



# Annual Epidemiological Report

September 2018

Herpes simplex (genital) in Ireland, 2017

## Key Facts

- There were 1,554 cases of herpes simplex (genital) notified in 2017
- The notification rate was 32.6 per 100,000 population in 2017; a 14% increase since 2016 (28.7/100,000)
- 71% of cases were among females
- The highest age-specific rate was among females aged 20-24 years (259.5/100,000 population)
- The median age was 27 years (range:14-85 years)
- 56% of cases were laboratory confirmed as herpes simplex virus type 1 and 31% as herpes simplex virus type 2; virus type was unknown for 13% of cases

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## Introduction

Herpes simplex (genital), or genital herpes, is a viral infection caused by the herpes simplex virus (HSV). HSV is common throughout the world, and is categorised into two types; HSV1 and HSV2. HSV1 is mainly transmitted by oral-to-oral contact causing oral herpes ('cold sores'), but it can also be transmitted sexually. HSV2 is almost exclusively sexually transmitted [1].

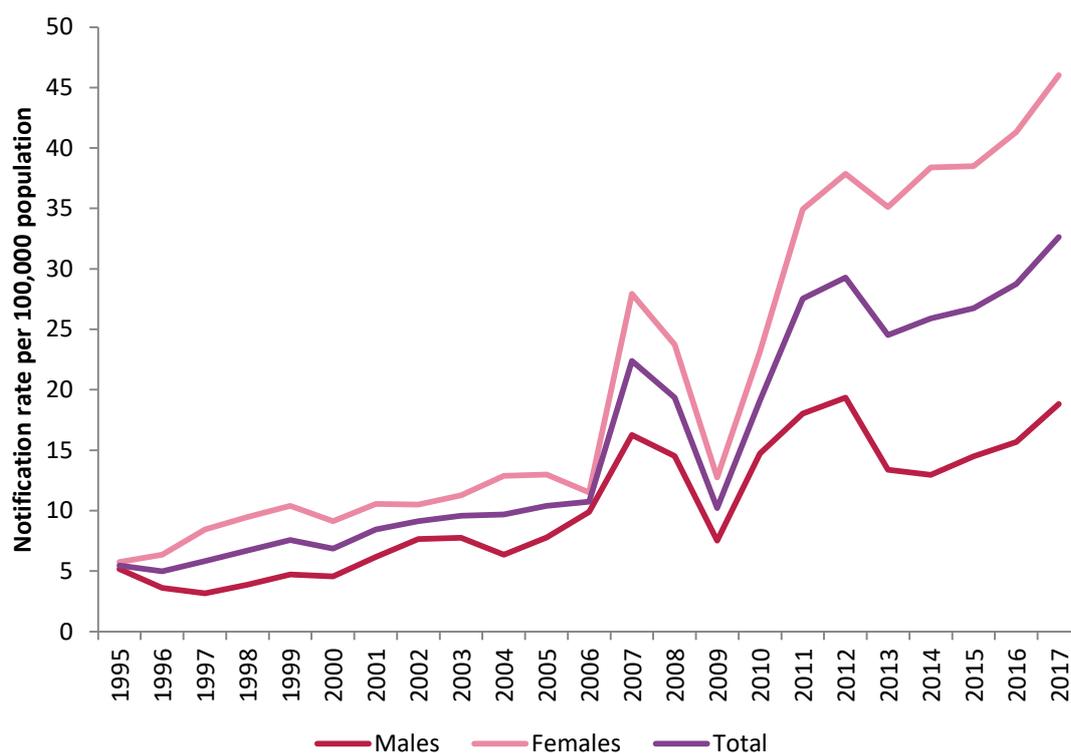
HSV1 and HSV2 infections are lifelong; the dormant virus remains in the body and can reactivate to cause recurrences. Infections can be asymptomatic or symptomatic, symptoms include painful blisters or ulcers at the site of infection. In immunocompromised people, symptoms can be more severe and recurrences more frequent. Additionally, infection with HSV2 increases the risk of acquiring and transmitting HIV [1].

In Ireland, genital herpes is notifiable under the Infectious Disease Regulations [2]. Since 2013, all cases have been reported via the Computerised Infectious Disease Reporting (CIDR) system. Prior to 2013, notifications from STI clinics and primary care were collated by Departments of Public Health and notified in aggregate format to the Health Protection Surveillance Centre (HPSC) on a quarterly basis.

## Epidemiology

### Cases and notification rates

There were 1,554 cases of herpes simplex (genital) notified in Ireland during 2017, corresponding to a notification rate (NR) of 32.6 per 100,000 population. This is a 14% increase compared to 2016, when 1,369 cases were notified (NR 28.7/100,000), and continues the trend of an increasing notification rate since 2013 (Figure 1).

**Figure 1: Notification rate of herpes simplex (genital) in Ireland by sex, 1995-2017**

## HSE area

Cases were reported from all HSE areas with the majority (58%) reported in HSE East (Table 1).

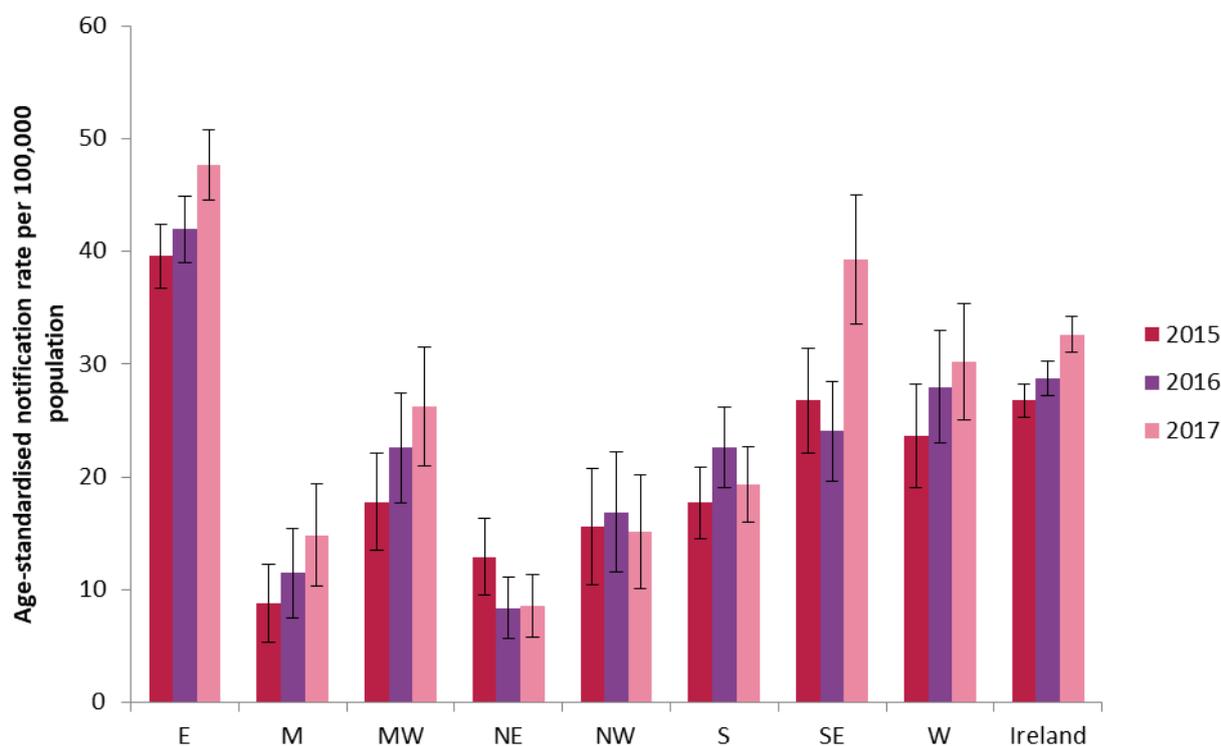
**Table 1: Notifications of herpes simplex (genital) in Ireland by HSE area, 2017**

	East	Midlands	Midwest	Northeast	Northwest	Southeast	South	West
Number of notifications	899	41	97	37	35	131	183	131
% of total notifications	57.9	2.6	6.2	2.4	2.3	8.4	11.8	8.4

The highest age-standardised notification rate (ASNR) was in HSE East (47.7/100,000), a 14% increase from 2016 and significantly higher than the national rate of 32.6 per 100,000 population. The ASNR in HSE Midlands (M), Northeast (NE), Northwest (NW) and South (S) were significantly lower than the national rate (Figure 2).

Data on 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/>.

**Figure 2: Age-standardised notification rate of herpes simplex (genital) in Ireland by HSE area, 2015-2017<sup>†</sup>**



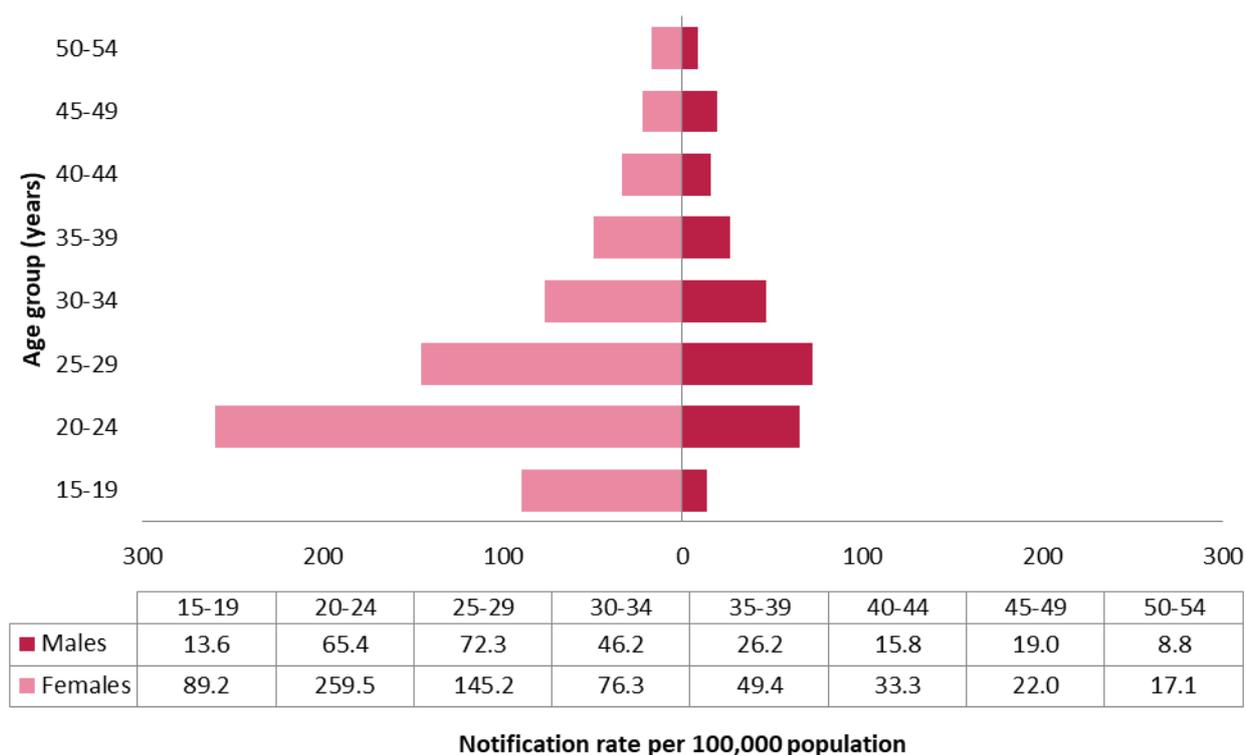
<sup>†</sup>See technical note 3 and 4 for details on the counties covered by each HSE area and ASNR calculation methodology.

## Age and sex

Seventy-one percent of cases were among females and 29% were among males, sex was unknown for three cases (<1%). The NR increased for both sexes, from 41.3/100,000 females in 2016 to 46.0/100,000 females in 2017, and from 15.7/100,000 males in 2016 to 18.8/100,000 males in 2017.

The median age was 27 years (range: 14-85 years); 26 years among females (range: 14-85 years) and 30 years among males (range: 16-81 years). The highest age-specific rate among females was in 20-24 year olds (259.5/100,000) and among males was in 25-29 year olds (72.3/100,000) (Figure 3).

**Figure 3: Age and sex-specific rates of herpes simplex (genital) in Ireland, 2017<sup>††</sup>**



<sup>††</sup>Excludes three cases where sex was unknown. Also excludes cases for individuals aged 0-14 years (n=1) and those over the age of 55 (n=62).

### HSV type

Ninety-nine percent of cases notified in 2017 were laboratory confirmed and 1% were probable (clinically compatible) cases. Among laboratory confirmed cases, 56% were reported as HSV1 and 31% as HSV2 in 2017. This suggests a changing proportion reported as HSV1 (62% in 2016) and HSV2 (36% in 2016), however HSV subtype was not reported for 13% of laboratory confirmed cases in 2017, an increase from 2% in 2016.

Interpretation of trends in HSV type is difficult given the increased proportion of cases notified with unknown HSV type in 2017.

### Patient type

Patient type (reflecting the service at which the patient was diagnosed) was recorded for 81% (n=1,253) of herpes simplex (genital) notifications in 2017. Where patient type was reported, 58% were diagnosed in general practice, 39% were diagnosed in STI clinics and 3% were diagnosed in emergency departments or other hospital settings.

## Other STIs

A number of individuals diagnosed with genital herpes in 2017 were also diagnosed with other STIs during 2017: chlamydia (n=56), gonorrhoea (n=31) and syphilis (n=3).

## Technical notes

1. Data for this report were extracted from CIDR on 27<sup>th</sup> August 2018, and were correct at the time of publication. Information from previous years is updated on an ongoing basis in CIDR, therefore data in this report may be updated in future reports.
2. Percentages are rounded up in the text and provided to one decimal place in tables.
3. 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.
4. 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. Data were aggregated into the following age groups for the analysis: 0-4 years, 5-9 years, 10-14 years, 15-19 years, 20-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years and ≥65 years.
5. While efforts are made to remove duplicate records from these data, it is not always possible to link and remove all duplicate records and some patients or disease events may be counted more than once.

## Further information

- Previous years' reports are available at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/genitalherpessimplex/surveillancereports/>, at <http://www.hpsc.ie/abouthpsc/annualreports/> and at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/publications/stireports/>
- Keep up to date with HIV and STIs in Ireland at <http://www.hpsc.ie/a-z/hivstis/sexuallytransmittedinfections/publications/stireports/stiweeklyreports/>

## Acknowledgements

The Health Protection Surveillance Centre (HPSC) would like to thank all those who provided the data for this report, particularly the Microbiology Laboratories, infectious disease surveillance staff within the Departments of Public Health, Consultants in Infectious Disease/Genitourinary Medicine, STI clinics and GPs.

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## References

1. World Health Organization (WHO), Herpes simplex virus. 2018 [cited 2018 28 August]; Available from: <http://www.who.int/news-room/fact-sheets/detail/herpes-simplex-virus>.
2. Government of Ireland. Infectious Diseases (amendment) Regulations 2016 S.I. No. 276 of 2016. 2016 : Ireland. 2016.