

Prevalence and risk factors of hepatitis B virus infection in  
Middle-Limburg Belgium, year 2017: Importance of migration.

Supplementary material

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DOI: 10.1002/jmv.25457

Handle: <http://hdl.handle.net/1942/28454>

<b>Table 1</b> Prevalence of anti-HBc by different risk factors (weighted chi squared test)					
	N	N	Prevalence (%)	<i>p</i> -value	Crude OR (95% CI)
Overall	93	1107	8.40	--	--
Gender				.659	0.94 (0.62 – 1.44)
Men	49	598	8.19		
Women	44	509	8.64		
Age group				.015	2.16 (1.30 – 3.60)
18-39 years	20	397	5.04		
40-70 years	73	710	10.28		
Ethnicity				<.001	5.08 (3.21 – 8.08)
Belgian	44	876	5.02		
FGM	49	231	21.21		
Household HBV				<.001	4.24 (1.99 – 9.04)
Yes	10	38	26.32		
No	83	1069	7.76		
HCV infection				.004	4.09 (0.93-14.17)
Yes	4	15	26.67		
No	89	1092	8.15		
HIV infection				.298	2.74 (0.06-28.08)
Yes	1	5	20.00		
No	92	1102	8.35		
Multiple (unsafe) sexual contacts				.203	0.70 (0.42 – 1.16)
Yes	21	320	6.56		
No	72	787	9.15		
MSM				.001	5.69 (1.49 – 18.75)
Yes	5	15	33.33		

No	88	1092	8.06		
IDU				.479	1.84 (0.41 – 8.33)
Yes	2	14	14.29		
No	91	1093	8.33		
Blood transfusion before 1972				.026	4.44 (0.85 – 23.18)
Yes	2	7	28.57		
No	91	1100	8.27		
Haemodialysis				<.001	6.72 (2.74 – 16.48)
Yes	8	22	36.36		
No	85	1085	7.83		
Surgery				.398	
No	18	197	9.14		(ref.)
Yes, before 1990	31	350	8.86		0.97 (0.53 – 1.78)
Yes, in a non-Western country	2	9	22.22		2.84 (0.55 – 14.71)
Yes, after 1990 in a Western country	42	551	7.62		0.82 (0.46 – 1.46)
Healthcare worker				.478	0.75 (0.41 – 1.38)
Yes	13	193	6.74		
No	80	914	8.75		
Cultural or ritual intervention				.015	2.21 (1.24 – 3.96)
Yes	16	103	15.53		
No	77	1004	7.67		
Tattooing or body piercing				.041	0.60 (0.37 – 0.98)
Yes	22	368	5.98		
No	71	739	9.61		
Non-hygienic tattoo				.415	1.49 (0.62 – 3.58)
Yes	6	51	11.77		
No	87	1056	8.24		

2 Abbreviations: anti-HBc: hepatitis B core antibodies; OR: odds ratio; CI: confidence interval; FGM: first-generation migrants, i.e. foreign-born  
3 persons;; HBV: hepatitis B virus; HCV: hepatitis C virus; MSM: men who have sex with men; IDU: intravenous drug use.

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**Table 2** Parameter estimates for the final weighted model for anti-HBc.

Parameter	n° patients (+)	Estimate	S.E.	p-value	Adjusted OR (95% CI)
(intercept)		-3.98	0.51	<.001	--
Female, 18-39yrs, FGM	44 (10)	2.60	0.71	<.001	13.41 (3.41 – 68.37)
Male, 18-39yrs, Belgian	160 (2)	-0.71	0.81	.380	0.49 (0.07 – 2.47)
Male, 18-39yrs, FGM	34 (5)	1.91	0.84	.023	6.75 (1.06 – 38.55)
Female, 40-70yrs, Belgian	245 (17)	1.15	0.56	.039	3.16 (1.17 – 13.36)
Female, 40-70yrs, FGM	61 (14)	2.67	0.72	<.001	14.47 (3.64 – 74.29)
Male, 40-70yrs, Belgian	312 (22)	1.08	0.55	.051	2.94 (1.10 – 12.33)
Male, 40-70yrs, FGM	92 (20)	2.51	0.67	<.001	12.26 (3.45 – 59.72)
Household HBV	38 (10)	1.84	0.46	<.001	6.30 (2.44 – 15.38)
HCV infection	15 (4)	1.79	0.63	.005	5.96 (1.49 – 19.16)
MSM	15 (5)	2.16	0.69	.002	8.69 (2.02 – 34.52)
Haemodialysis	22 (8)	1.88	0.52	<.001	6.58 (2.15 – 17.60)

25 Abbreviations: anti-HBc: hepatitis B core antibodies; S.E.: standard error around the coefficient for the constant; OR: odds ratio; CI: confidence  
 26 interval; yrs: years; FGM: first-generation migrants, i.e. foreign-born persons; HBV: hepatitis B virus; HCV: hepatitis C virus; MSM: men who  
 27 have sex with men.

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<b>Table 3</b> Prevalence of HBsAg by different risk factors (weighted chi squared test)					
	<b>n</b>	<b>N</b>	<b>Prevalence (%)</b>	<b>p-value</b>	<b>Crude OR (95% CI)</b>
Overall	11	1131	0.97	--	--
Gender				.744	1.38 (0.42 – 4.56)
Men	5	605	0.83		
Women	6	526	1.14		
Age group				.581	1.53 (0.41 – 5.81)
18-39 years	3	412	0.73		
40-70 years	8	719	1.11		
Ethnicity				.015	4.66 (1.17 – 19.48)
Belgian	5	896	0.67		
FGM	6	235	2.55		
Household HBV				.036	6.51 (1.36 – 31.17)
Yes	2	39	5.13		
No	9	1092	0.82		
HCV infection				.701	0.00 (0.00-30.20)
Yes	0	16	0.00		
No	11	1115	0.99		
HIV infection				.818	0.00 (0.00-122.30)
Yes	0	5	0.00		
No	11	1126	0.98		
Multiple (unsafe) sexual contacts				.498	1.39 (0.40 – 4.77)
Yes	4	331	1.21		
No	7	800	0.88		
MSM				.016	7.86 (0.17 – 62.50)
Yes	1	15	6.67		
No	10	1116	0.90		

IDU				.706	--
Yes	0	15	0.00		
No	11	1116	0.99		
Blood transfusion before 1972				.804	--
Yes	0	7	0.00		
No	11	1124	0.98		
Haemodialysis				.194	4.77 (0.59 – 38.82)
Yes	1	24	4.17		
No	10	1107	0.90		
Surgery				.944	
No	2	202	0.99		(ref.)
Yes, before 1990	4	354	1.13		1.14 (0.21 – 6.30)
Yes, in a non-Western country	0	10	0.00		--
Yes, after 1990 in a Western country	5	565	0.89		0.89 (0.17 – 4.64)
Healthcare worker				.572	0.47 (0.06 – 3.73)
Yes	1	196	0.51		
No	10	935	1.07		
Cultural or ritual intervention				.846	1.00 (0.13 – 7.88)
Yes	1	103	0.97		
No	10	1028	0.97		
Tattooing or body piercing				.077	0.20 (0.03 – 1.55)
Yes	1	377	0.27		
No	10	754	1.33		
Non-hygienic tattoo				.629	2.14 (0.27 – 17.05)
Yes	1	51	1.96		
No	10	1080	0.93		

37 Abbreviations: HBsAg: hepatitis B surface antigen; OR: odds ratio; CI: confidence interval; FGM: first-generation migrants, i.e. foreign-born

38 persons; HBV: hepatitis B virus; HCV: hepatitis C virus; MSM: men who have sex with men; IDU: intravenous drug use.