

Record highs of sexually transmitted infections in UK's MSM

The UK is facing a surge in sexually transmitted infections among men who have sex with men, with record highs in infections of gonorrhoea, chlamydia, and HIV. Tony Kirby reports.

For PHE's STI information see <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/STIs/STIsAnnualDataTables/>

For the report on HIV in the UK 2013 see <http://www.hpa.org.uk/Publications/InfectiousDiseases/HIVAndSTIs/1311HIVintheUK2013report/>

For Australia's STI surveillance report see <http://www.kirby.unsw.edu.au/surveillance/2013-annual-surveillance-report-hiv-viral-hepatitis-stis>

For more on the British Society for Sexual Health and HIV see <http://www.bashh.org/>

For more on the 56 Dean Street Clinic, Soho, London see <http://www.chelwest.nhs.uk/services/hiv-sexual-health/clinics/56-dean-street/56-dean-street>

Men who have sex with men (MSM) in the UK are experiencing record-high diagnosis rates for various sexually transmitted infections (STIs) including chlamydia, gonorrhoea, and HIV. Data from Public Health England (PHE) showing these increases were recently presented at the conference Sex, Drugs, and MSM in Birmingham, UK (Nov 1), convened by the British Society for Sexual Health and HIV (BASHH) after concerns about an STI crisis in UK's MSM.

In 2012, there were around 36 000 STI diagnoses in MSM in sexual health clinics in England—the location where most MSM are tested. This figure includes chlamydia (8500 cases), gonorrhoea (10 800 cases), syphilis (2100 cases), herpes (1400 cases), and genital warts (3500 cases). Since 2008, STI diagnoses in MSM have risen sharply, especially gonorrhoea diagnoses, which have trebled. There were 3250 new HIV diagnoses in UK MSM, an all time high, and a 10% increase on the 2960 new diagnoses in MSM in 2011. In 2012, an estimated

7300 MSM were living with HIV but unaware of their infection compared with 34 000 MSM living with a diagnosed HIV infection. All of these infections are over-represented among the UK's MSM population, with 51% of new diagnoses of HIV occurring in MSM, along with 72% of syphilis, 42% of all gonorrhoea, and 9% of all chlamydia diagnoses.

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“Some of the increase in new diagnoses of various infections are due to increased and improved testing, for gonorrhoea, chlamydia, and HIV”, says Gwenda Hughes, Head of the STI section at PHE's Centre for Infectious Disease Surveillance and Control, London, UK. “However, there have also been rises in diagnosis rates for other STIs such as syphilis where there have been no changes in testing practice. This suggests that the rises in STIs are due partly to ongoing risky sexual behaviours.”

The number of MSM tested for HIV in 2012 increased by 13% (from 64 270 in 2011 to 72 710) in England and by 19% (from 28 640 to 34 000) in London, the number tested for other STIs through sexual health screens increased by 16% (from 85 322 to 99 171) in England and by 21% (from 39 765 to 48 021) in London, explaining part of the increases. Also, in early 2010 nucleic acid amplification tests were validated for testing for gonorrhoea and chlamydia at extragenital sites—namely the throat and rectum—meaning that many people who had the conditions only at these sites and were asymptomatic are now being diagnosed. But the trebling

in gonorrhoea diagnoses in MSM from 2008–12 and the more than two-fold increase in chlamydia diagnoses in the same period suggests that ongoing, increased transmission rates are a huge problem, stretching sexual health clinics in certain locations, especially London, to their limits.

There are also some emerging STI problems in the UK. Lymphogranuloma venereum (LGV) is caused by a specific strain of chlamydia that causes more severe symptoms and requires a longer course of treatment than other strains. In the past 10 years, cases of LGV have risen substantially, with 2397 in the UK since 2003, of which 99% were in MSM, and 54% were in London. HIV co-infection was present in 82% of cases, the hepatitis C infection in 20% of cases. There was a rapid rise in cases during 2009, and 56% of all reported cases have been diagnosed since 2010. By comparing cases during the so called surge period from 2009 with earlier cases, experts from PHE were able to determine that MSM more recently infected with LGV were more likely to have attended group sex parties, to have shared sex toys, and to be HIV positive. “This is suggestive of an increasing number of HIV-positive MSM in the UK engaging in high-risk sexual behaviour”, says Hughes. A PHE initiative in 2010 to promote better hygiene practices and safer sex, including in gay saunas, has probably helped bring down new infection rates of LGV from their 2010 peak.

Another relative newcomer to the STI scene is *Shigella flexneri*, a gastrointestinal infection spread by faecal-oral contact that can cause serious episodes of diarrhoea, fever, and other symptoms. Although data about sexual orientation are not routinely collected for cases of *Shigella*

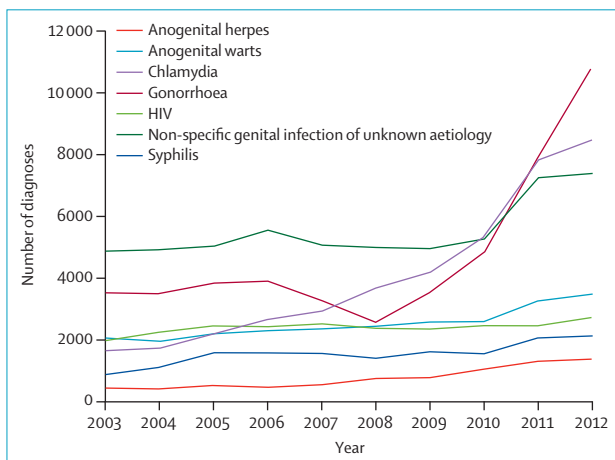


Figure 1: New diagnoses of sexually transmitted infections including HIV in men who have sex with men, England, 2003–12. Reproduced with permission from Public Health England.

flexneri, the estimated number of sexually acquired cases in MSM in England and Wales has risen from 43 in 2009 to 172 in 2012. 224 cases have been reported so far in 2013. A PHE investigation of 34 MSM infected by *Shigella* showed that 59% were HIV positive, 76% had used recreational drugs, and, of these, 30% had injected them. Injecting was a new behaviour for almost all of those who reported it. Most men interviewed had met their partners online, through smartphone apps, or at private sex parties, and sex-on-premises venues such as saunas.

"The issues behind the rise in STIs in the UK are complex and multifactorial", says David Asboe, Chair of both the BASHH MSM special interest group and the British HIV Association. "Firstly, it is important to remember that rates of STIs, particularly gonorrhoea and syphilis, were high in the 1970s and 80s. They dropped because of profound changes in sexual behaviour, including reduced numbers of sexual partners, and increased use of condoms, directly due to HIV/AIDS. While some of the data are conflicting, I have no doubt that a significant proportion of increases in STIs and HIV in MSM since 2000 relate to a reversal of these changes in sexual behaviour due to the fact HIV is now treatable and that AIDS and death related to HIV are rare."

Sexual health surveys in London have shown that the proportion of MSM engaging in sex without condoms has increased from 29% to 47% over the 12 years from 1996 to 2008 (when the survey was last done).

The rise in gonorrhoea is a particular worry since antibiotic resistance to this infection has been increasing worldwide. In 2011, the UK changed treatment guidelines because reduced susceptibility to cefixime, the front-line therapy at that time, had increased beyond 5% of cases. This trend has reversed following the switch to the new front-line regimen, ceftriaxone and azithromycin. "This is only a reprieve", warns Hughes. "History has shown that gonorrhoea

is an infection that quickly develops resistance to new treatments. We do need new treatments but we should also investigate whether we can tailor treatments for specific population groups using existing drugs, to help keep them useful drugs for longer. We also need to improve awareness among MSM that this could become an infection that might not be so easy to treat in future, and that using condoms when having sex can greatly reduce your risk of getting infected."

The UK is by no means unique among developed countries in terms of its STI epidemic in MSM. At the recent Australasian HIV and Sexual Health Conferences in Darwin, Australia, experts announced that 1253 new HIV diagnoses were recorded in Australia in 2012. This prevalence was the highest for 20 years, 853 of which were in MSM, an 8% rise on the total of 803 recorded in 2011. Cases of gonorrhoea increased by 91% between 2008–12 in all men, compared with 54% in women, whereas syphilis cases increased by 22% in all men from 2011 to 2012 compared with a 9% increase in women. LGV and *Shigella* are not currently notifiable STIs in Australia.

"Both chlamydia and gonorrhoea are increasing substantially in Australia, although not by the extraordinarily large percentage seen in the UK since 2008", says Andrew Grulich, Head of the HIV Epidemiology and Prevention Program at the Kirby Institute (University of New South Wales, Australia). "For chlamydia, the increase is in men and women, whereas in gonorrhoea, the increase is largely in men, mostly MSM. Some of this increase is known to be related to increased testing rates using more accurate diagnostic tests. Nevertheless, at least some of the increase is real, meaning from increased transmission."

Back in England, PHE has established an expert group to address some of the health risks posed by the interplay between drug use and sexual behaviours, especially in relation to

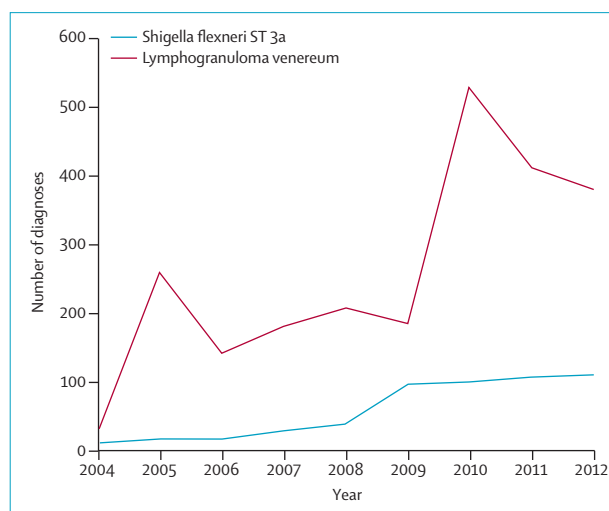


Figure 2: New diagnoses of Lymphogranuloma venereum and non-travel related *Shigella flexneri* serotype 3a in men, England, 2004–12. Reproduced with permission from Public Health England.

STI and blood-borne viruses, and to consider the kinds of services that are needed. Hughes believes clinics such as the 56 Dean Street Clinic in Soho, London (which includes CODE, the Antidote Substance Misuse Service at London Friend, a Lesbian Gay Bisexual and Transgender health and wellbeing charity) and the Club Drug Clinic at Chelsea and Westminster Hospital, London, are vital to help deal with the crossover between STIs and drug use.

PHE are attempting pilots in sexual health clinics nationwide to ascertain drug use in MSM attending health screens, which could help improve understanding of the relation between unsafe sex and drug use. "More must be done to promote safer sexual behaviour and to improve sexual health screening for MSM, including regular HIV testing", she concludes. Along with other experts across Europe, Hughes is hopeful that the recent European HIV Testing Week (Nov 22–29), has encouraged more MSM to come forward for testing for HIV and other STIs, since earlier diagnosis and treatment is one of the most important steps in slowing and eventually reversing the STI epidemic.

Tony Kirby