

Table S1 : Missing data

Variables	Missing (N=1009)	Missing (%)
Region	0	0.00
Sex	11	1.09
Age group	18	1.78
Birth location	15	1.59
Education	35	3.47
Reason for consultation (STI related symptoms)	0	0.00
Reason for consultation (screening)	0	0.00
Reason for consultation (partner with STI)	0	0.00
Other reason to consult	0	0.00
Sexual behaviour	14	1.39
NB of partners	23	2.28
Partner notification	3	0.29
Coinfection	0	0.00
Chlamydia	0	0.00
Genital herpes	0	0.00
Gonorrhoea	0	0.00
Syphilis	0	0.00
Condylomata acuminata	0	0.00

Table S2: Characteristics of population consulting for STI and reported by the SGP from 2015 to 2020.

Variable		2015 N = 180	2016 N = 205	2017 N = 170	2018 N = 176	2019 N = 171	2020# N = 107	Total N = 1009	Chi square Test
Region	Brussels	13 (7.2%)	13 (6.3%)	8 (4.7%)	9 (5.1%)	5 (2.9%)	4 (3.7%)	52 (5.15%)	P = 0.065 Cramer's V= 0.093
	Flanders	150 (83.3%)	160 (78.1%)	133 (78.2%)	126 (71.6%)	141 (82.5%)	83 (77.6%)	793 (78.6%)	
	Wallonia	17 (9.4%)	32 (15.6%)	29 (17.1%)	41 (23.3%)	25 (14.6%)	20 (18.7%)	164 (16.3%)	
Age group	15 - 29 years	100 (56.2%)	114 (55.6%)	102 (61.5%)	79 (48.2%)	97 (56.7%)	63 (58.9%)	555 (56%)	P = 0.0186 Cramer's V= 0.0979
	30 - 44 years	44 (24.7%)	53 (25.9%)	43 (25.9%)	51 (31.1%)	52 (30.4%)	30 (28%)	273 (27.6%)	
	45 - 59 years	31 (17.42%)	24 (11.7%)	20 (12%)	30 (18.3%)	19 (11.1%)	10 (9.4%)	134 (13.5%)	
	>= 60 years	3 (1.7%)	14 (6.8%)	1 (0.6%)	4 (2.4%)	3 (1.8%)	4 (3.7%)	29 (2.9%)	
Sex	Female	70 (39.8%)	78 (38%)	72 (42.9%)	66 (38.6%)	76 (44.4%)	39 (36.5%)	401 (40.2%)	P = 0.701

	Male	106 (60.2%)	127 (62%)	96 (57.1%)	105 (61.4%)	95 (55.6%)	68 (63.6%)	597 (59.8%)	Cramer's V= 0.055
Sexual behaviour	Heterosexual contacts	139 (78.9%)	149 (75.3%)	134 (79.3%)	124 (71.3%)	125 (73.1%)	80 (74.8%)	751 (75.5%)	P = 0.296 Cramer's V= 0.077
	Homosexual contacts	29 (16.5%)	30 (15.2%)	23 (13.6%)	29 (16.7%)	26 (15.2%)	11 (10.3%)	148 (14.9%)	
	Bisexual contacts	0	0	3 (1.8%)	6 (3.4%)	2 (1.2%)	3 (2.8%)	14 (1.4%)	
	Unknown	8 (4.6%)	19 (9.6%)	9 (5.3%)	15 (8.6%)	18 (10.5%)	13 (12.1%)	82 (8.2%)	
Education	Higher education	62 (36.7%)	60 (30.3%)	54 (32.9%)	46 (27.9%)	56 (32.8%)	33 (30.8%)	311 (31.9%)	P = 0.202 Cramer's V= 0.081
	Secondary education	54 (31.9%)	56 (28.3%)	62 (37.8%)	63 (38.1%)	57 (33.3%)	32 (29.9%)	324 (33.3%)	
	Primary education or less	3 (1.8%)	9 (4.5%)	5 (3,1%)	9 (5,5%)	5 (2.9%)	9 (8.4%)	40 (4,1%)	
	Unknown	50 (29.6%)	73 (36.9%)	43 (26,2%)	47 (28.5%)	53 (30.9%)	33 (30.8%)	299 (30.7%)	

GP: general practitioner; STI: sexually transmitted infection;

Reading direction: frequencies and proportions are shown per variable per year, the Chi² test is on the entire sample.

Distribution is shown for non-missing values (see table S2 for proportion of missing values for each variable)

Registration in 2020 was low due to COVID-19 lock down and restrictions to access health care.

Table S3: Multivariate logistic regression analysis of associations between age, sexual behaviour by sex, education, number of partners, co-infection status and region by STI diagnosis.

Covariates	Chlamydia		Gonorrhoea		Genital warts		Genital herpes+		Syphilis		
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	
Age group	15 - 29 years (Ref.)	1		1		1		1		1	
	30 - 44 years	0.43***	0.30-0.62	NA		1.84*	1.09-3.10	1.40	0.75-2.59	3.11**	1.54-6.30
	45 - 59 years	0.20***	0.12-0.32	NA		2.67**	1.46-4.87	2.69**	1.35-5.36	2.98**	1.31-6.79
	>= 60 years	0.17***	0.07-0.45	NA		5.34**	1.93-17.82	2.37	0.66-8.58	<0.001	0.001-999.99
Sexual Behaviour by sex	heterosexual men (Ref.)	1		1		1		1		1	
	heterosexual women	1.48*	1.05-2.10	0.52**	0.32-0.85	NA		NA		0.74	0.28-1.97
	MSM	0.13***	0.07-0.22	3.75***	2.33-6.1	NA		NA		12.56***	6-26.27
	WSW	0.94	0.21-4.23	0.80	0.09-6.88	NA		NA		2.99	0.33-27.1

Education	Higher education (Ref)	1		1		1		1		1	
	Secondary education	2.31**	1.35-3.94	1.21	0.73-1.99	NA		NA		NA	
	Primary education or less	2.18	0.83-5.67	3.90**	1.64-9.28	NA		NA		NA	
	Unknown	0.81	0.41-1.58	1.35	0.81-2.25	NA		NA		NA	
Number of partners	< 3 (Ref.)	1		1		1		1		1	
	>= 3	1.64*	1.04-2.58	NA		NA		NA		NA	
	Unknown	1.67**	1.15-2.4	NA		NA		NA		NA	
Co-infection	Yes	26.24***	7.75-88.86	11.43***	5.68-22.98						
	No (Ref)	1		1		1		1		1	
Region	Brussels	0.22***	0.11-0.45	NA		3.74***	1.82-7.66	NA		NA	
	Wallonia	0.93	0.61-1.42	NA		1.17***	0.66-2.08	NA		NA	
	Flanders (Ref.)	1		1		1		1		1	

Legend: The logistic regression model remove autocorrected variables and select the best fitted model to explain our dependent variable (STI).

NA: Not applicable means the logistic model did not retain the variable as predictor because it did not significantly improve the fit of the model, thus did not compute OR.

N= 851 observations used to run the model applied to the entire dataset (registration from 2015 onwards). Observations with missing values for the response or explanatory variables were deleted from the dataset to run the model.

+ N= 699 observations (genital herpes) used to run the model applied to the entire dataset (registration from 2016 onwards).

Significant codes, p values: * 0,05, ** 0,01, *** 0,001.

Table S4: Distribution of sexual orientation by STI and patient sex, Belgium, 2015-2020

	Chlamydia		Genital warts		Gonorrhea		Genital herpes		Syphilis	
	Men (N=246)	Women (N= 275)	Men (N= 65)	Women (N=46)	Men (N= 109)	Women (N=35)	Men (N= 39)	Women (N= 37)	Men (N= 51)	Women (N= 10)
Heterosexual contacts	79.66%	94.89%	66.25%	84.78%	45.26%	94.29%	69.23%	88.89%	18.75%	80.00%
Unknown	8.14%	3.65%	21.25%	10.87%	10.22%	2.86%	10.26%	8.33%	4.69%	10.00%
Homosexual and bisexual contacts	12.20%	1.46%	12.50%	4.35%	44.53%	2.86%	20.51%	2.78%	76.56%	10.00%