

HIV and STI trends in Wales

Surveillance Report, June 2017

Author: Communicable Disease Surveillance Centre

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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 2015.

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)

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Key trends

- There is continued transmission of STIs and HIV in Wales.
- In general, STIs have increased in the last few years, but appeared to level off in 2015.
- The number of STIs diagnosed in sexual health clinics (SHCs) across Wales in 2015 remained fairly stable for both genders in comparison to 2014 figures. However, the rate of syphilis in males decreased by 31%, returning to 2013 levels after a peak in 2014 that was partly due to an outbreak in North Wales.
- The rates of testing reported from SHCs also remained fairly stable in 2015, with testing for chlamydia, gonorrhoea, syphilis and HIV increasing between 3% and 4%.
- The magnitude of the increase in STIs in recent years is difficult to ascertain due to concurrent changes in testing, services, and reporting systems, all of which occurred between 2011 and 2015. Examples of changes include:
 - o the use of dual chlamydia/gonorrhoea NAAT testing in SHCs,
 - the inclusion of former Family Planning or Community Contraceptive Services clinics in the surveillance system,
 - o the improvements in reporting completeness from SHCs,
 - the implementation of a new Laboratory Information Management System common to all laboratories across Wales.
 - Between 2011 and 2015, there was a general increase in STIs diagnosed in SHCs, as well as increases in testing in this setting:
 - In males, there were increases in the rates of diagnoses of gonorrhoea (119%), syphilis (61%), chlamydia (38%), herpes (22%), and warts (13%). Testing for gonorrhoea, syphilis, and chlamydia in males increased by 63%, 28%, and 58% respectively.
 - During the same period, in females, there were increases in the rates of gonorrhoea (128%), chlamydia (68%), and herpes (46%), and decreases in warts (9%), whilst syphilis remained at low levels. Testing for gonorrhoea and chlamydia in females increased by 100% and 96%, whilst testing for syphilis increased by 25%.
 - Laboratory data include data from all healthcare settings in Wales. These data also show a general increase in individuals tested and individuals tested positive for STIs/HIV. Between 2011 and 2015:
 - The number of individuals testing positive for gonorrhoea increased by 93% in males and 58% in females, respectively.
 - Chlamydia testing increased by 41% in males and by 10% in females, with the number of individuals testing positive increasing by a similar percentage (by 37% and 13%, respectively).
 - HIV testing increased by 59% in males and 31% in females. However, the number of HIV diagnoses per 100,000 tested decreased by 20% in males and 52% in females.
- The number of new HIV diagnoses decreased to 168 in 2015, after reaching the highest annual number since records began in 2014, with 186 cases. Overall, between 2011 and 2015, the number of new HIV diagnoses increased by 28% in males and decreased by 38% in females.
- 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 8 in 2013, 7 in 2014, and 13 in 2015, which could indicate an increase in recent transmission. However, these results should be interpreted with caution due to small numbers.

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- According to SOPHID data (Survey of Prevalent HIV Infections Diagnosed, PHE) 1,877 residents
 of Wales received HIV-related care in 2015 (60.6 per 100,000 population), of which 1,668 were
 receiving HIV treatment (SOPHID, Survey of Prevalent HIV Infections Diagnosed, PHE).
- PHE estimates that in 2015 87% of people living with HIV in the UK would have been diagnosed, and 96% of those diagnosed would be receiving HIV treatment (HIV in the UK, 2016 report: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574667/HIV_in_the_UK_2016.pdf). Applying these estimates to Wales, there would be an estimated 2,011 people living with HIV in Wales, of whom 268 would be undiagnosed.
- Ninety-four percent of those receiving HIV treatment in the UK with a reported viral load were virally suppressed (this excludes 14% of patients on treatment for whom viral information was missing). Similarly, 95% of Welsh residents receiving HIV treatment with a reported viral load were virally suppressed. However, viral load data was missing for 35% of patients on treatment.
- Late HIV diagnosis remains a concern. In 2015, 36% of all individuals diagnosed with HIV had a "late stage" diagnosis (50% when the cases with unknown CD4 count at diagnosis were excluded), highlighting the need for further increases in testing. Late stage was defined as a CD4 count under 350 cells/mm³ within three months of diagnosis.
- The proportion of all individuals newly diagnosed with HIV with a "late stage" diagnosis for the
 period 2010-2015 was higher in Asian and black individuals (67% and 60%, respectively),
 compared to white individuals (43%) and other/mixed ethnicities (42%). However, these
 differences should be interpreted with caution as results are not statistically significant.
- Young people are still disproportionately affected by STIs. In 2015, for example, the age-specific population rates of gonorrhoea diagnoses in SHCs in 15-24 year olds was 124.4 per 100,000, whilst in the population as a whole the rate was 32.9 per 100,000.
- Trends in 15-24 years olds were similar to those in the population as a whole, although genital
 herpes increased by 16% in young females in 2015, an increase not seen in the general female
 population, and the number of new HIV diagnoses in young males increased by 30%, whilst
 remaining stable in all males. However, the latter should be taken with caution due to small
 numbers.
- A high percentage of STI and HIV diagnoses are in men who have sex with men (MSM). In 2015, 57% of all syphilis diagnoses, and 32% of all gonorrhoea diagnoses made in SHCs were in MSM, whilst 54% of HIV diagnoses in all healthcare settings were in MSM.
- In 2014 and 2015 injecting drug use was the probable exposure category for 4% of new HIV
 diagnoses (8 and 7 new diagnoses respectively), the highest percentage since 2002. Some of
 these cases were related to specific clusters investigated by Public Health Wales.
- The highest ethnicity-specific population rates of STI diagnoses were found among people of black ethnicity and among "non-British and non-Irish" white individuals. For example, in 2015 the rate of new HIV diagnoses in black individuals (mostly reported from black African individuals) was 21-fold the rate in white individuals, and the rate of gonorrhoea in black individuals (mostly reported from black individuals other than Caribbean, including black African and black "other") was 3-fold the rate in white individuals. In "non-British and non-Irish" white individuals the rates of gonorrhoea and syphilis were 13-fold and 8-fold the rate in white-British individuals. 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 2015, the percentage of gonorrhoea tests from SHCs for which a
 positive diagnosis was reported was highest in those living in Caerphilly, Cardiff, and Vale of
 Glamorgan local authorities (LAs). For chlamydia, the percentage positivity was highest in those
 living in Caerphilly, Torfaen, Denbighshire, Wrexham, Monmouthshire and Merthyr Tydfil.

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In 2015 there were 6 laboratory reports of lymphogranuloma venereum (LGV) for specimens sent
to the PHE Sexually transmitted bacteria reference unit (STBRU) from Wales, the highest figure
since 2010. The annual numbers of laboratory reports of LGV in Wales between 2010 and 2015
were six, two, four, three, one and six, respectively. Reports of LGV in the UK have increased
more than two fold since 2012, and in 2015 PHE reported the highest annual number of LGV
diagnoses since the start of the UK LGV epidemic (948 diagnoses).

• As reported by the Gonococcal Resistance to Antimicrobials Surveillance Programme (GRASP), in 2015, the world's first documented treatment failure to dual ceftriaxone and azithromycin therapy was reported in England, and the outbreak of high-level azithromycin-resistant *N. gonorrhoeae* first identified in Leeds in 2015 is ongoing, with 56 confirmed cases between November 2014 and August 2016 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/567602/GRASP_Report_2016.pdf). In Wales there have been no reports of dual ceftriaxone and azithromycin resistance, and as per high-level azithromycin-resistant *N. gonorrhoeae* there were no reports in 2015 and one report in 2016.

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