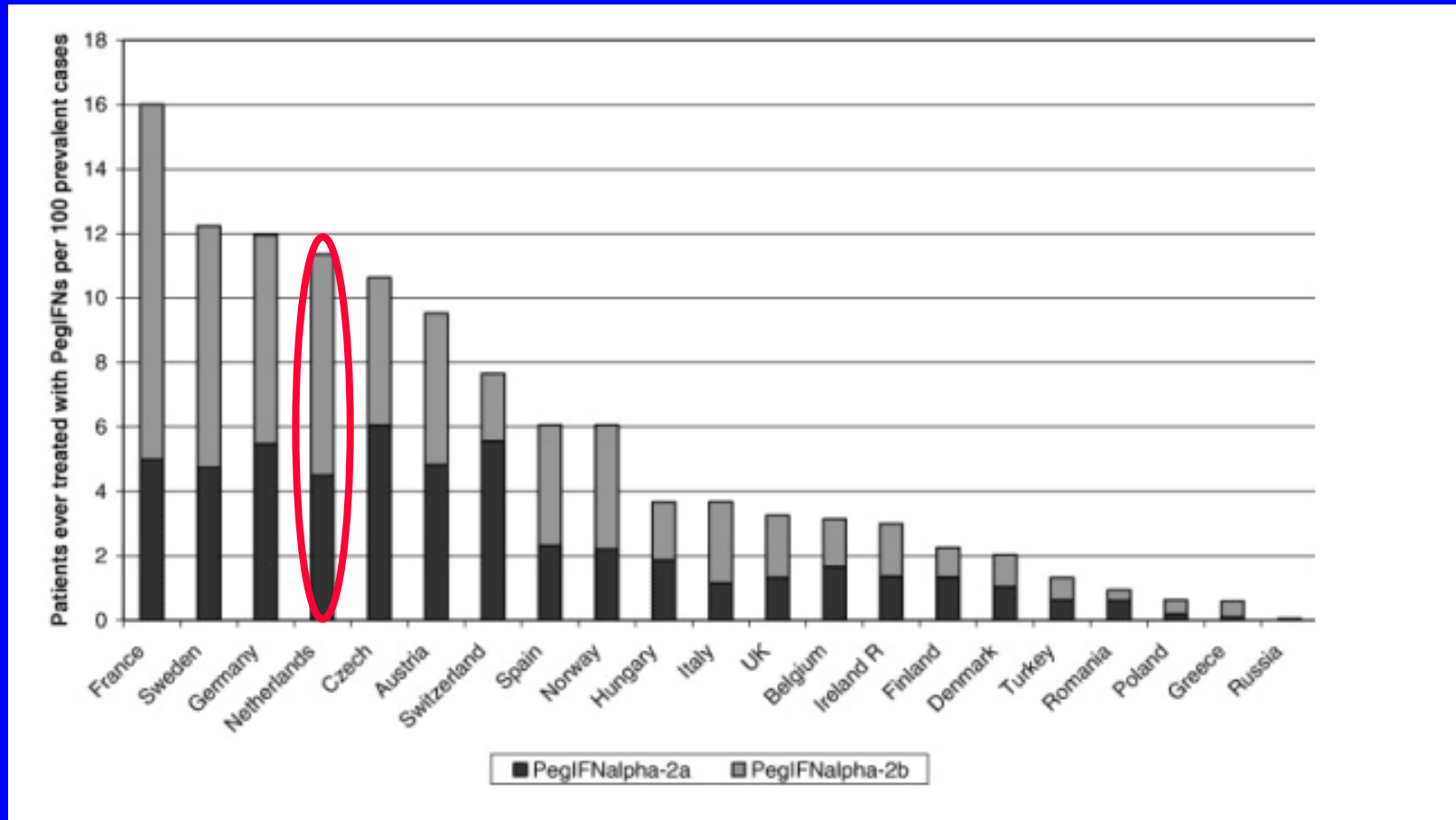
WEL EENS
HARDDRUGS
GEBRUIKT?

DAN HEEFT U
MIJ MISSCHIEN
OOK!

LOOPT U RISICO?

DOE DE HEPTEST.NL >>

Percentage HCV patients treated with Inteferon



Conclusions

- o 11,000 – 46,000 (0.1-0.4%) HCV infected in The Netherlands
- o 75% Not yet detected (immigrants)!
- o Acute HCV infections in HIV+ve MSM since 2000
- o Active surveillance necessary due to better treatment options.