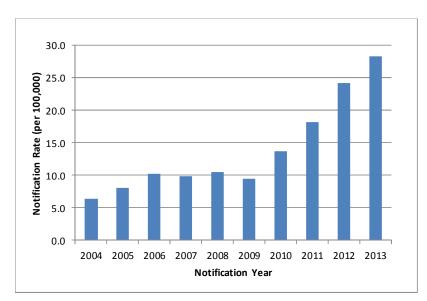




Gonorrhoea is a notifiable sexually transmitted infection. Since early 2013, case based information on laboratory notifications and clinical notifications have been collated in CIDR. Prior to this, information on gonorrhoea was collected on an aggregate basis nationally, the data coming from STI clinics and from GPs via Departments of Public Health.

Figure 1: Gonorrhoea cases by year of notification, 2004 to 2013

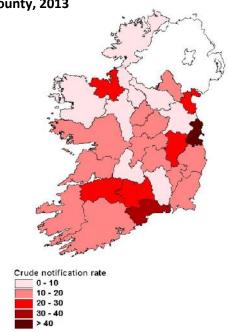


In 2013, a total of 1,294 cases of gonorrhoea were reported in Ireland, giving a notification rate of 28.2 per 100,000 population. Figure 1 shows the trend in gonorrhoea notifications from 2004 to 2013. The overall trend has increased by almost 200% between 2009 and 2013.

The highest crude incidence rate (CIR) was in HSE East (51.0/100,000) followed by HSE Southeast (19.3/100,000) and HSE South (17.9/100,000). Following an upsurge in gonorrhoea in HSE East in 2012 rates remained stable in n 2013 (51.0/100,000 in 2013 compared with 50.6 /100,000 in 2012). However, the CIR across most other HSE areas (except HSE West & HSE Midwest) increased in 2013.

Counties with the highest rates included Dublin (59.2/100,000), Waterford (33.4/100,000) and Sligo (27.5/100,000). Rates and number by county should be interpreted with caution as county is based on the clinic and not the patient's address for the some of cases. Consequently, rates and numbers of cases by county may 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 www.yoursexualhealth.ie.

Figure 2: Gonorrhoea crude notification rate (per 100,000) by county, 2013

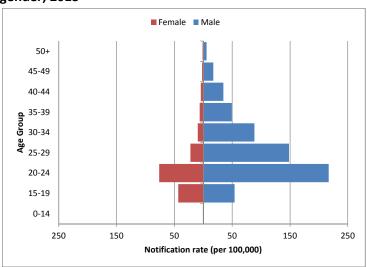






There were four cases of gonorrhoea notified among 0-14 years age group. Two of these were reported as eye infections and no further details were reported for the other two cases.

Figure 3: Gonorrhoea notification rates by age group and gender, 2013



A third (33%) of gonorrhoea cases notified in 2013 were among those aged between 20 and 24 years old and over two thirds were aged between 20 and 35 years old. The highest rate among males was in the 20-24 year old age group followed by the 25-29 year old group. The highest rate among females was also in the 20-24 year age group followed by the 15-19 year old age group (figure 3).

In 2013, the median age of cases (excluding those aged <15 years) was 26 years (age range 15 to 79) and the mean age was 28 years. The median age of male cases (excluding those aged <15 years) was 27 years (age range 15 to 79 years) and among female cases was 22 years (age range 15 to 63 years).

The notification rate in males and females has increased three fold between 2009 and 2013; in women the rate has increased from 3.9/100,000 in 2009 to 11.5/100,000 in 2013 and in men the rate increased from 14.7/100,000 to 44.1/100,000 in the same period (figure 4).

Figure 4: Gonorrhoea age-specific notification rate and percentage age group unknown by year, 1995-2013

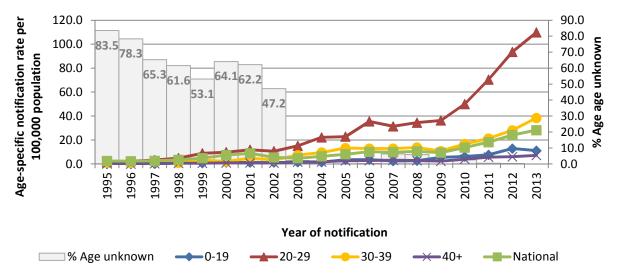
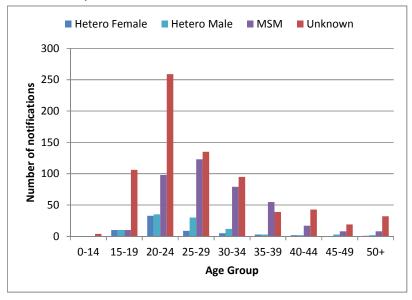






Figure 5: Gonorrhoea notifications by age group and mode of transmission, 2013



Mode of transmission was available for 557 (43.0%) of gonorrhoea notifications in 2013. Of the 557 cases, mode of transmission was reported as men who have sex with men (MSM) for 71% of cases (n=398) and heterosexual for 29% (97 male and 63 female). These data should be interpreted with caution as the completeness of mode of transmission among MSM cases may be a reporting artefact as mode can be assigned based on attendance at MSM specific clinics.

Cases among MSM tended to be older than heterosexuals. Forty-three percent of cases among heterosexuals (52% heterosexual women and 36% heterosexual men) were aged 20-24 years compared with 25% of MSM. The median age among MSM (28 years) was higher than among heterosexuals (23 years; 25 years among males and 22 years among females).

Country of birth was available for 375 (29.0%) of gonorrhoea notifications in 2013. Of the 375 cases:

- 72% (n=270) were born in Ireland;
- 10% (n=36) were born in Latin America;
- 7% (n=28) were born in Central and Eastern Europe;
- 11% (n=41) were born in Western Europe or other regions.

Discussion

A multi-disciplinary Gonorrhoea Control Group (GCG) established in December 2012 was tasked with investigating the increase in gonorrhoea cases, identifying those at risk and implementing control measure to halt the rise. While the CIR in HSE East stabilised in 2013, there were large rises in other parts of the country. The CIR in HSE South increased more than 4-fold from 4.4/100,000 in 2012 to 17.9/100,000 in 2013, while the CIR in HSE Midlands increased more than 3-fold from 4.2/100,000 in 2012 to 14.9/100,000 in 2013. Rates in HSE Northeast, HSE Northwest and HSE Southeast increased by 40-50% compared with 2012 (12.0/100,000, 13.5/100,000 and 19.3/100,000 in 2013, respectively). Conversely, there was little change in CIR in HSE Midwest (16.6/100,000 in 2012 and 17.1/100,000 in 2013) and HSE West (12.8/100,000 in 2012 and 12.6/100,000 in 2013).

Some of the increase may be attributed to better reporting with the introduction of case based electronic reporting using CIDR in 2013. Furthermore better quality data on patient's residence may





have resulted in more cases being assigned to areas other than those with large STI clinics, in particular HSE East.

A study of enhanced surveillance data on laboratory confirmed cases diagnosed in HSE East and Southeast areas during quarter 1, 2013 identified MSM and young heterosexuals as most affected by the outbreak¹.

These risk groups also stand out in national data for 2013. A third of cases in 2013 were aged 20-24 years and this age group also had the highest age-specific incidence rate among both men and women. While mode of transmission was not complete, the finding that 71% of cases were in MSM where mode of transmission was reported is in line with data reported by other countries. Public Health England reported that 63% of gonorrhoea cases in England were reported in MSM and cases increased by 26% in this group in 2013². In the latest report from ECDC (data for 2012) it is reported that cases diagnosed in MSM represent 33% of all cases reported and 53% of cases reported in men³.

Control measures implemented by the CGC included targeted information campaigns for MSM and young heterosexuals using social media and engagement with health care providers, particularly GPs, to provide the required testing and treatment services for gonorrhoea⁴. The final outbreak report is currently being prepared.

This is the first year for which case-based data are available for gonorrhoea. Together with improvements in data completeness, e.g. mode of transmission, these data will provide a more accurate description of the epidemiology of gonorrhoea in Ireland over the coming years.

References

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- 4. Fitzgerald M. et al. Control group use surveillance findings to target response to gonorrhoea increase. Epi-Insight 14(10), October 2013. Available at http://ndsc.newsweaver.ie/epiinsight/1lr0bmm7cr9?a=6&p=41164045&t=17517844. Accessed on 26th August, 2014.

Technical Note

- Data for this report were extracted from the STI aggregate database (1995-2012) and CIDR (2013) on 18th
 February, 2014, and were correct at the time of publication.
- 2. Percentages are rounded up in the text and provided to one decimal place in the tables.