Annual spotlight on sexually transmitted infections in the South East PHE Centre
2014 data
About Public Health England

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.
# Contents

About Public Health England 2

1 Summary 4

   PHE’s messages: 5

2 Charts, tables and maps 6

3 Information on data sources 13

   3.1 Genitourinary Medicine Clinic Activity Dataset (GUMCAD) 13
   3.2 Chlamydia Testing Activity Dataset (CTAD) 13
   3.3 New STIs 13
   3.4 Calculations 14

4 Further information 15

5 About Field Epidemiology Services 16

6 Acknowledgements 16
1 Summary

Sexually transmitted infections (STIs) represent an important public health problem in the South East PHE Centre. Out of all the Public Health England centres it has the lowest rate of new STIs in England.

Over 53,400 new STIs were diagnosed in South East residents in 2014, representing a rate of 626 diagnoses per 100,000 population. Rates by upper tier local authority ranged from 413 new STI diagnoses per 100,000 population in Hampshire to 1,454 new STI diagnoses per 100,000 population in Brighton and Hove.

The number of new STIs diagnosed in South East residents remained the same between 2013 and 2014. Numbers of three of the five major STIs rose: syphilis increased by 55%, gonorrhoea by 23% and chlamydia by 6%. Numbers of genital herpes decreased by 4% and genital warts by 9%.

PHE recommends that local areas should be working towards achieving a chlamydia detection rate of at least 2,300 per 100,000 among individuals aged 15 to 24 years and this is an indicator in the Public Health Outcome Framework. In 2014 the chlamydia diagnosis rate among South East residents aged 15 to 24 years was 1,665 per 100,000 residents.

Men and women had similar rates of new STIs (643 and 600 per 100,000 residents respectively).

Where gender and sexual orientation are known, men who have sex with men accounted for 12% of South East residents diagnosed with a new STI in a GUM clinic (82% of those diagnosed with syphilis and 55% of those diagnosed with gonorrhoea).

STIs disproportionately affected young people. South East residents aged between 15 and 24 years accounted for 57% of all new STI diagnoses in 2014.

Black ethnic groups are more affected by STIs than other ethnic groups. Black Caribbeans had the highest rate of new STIs: 1,770 per 100,000. This is 3.5 times the rate seen in the white ethnic group in 2014.
PHE's messages:

- Prevention efforts should include ensuring open access to sexual health services and STI screening, and should focus on groups at highest risk.

- The National Chlamydia Screening Programme (NCSP) recommends that sexually active under-25-year-old men and women should be screened for chlamydia every year, and on change of sexual partner.

- MSM should have a full HIV and STI screen at least annually, or every three months if having condomless sex with new or casual partners.

- Black African men and women should have a regular full HIV and STI screen if having condomless sex with new or casual partners.

- Individuals can significantly reduce their risk of transmitting or being infected with an STI by:
  - Consistently and correctly using condoms until all partners have had a sexual health screen.
  - If in a high-risk group, getting screened regularly to ensure early identification and treatment as these infections are frequently asymptomatic.
  - Reducing the number of sexual partners and avoiding overlapping sexual relationships.
2 Charts, tables and maps

Figure 1: New STI diagnoses by public health centre (PHEC) of residence: England 2014. Data source: GUMCAD and CTAD

Figure 2: Diagnoses of the five main STIs: South East residents, 2010–2014. Data sources: GUMCAD, CTAD, NCSP and laboratory chlamydia data

Any increase in gonorrhoea diagnoses may be due to the increased use of highly sensitive nucleic acid amplification tests (NAATs) and additional screening of extra-genital sites in MSM.
Any decrease in genital wart diagnoses may be due to a moderately protective effect of HPV-16/18 vaccination.
Any increase in genital herpes diagnoses may be due to the use of more sensitive NAATs.
Increases or decreases may also reflect changes in testing practices.
Due to changes in 2012 to the surveillance of chlamydia, comparisons to previous years are not robust.
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Any increase in genital herpes diagnoses may be due to the use of more sensitive NAATs. Increases or decreases may also reflect changes in testing practices.

Due to changes in 2012 to the surveillance of chlamydia, comparisons to previous years are not robust.

Table 1: Percentage change in new STI diagnoses: South East residents. Data sources: GUMCAD, CTAD, NCSP and laboratory chlamydia data

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>2014</th>
<th>% change 2010-2014</th>
<th>% change 2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>New STIs</td>
<td>53,409</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>449</td>
<td>96%</td>
<td>55%</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>3,050</td>
<td>109%</td>
<td>23%</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>24,911</td>
<td>-</td>
<td>6%</td>
</tr>
<tr>
<td>Genital Herpes</td>
<td>4,381</td>
<td>-1%</td>
<td>-4%</td>
</tr>
<tr>
<td>Genital Warts</td>
<td>9,809</td>
<td>-12%</td>
<td>-9%</td>
</tr>
</tbody>
</table>

Please see notes for Figure 3.

Due to changes in 2012 to the surveillance of chlamydia diagnosed outside GUM, comparisons for chlamydia and for new STIs before and after 2012 are not robust and, therefore, have not been presented.
Figure 4: Rate of new STIs per 100,000 residents by age group in the South East, 2014. Data sources: GUMCAD and CTAD

Figure 5: Rates by ethnicity per 100,000 population of South East residents diagnosed with a new STI: 2014. Data sources: GUMCAD and CTAD

Table 2: Proportion of South East residents diagnosed with a new STI by ethnicity: 2014
Data sources: GUMCAD, CTAD

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Number</th>
<th>Percentage excluding unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>38,213</td>
<td>89%</td>
</tr>
<tr>
<td>Black Caribbean</td>
<td>561</td>
<td>1%</td>
</tr>
<tr>
<td>Black African</td>
<td>946</td>
<td>2%</td>
</tr>
<tr>
<td>Other BME</td>
<td>3,134</td>
<td>7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>10,555</td>
<td></td>
</tr>
</tbody>
</table>
Figure 6: Diagnoses of the five main STIs among MSM in GUM clinics: South East residents, 2010–2014. Data source: GUMCAD

GUMCAD started in 2009. Reporting of sexual orientation is less likely to be complete for earlier years, so rises seen may be partly artefactual.

Any increase in gonorrhoea diagnoses may be due to the increased use of highly sensitive nucleic acid amplification tests (NAATs) and additional screening of extra-genital sites in MSM.

Any decrease in genital wart diagnoses may be due to a moderately protective effect of HPV-16/18 vaccination.

Any increase in genital herpes diagnoses may be due to the use of more sensitive NAATs.

Any increase or decrease may reflect changes in testing.

Table 3: Percentage change in new STI diagnoses in men who have sex with men (MSM) diagnosed in GUM clinics: South East residents. Data sources: GUMCAD data only

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>2014</th>
<th>% change 2010-2014</th>
<th>% change 2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>New STIs</td>
<td>4,699</td>
<td>127%</td>
<td>18%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>361</td>
<td>244%</td>
<td>67%</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>1,622</td>
<td>342%</td>
<td>36%</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>1,086</td>
<td>162%</td>
<td>25%</td>
</tr>
<tr>
<td>Genital Herpes</td>
<td>164</td>
<td>74%</td>
<td>2%</td>
</tr>
<tr>
<td>Genital Warts</td>
<td>382</td>
<td>27%</td>
<td>-8%</td>
</tr>
</tbody>
</table>

Please see notes for Figure 6.
Figure 7a: Rate of new STI diagnoses per 100,000 population among South East residents by upper tier local authority of residence: 2014. Data sources: GUMCAD and CTAD

Figure 7b: Rate of new STI diagnoses (excluding chlamydia diagnoses in persons aged 15–24 years) per 100,000 population aged 15–64 years among South East residents by upper tier local authority of residence: 2014. Data sources: GUMCAD and CTAD
Figure 8: Chlamydia detection rate per 100,000 population aged 15–24 years in South East residents by upper tier local authority of residence: 2014. Data sources: GUMCAD and CTAD

Figure 9: Rate of gonorrhoea diagnoses per 100,000 population in South East residents by upper tier local authority of residence: 2014. Data source: GUMCAD
Figure 10: Map of new STI rates per 100,000 residents by upper tier local authority in the South East: 2014. Data source: GUMCAD & CTAD
3 Information on data sources


3.1 Genitourinary Medicine Clinic Activity Dataset (GUMCAD)

This disaggregate reporting system collects information about attendances and diagnoses at genitourinary (GUM) clinics. Information about the patient’s area of residence is collected along with demographic data and other variables. GUMCAD superseded the earlier KC60 system and can provide data from 2009 onwards. GUMCAD is the main source of data for this report. The data extract used was provided in May 2015.

Due to limits on how much personally identifiable information sexual health clinics are able to share, it is not possible to deduplicate between different clinics. There is a possibility that some patients may be counted more than once if they are diagnosed with the same infection (for infection specific analyses) or a new STI of any type (for new STI analyses) at different clinics during the same calendar year.

3.2 Chlamydia Testing Activity Dataset (CTAD)

The Chlamydia Testing Activity Dataset (CTAD) is a universal disaggregate dataset for the collection of data on all NHS and LA/NHS-commissioned chlamydia testing carried out in England. The CTAD dataset is comprised of all chlamydia (NAATs) tests for all ages (with the exception of conjunctival samples), from all venues and for all reasons. CTAD enables unified, comprehensive reporting of all chlamydia data, to effectively monitor the impact of the NCSP through estimation of the coverage of population screening, proportion of all tests that are positive and diagnosis rates. The data extract used was provided in May 2015.

3.3 New STIs

New STI diagnoses comprise diagnoses of the following: chancroid, LGV, donovanosis, chlamydia, gonorrhoea, genital herpes (first episode), HIV (acute and AIDS defining), *Molluscum contagiosum*, non-specific genital infection (NSGI), non-specific pelvic inflammatory disease (PID) and epididymitis, chlamydial PID and epididymitis (presented in chlamydia total), gonococcal PID and epididymitis (presented in gonorrhoea total), scabies, pediculosis pubis, syphilis (primary, secondary and early latent), trichomoniasis and genital warts (first episode).
3.4 Calculations

Confidence Intervals were calculated using Byar’s method http://www.erpho.org.uk/statistical_tools.aspx.

ONS mid-year population estimates for 2013 were used as a denominator for rates for 2014. ONS ceased producing estimates of population by ethnicity in 2011. Estimates for that year were used as a denominator for rates for 2014.
4 Further information

Please access the online ‘Sexual and Reproductive Health Profiles’ for further information: http://fingertips.phe.org.uk/profile-sexualhealth


Local authorities have access to LA sexual health epidemiology reports (LASERs) and the HIV and STI portal. They should contact josh.forde@phe.gov.uk or geraldine.leong@phe.gov.uk if they do not have access to this information.
5 About Field Epidemiology Services

The Field Epidemiology Service (FES) supports Public Health England centres and partner organisations through the application of epidemiological methods to inform public health action.

FES does this in two main ways, firstly by providing a flexible expert resource, available as and when needed to undertake epidemiological investigations for key health protection work and secondly through the expert analysis, interpretation and dissemination of surveillance information to PHE Centres, local health partners, service providers and commissioners of services.

Within the FES network, excellence and innovation is encouraged; we foster academic collaborations and take active part and lead in research, development and training.

You can contact your local FES team at fes.seal@phe.gov.uk

If you have any comments or feedback regarding this report or the FES service, please contact josh.forde@phe.gov.uk

6 Acknowledgements

We would like to thank the following:

- local sexual health clinics for supplying the GUM clinic data
- local laboratories for supplying the CTAD data
- PHE Centre for Infectious Disease Surveillance and Control (CIDSC) HIV and STI surveillance teams for collection, analysis and distribution of data