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HIV and STI trends in Wales

Surveillance Report, June 2018

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Purpose and Summary of Document:

This report summarises trends in the epidemiology of HIV/AIDS and other sexually transmitted infections (STI) in Wales up to the end of December 2016.

It is accompanied by a data tables release, slide set, infographics and notes on interpretation.

Publication/Distribution:

- Publication on Public Health Wales intranet and internet
- E-mail notification of publication to stakeholders
- Link from Public Health Wales e-Bulletin
- Publication in Public Health Wales Document Database (Community surveillance)

Key trends

- There is continued transmission of STIs and HIV in Wales. In 2016, sexual health clinics (SHCs) made 6,337 diagnoses of chlamydia, 3,236 of first episode genital warts, 1,503 of first episode herpes, 964 diagnoses of gonorrhoea, 141 of HIV and 138 of syphilis.
- Syphilis and first episodes of herpes increased between 2015 and 2016 in Wales, whilst chlamydia remained stable and HIV, gonorrhoea, and first episodes of warts decreased.
- Between 2011 and 2016, there were increases in syphilis, herpes, gonorrhoea and chlamydia; whilst warts decreased, and HIV decreased after a 3 year upward trend peaking in 2015.
- Syphilis diagnoses in sexual health clinics (SHCs) doubled between 2011 and 2016, peaking at 138 cases in 2014 and 2016. The majority of the increase in diagnosed cases was amongst men who have sex with men (MSM), who are at increased risk. Although cases in females are a lot less frequent, they have increased in the last few years, reaching 16 in 2016. Recent data indicate that the incidence of syphilis in Wales is still increasing.
- First episodes of herpes reported from SHCs increased by 14% between 2015 and 2016. Herpes diagnoses have increased over the last decade, with a 56% increase between 2011 and 2016 (65% in females and 43% in males). Part of this increase, and especially that in females, may be explained by the gradual inclusion of former community clinics to the surveillance system up to 2016. Between 2011 and 2016 the number of attendances to sexual health clinics reported to the system doubled, increasing by 145% in females and by 40% in males.
- Chlamydia laboratory positives and testing remained stable between 2015 and 2016, as indicated by laboratory data, which include tests from all healthcare settings in Wales. However, positives increased by 21% and testing by 11% between 2011 and 2016. In males, the increase in positives (38%) was similar to the increase in testing. In females, a 13% increase in positives was accompanied by a 5% increase in testing, which may indicate increased transmission in the population. Whilst these may be underestimates of the increase in testing and positives, due to changes to the laboratory information systems between 2012 and January 2015, the large increases in chlamydia diagnoses in SHCs in recent years may be largely explained by the increased reporting and testing from clinics, and therefore laboratory data (when available) may better describe the magnitude of the change
- Gonorrhoea decreased in 2016, with a 19% reduction in individuals testing positive, according to laboratory data from all healthcare settings. This is unlikely to be due to a decline in overall testing, given that gonorrhoea screens increased in SHCs in 2016 and has been available in a pilot carried out in primary care settings within Betsi Cadwaladr University health board and Cardiff and Vale University health board. The decrease was more marked in males than in females (22% and 14%, respectively), and it follows a couple years of relatively stable gonorrhoea rates after a step increase in 2011-2013, which coincided with the roll out of dual NAAT test for chlamydia and gonorrhoea in SHCs. Overall, between 2011 and 2016 there was a 41% increase in the number of individuals testing positive for gonorrhoea in all healthcare settings in Wales.
- Diagnoses of first episodes of warts in SHCs declined by 7% in 2016, with a similar reduction in males and females. Since 2011, rates have remained relatively stable in males and declined by 15% in females.
- The number of new HIV diagnoses reported from all settings across Wales dropped substantially (by 32%) in 2016, returning to 2011 levels after a 3 year upward trend (Public Health England data, PHE). The percentage of decrease was similar in males and females. Laboratory data indicate that the number of individuals tested did not fall and remained relatively stable.

- New diagnoses of HIV in young MSM (15-24 year olds) can be a useful measure of HIV transmission, as these diagnoses are more likely to represent recent infections. The number of diagnoses in young MSM in Wales was 5 in 2016, whilst the average annual number for the 5 year period 2011-2015 is 10.2.
- In 2016, 1,835 residents of Wales received HIV-related care (58.9 per 100,000 population), of which 1,585 were receiving HIV treatment (SOPHID, Survey of Prevalent HIV Infections Diagnosed, PHE)
- PHE estimates that in 2016, 88% of people living with HIV in England would have been diagnosed, and 96% of those diagnosed would be receiving HIV treatment. Applying these estimates to Wales, there would be an estimated 1,876 people living with HIV in Wales, of whom 225 would be undiagnosed.
- Ninety-seven percent of those receiving HIV treatment in the UK with a reported viral load were virally suppressed. Similarly, 96% of Welsh residents receiving HIV treatment with a reported viral load were virally suppressed (less than 200 copies/UL). However, viral load data were missing for 21% of patients on treatment.
- Late HIV diagnosis (defined as a CD4 count under 350 cells/mm³ within three months of diagnosis) remains a concern. However, the current surveillance system is not effective in collecting CD4 data at diagnosis, which were missing in 56% of new diagnoses in 2016. Amongst those with known CD4 count at diagnosis, 48% (30/62) were diagnosed “late stage” (21% of all individuals diagnosed with HIV in 2016). Public Health Wales is reviewing HIV surveillance in Wales with a view to improve data collection.
- Young people continue to be disproportionately affected by STIs. In 2016, for example, the age-specific population rates of gonorrhoea diagnoses in SHCs in 15-24 year olds was 126.8 per 100,000, whilst in the population as a whole the rate was 31.0 per 100,000.
- Time trends in 15-24 year olds were similar to those in the population as a whole, although the increases in syphilis and herpes were more marked in this group. Syphilis diagnoses in 15-24 year olds went from 10 cases in 2011 to 30 in 2016, whilst first diagnoses of herpes increased by 78% in young females and 68% in young males.
- A high proportion of STI and HIV diagnoses are in men who have sex with men (MSM). In 2016, 67% of all syphilis diagnoses, and 33% of all gonorrhoea diagnoses made in SHCs were in MSM, whilst at least 23% of HIV diagnoses in all healthcare settings were in MSM (sexuality data for HIV diagnoses is unknown for 59 out of 110 men newly diagnosed with HIV).
- New HIV diagnoses probably acquired through injecting drug use declined in 2016 to 1%. In 2016, two new HIV diagnoses (1%) occurred in this probable exposure category. In 2014 and 2015 injecting drug use was the probable exposure for 5% and 3% of new HIV diagnoses (9 and 7 new diagnoses respectively), the highest percentages since 2001. Some of these cases were related to specific clusters investigated by Public Health Wales.
- The highest ethnicity-specific population STI rates were among people of black ethnic minorities. Whilst the highest rates of HIV were amongst those self-defining as black African, the highest rates of other STIs like gonorrhoea and herpes were found in other black ethnic minorities. It is worth noting that ethnicity-specific rates were based on population estimates from the 2011 census (Office for National Statistics), and therefore may be affected by changes in the underlying populations since then.
- Data from SWS indicate that there is geographical variation in the incidence of STIs in Wales, as well as in the rates of testing. In 2016, the percentage of gonorrhoea tests from SHCs for which a positive diagnosis was reported was highest in those living in Cardiff, and the Vale of Glamorgan local authorities (LAs). For chlamydia, the percentage positivity was highest in those living in Conwy, Denbighshire, Wrexham (all in North Wales), and Carmarthenshire LAs.

- In 2016 there were 2 laboratory reports of lymphogranuloma venereum (LGV) for specimens sent to the PHE Sexually transmitted bacteria reference unit (STBRU) from Wales, a decline after the highest annual number was reported in 2015 with 6 cases. Reports of LGV in the UK also peaked in 2015 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/653619/hpr3717_LGV.pdf). This decrease occurred as chlamydia diagnoses in MSM remained stable in the UK and increased in Wales; the reasons for this remain unclear.
- Gonorrhoea resistance to first line antimicrobials remains a concern. As reported by the Gonococcal Resistance to Antimicrobials Surveillance Programme (GRASP), between January 2015 and June 2017, PHE's national reference laboratory confirmed 81 cases of high-level azithromycin-resistant *N.gonorrhoeae*; and one case of treatment failure after dual therapy with ceftriaxone and azithromycin, reported in 2015. In Wales there have been no reports of dual ceftriaxone and azithromycin resistance, and no reports of high-level azithromycin-resistant *N.gonorrhoeae* in 2015 and one report in 2016.
- Although laboratory and clinic data indicate that the incidence of STIs is increasing in Wales, the magnitude of the changes detected by surveillance in recent years needs to be interpreted with caution in light of concurrent developments in testing, treatment services, and reporting systems, all of which occurred between 2011 and 2016. These changes include:
 - Implementation of a single Laboratory Information Management System common to all laboratories across Wales
 - The gradual inclusion of former Family Planning or Community Contraceptive Services clinics in the surveillance system,
 - the use of dual chlamydia/gonorrhoea NAAT testing in SHCs,
 - the improvements in reporting completeness from SHCs,
 - the change in reporting from paper-based to computer-based clinical management systems in Hywel Dda University Health Board in March 2016

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