



Annual Epidemiological Report

October 2018

Ano-genital warts in Ireland, 2017

Key Facts

- There were 1,281 cases of ano-genital warts notified in 2017, compared to 1,593 cases in 2016
- The notification rate continued to decrease to 26.9 per 100,000 population in 2017, down from 33.5 per 100,000 population in 2016
- 53% of cases were among males
- The highest age-specific rate was among 25-29 year olds, for both males and females, at 97.1 per 100,000 population and 48.6 per 100,000 population, respectively

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Introduction

Ano-genital warts are caused by the human papillomavirus (HPV). There are more than 100 different types of HPV, most of which are responsible for common skin warts. Over 30 types of HPV have been shown to be sexually transmitted and infect the ano-genital and pharyngeal areas where infection is associated with ano-genital warts and multiple cancers, including cervical, vaginal, vulvar, anal, penile and oropharyngeal cancer.

In Ireland, all females aged 12-13 years should receive the HPV vaccine as part of the national HPV vaccination programme. The programme aims to prevent infection of susceptible females with the HPV types covered by the vaccine, protecting against their future risk of developing cervical cancer. The HPV vaccination programme began in September 2010, when quadrivalent HPV vaccine was introduced routinely for all girls in first year of second level school and age equivalent girls in special schools and those educated at home. Girls in second year and their age equivalent counterparts who had not previously been targeted were also offered the vaccine. In September 2011, a catch-up programme was introduced, for all girls in sixth year or equivalent from 2011 to 2014 [1].

The HPV vaccine is also available to HIV positive men and women under the age of 26 attending public HIV clinics and to men who have sex with men (MSM) under the age of 26. In April 2017, a HPV vaccine clinic was introduced by the Gay Men's Health Service (GMHS), to deliver targeted vaccination services to MSM aged 26 and younger [2]. Furthermore, in July 2018, the Health Information and Quality Authority (HIQA) commenced a national public consultation on offering the HPV vaccine to boys and in October 2018 additional investments were announced by the Department of Health in Ireland, that include funding to extend the HPV vaccination to boys [3, 4].

Cases of ano-genital warts are notifiable under the Infectious Disease Regulations in Ireland [5]. Notifications from STI clinics and primary care are collated by Departments of Public Health and notified in aggregate format to the Health Protection Surveillance Centre (HPSC) on a quarterly basis. A more specific breakdown of data has been requested since 2013, comprising the number of cases by sex for each age group. Data for three STI clinics are outstanding for 2017, it is unlikely that these data will be reported as the pattern of missing data is unchanged since 2013 (see Appendix 1).

Epidemiology

Cases and notification rates

There were 1,281 cases of ano-genital warts reported in Ireland in 2017, corresponding to a notification rate (NR) of 26.9 per 100,000 population. This is a 20% decrease from the 1,593 cases reported in 2016, a NR of 33.5 per 100,000 population. The NR fell among males to 29.1 per 100,000 population and among females to 16.2 per 100,000 population (Figure 1).

The NR of ano-genital warts has decreased by 74% since it's peak in 2001, when it was 101.9 per 100,000 population. Between 2003 and 2010 the NR declined by 45%, to 55.7 per 100,000 population, and between 2010 and 2017 it declined by a further 52%, to 26.9 per 100,000 population.

Figure 1: Notification rate of ano-genital warts in Ireland, by sex 1995-2017*

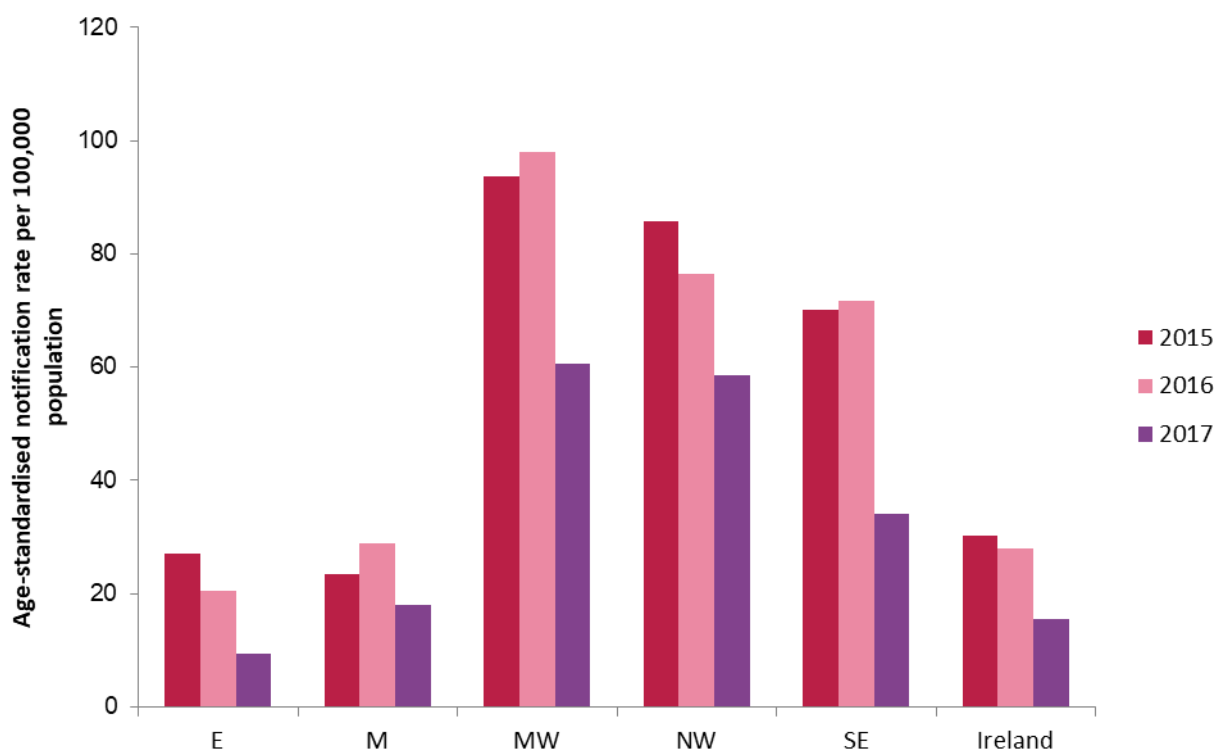


*Data completeness varied prior to 2013, with no information available on this variability prior to 2013. Data completeness remained fairly steady from 2013 onwards; see Appendix 1 for details on data completeness during the period 2013 to 2017.

HSE area

The highest age-standardised notification rate (ASNR) was in HSE Midwest (MW) (60.7/100,000) followed by HSE Northwest (NW) (58.7/100,000) (Figure 2). Rates and numbers by HSE area should be interpreted with caution; HSE area is based on the clinic and not the patient's address for the vast majority of cases. Consequently, rates and numbers of cases by HSE area reflect the location of STI services as well as differences in reporting practices by clinics and clinicians from one area to another (a list of STI clinics is available at <https://www.sexualwellbeing.ie/>). Additionally, age group data were not available for 42% of cases in 2017, an increase from 36% in 2016. All cases missing age group data were reported from the Northeast and the South, therefore ASNR was not calculated for these areas. HSE West was also excluded from ASNR calculations due to the low number of cases reported.

Figure 2: Age-standardised notification rate of ano-genital warts in Ireland by HSE area, 2015-2017^{^††}



[^]ASNR could not be calculated for HSE Northeast, HSE South or HSE West.

^{††}See technical note 4 and 5 for details on the counties covered by each HSE area and ASNR calculation methodology.

Age and sex

Data completeness for both sex and age decreased in 2017, with sex missing for 16% and age missing for 42% of cases notified.

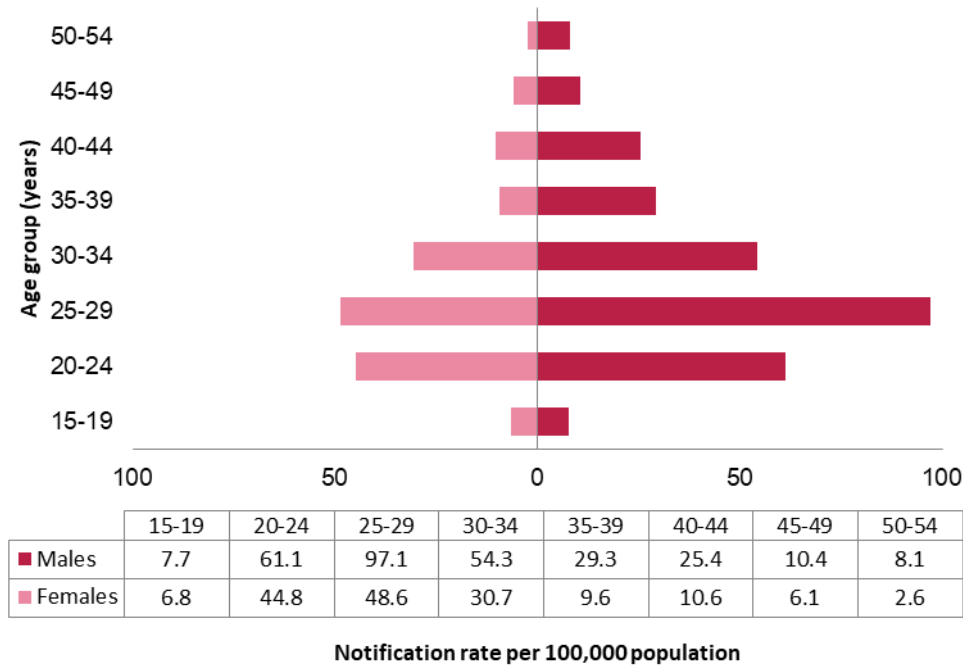
There were more notifications among males (53%) than females (31%) in 2017 (Table 1). Where age and sex are known, the age and sex-specific NRs were higher in males than in females for all age groups. The highest age-specific NR among males was for those aged 25-29 years old (97.1/100,000) and among females also for those aged 25-29 years old (48.6/100,000) (Figure 3).

A particular decrease was observed for individuals aged 20-29 years, from 100.3 per 100,000 population in 2016 to 63.0 per 100,000 population in 2017 (Figure 4).

Table 1: Notifications of ano-genital warts in Ireland by age group & sex, 2017

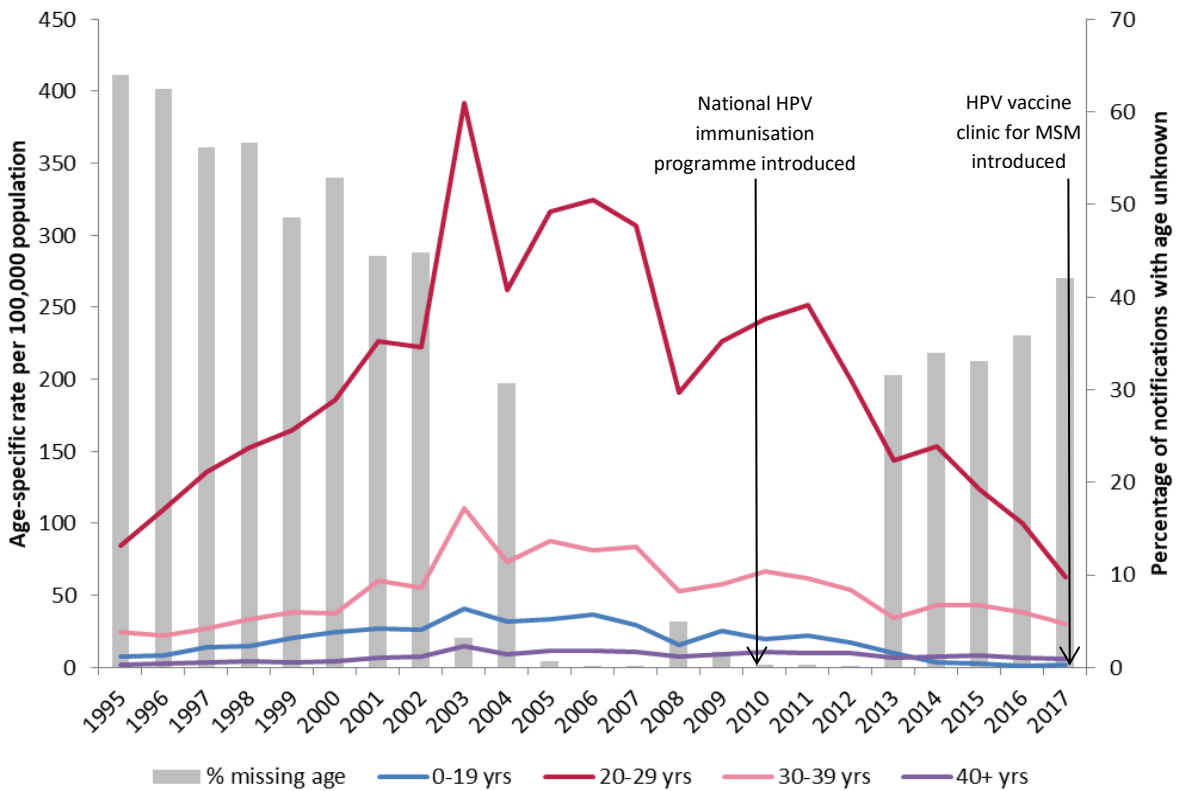
Age Group (years)	Male		Female		Unknown		Total	
	N	%	N	%	N	%	N	%
0-14	0	0.0	0	0.0	0	0.0	0	0.0
15-19	12	1.8	10	2.6	0	0.0	22	1.7
20-24	84	12.3	61	15.6	0	0.0	145	11.3
25-29	141	20.6	74	18.9	0	0.0	215	16.8
30-34	94	13.7	58	14.8	0	0.0	152	11.9
35-39	56	8.2	19	4.9	0	0.0	75	5.9
40-44	45	6.6	19	4.9	0	0.0	64	5.0
45-49	17	2.5	10	2.6	0	0.0	27	2.1
50-54	12	1.8	4	1.0	0	0.0	16	1.2
55+	21	3.1	5	1.3	0	0.0	26	2.0
Unknown	202	29.5	131	33.5	206	100.0	539	42.1
Total	684	100.0	391	100.0	206	100.0	1281	100.0

Figure 3: Age- and sex-specific notification rates of ano-genital warts in Ireland , 2017 (n=714)[†]



[†]Excludes 202 males and 131 females where age is unknown and 206 cases where both age and sex are unknown. Also excludes cases for individuals over the age of 55 (n=26).

Figure 4: Age-specific notification rates of ano-genital warts in Ireland, 1995-2017



Discussion

The overall downward trend in ano-genital warts rates seen since the early 2000s in both males and females continued in 2017. For those aged 20-29 years, the highest ASNR, the rates in males were double those in females. The decreasing rate of AGW in Ireland is encouraging, however interpretation of these trends is difficult given the absence of information on data completeness prior to 2013 and the increasing proportion of cases notified as unknown age (range 32%-42%) and unknown sex (range 7%-16%) since 2013. Since the introduction of the new template for reporting (available at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/ano-genitalwarts/surveillanceforms/>), some clinics have been unable to provide data in the required format (see Appendix 2 for details). There is a need to improve completeness of age and sex data, particularly with the recent announcement of additional investments in healthcare that include funding to extend the HPV vaccine to boys [3, 4].

Technical notes

1. Data for this report were provided in aggregate format by Departments of Public Health.
2. Aggregate data were collated on 21st June 2018, and were correct at the time of publication.
3. Percentages are rounded up in the text and provided to one decimal place in the tables.
4. The counties covered by each HSE area are as follows: HSE East (E): Dublin, Kildare & Wicklow; HSE Midlands (M): Laois, Longford, Offaly & Westmeath; HSE Midwest (MW): Clare, Limerick & N. Tipperary; HSE Northeast (NE): Cavan, Louth, Meath & Monaghan; HSE Northwest (NW): Donegal, Leitrim & Sligo; HSE South (S): Kerry & Cork; HSE Southeast (SE): Carlow, Kilkenny, S. Tipperary, Waterford & Wexford; HSE West (W): Galway, Mayo & Roscommon.
5. Age-standardised notification rates were calculated using the direct method in which the national population was taken as the standard population. Population data were taken from Census 2016 (for calculations for 2015-2017). Data were aggregated into the following age groups for the analysis: 0-14 years, 15-19 years, 20-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years and ≥65 years.

Further information

- Previous years' reports are available at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/ano-genitalwarts/surveillancereports/> and <http://www.hpsc.ie/abouthpsc/annualreports/>
- Keep up to date with HIV and STIs in Ireland at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/publications/stireports/stiweeklyreports/>.
- Get information on the HPV vaccine and vaccine uptake at <http://www.hpsc.ie/a-z/hepatitis/hpv/>

Acknowledgements

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References

1. HSE National Immunisation Committee, Immunisation Guidelines for Ireland. Chapter 10 - Human Papillomavirus (Updated 6th September 2016). 2016
2. HSE Gay Men's Health Service, GMHS25 The Annual Report, 2017. 2018
3. Health Information and Quality Authority (HIQA). Draft report for public consultation Health technology assessment (HTA) of extending the national immunisation schedule to include HPV vaccination of boys. 24th July 2018 HSE
4. Department of Health. Sláintecare top priority in health budget 2019; investment & improved access to GP services; more help for families & older people with health costs - Health Ministers. 2018. Press release 9th October 2018
5. Government of Ireland Infectious Diseases (amendment) Regulations 2016 S.I. No. 276 of 2016. 2016 : Ireland. 2016

Appendices

Appendix 1: Returns of ano-genital warts notifications by HSE area, 2013-2017

HSE Area	Site~	2013	2014	2015	2016	2017
East	Public Health	Yes	Yes	Yes	Yes	Yes
	GUIDE clinic	Yes	Yes	Yes	Yes	Yes
	Mater clinic	-	-	-	-	-
	Gay Men's Health Service	-	-	-	-	-
Midlands	Public Health	Yes	Yes	Yes	Yes	Yes
	Portlaoise STI clinic	Yes	Yes	Yes	Yes	Yes
	Mullingar STI clinic	Yes	Yes	Yes	Yes	Yes
Midwest	Public Health	Yes	Yes	Yes	Yes	Yes
	Limerick STI clinic	Yes	Yes	Yes	Yes	Yes
	Nenagh STI clinic	Yes	Yes	Yes	Yes	Yes
	Ennis STI clinic	Yes	Yes	Yes	Yes	Yes
Northeast	Public Health	Yes	Yes	Yes	Yes	Yes
	STI clinic	Yes ⁵	Yes	Yes	Yes	Yes
Northwest	Public Health [#]	Yes	Yes	Yes	Yes	Yes
	Sligo STI clinic	Yes	Yes	Yes	Yes	Yes
	Letterkenny STI clinic	Yes	Yes	Yes	Yes	Yes
Southeast	Public Health	Yes	Yes	Yes	Yes	Yes
	Carlow STI clinic	Yes	Yes	Yes	Yes	Yes
	Clonmel STI clinic	Yes	Yes	Yes	Yes	Yes
	Waterford STI clinic	Yes	Yes	Yes	Yes	Yes
South	Public Health	Yes	Yes	Yes	Yes	Yes
	STI clinic	Yes	Yes	Yes	Yes	Yes
West	Public Health	Yes	Yes	Yes	Yes	Yes
	STI clinic	-	-	-	-	-

Yes, data returned; -, data not returned.

~Public Health includes GPs, other primary care, student health and others.

[#]Data does not include Donegal patients who may have attended Altnagelvin, Derry.

⁵Q4 data did not include December.

Appendix 2: Returns of ano-genital warts notifications in the required format, 2017

HSE Area	Site~	Data returned in the required format
East	Public Health	Yes
	GUIDE clinic	Yes
	Mater clinic	-
	Gay Men's Health clinic	-
Midlands	Public Health	Yes
	Portlaoise STI clinic	Yes
	Mullingar STI clinic	Yes
Midwest	Public Health	Yes
	Limerick STI clinic	Yes
	Nenagh STI clinic	Yes
	Ennis STI clinic	Yes
Northeast	Public Health	Yes
	STI clinic	No [¶]
Northwest	Public Health	Yes
	Sligo STI clinic	Yes
	Letterkenny STI clinic	Yes
Southeast	Public Health	Yes
	Carlow STI clinic	Yes
	Clonmel STI clinic	Yes
	Waterford STI clinic	Yes
South	Public Health	No [¶]
	STI clinic	No ^{^^}
West	Public Health	Yes
	STI clinic	-

Yes, data returned in required format; No, data not returned in required format; -, data not returned.

~Public Health includes GPs, other primary care, student health and others.

[¶]Data provided by total number; breakdown by age group and sex not available.

^{^^}Data provided only by sex; age groups not compatible with standard template (old template still in use).