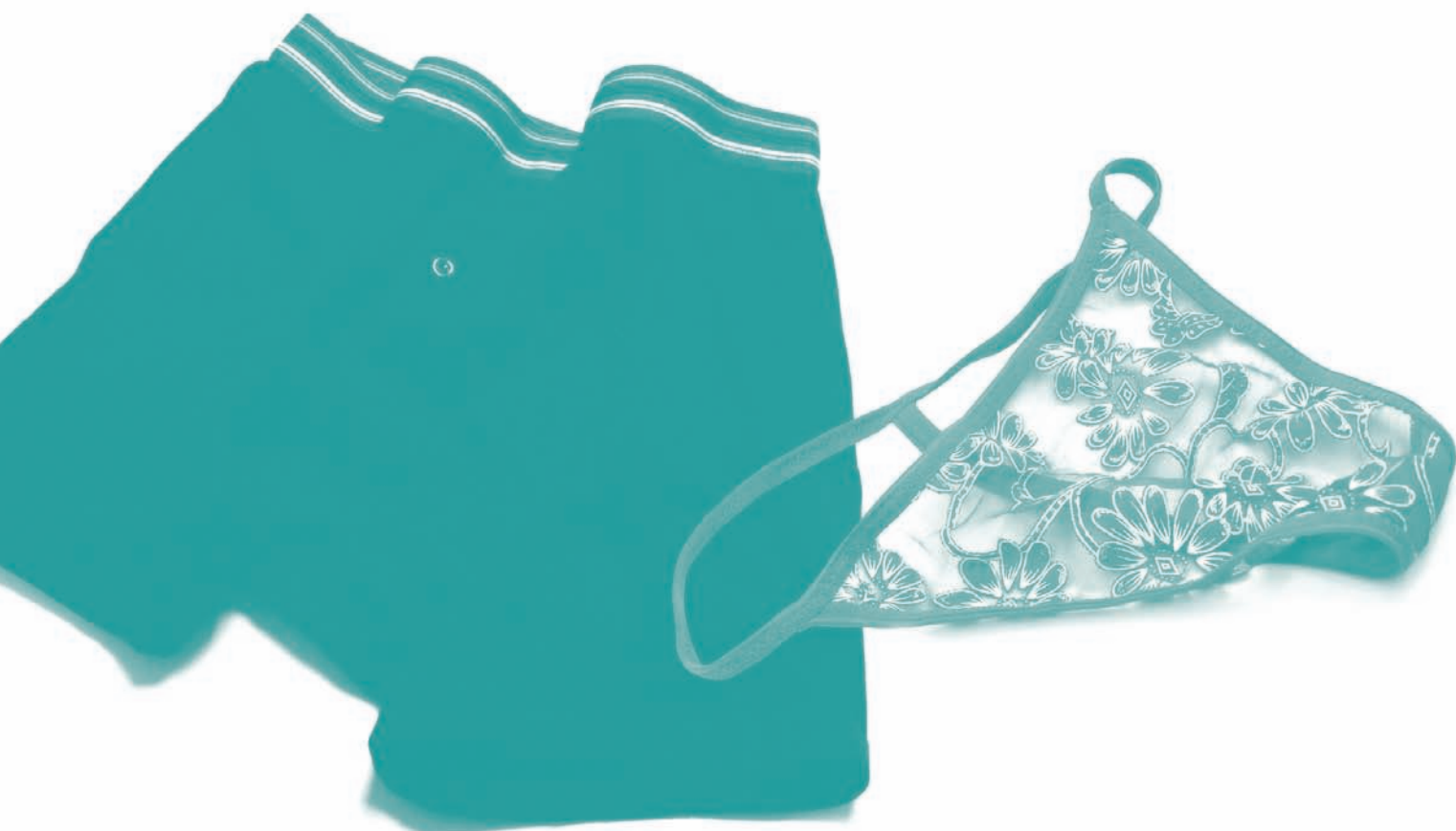


Enhanced Surveillance of  
**Sexually Transmitted Infections**  
in Cheshire and Merseyside  
Mid Year 2007

Suzy C. Hargreaves, Penny A. Cook and Mark A. Bellis



# Enhanced Surveillance of **Sexually Transmitted Infections** In Cheshire and Merseyside Mid Year 2007 Suzy C. Hargreaves, Penny A. Cook and Mark A. Bellis

© September 2008  
Published by the  
Sexual Health Team  
Centre for Public Health, Research Directorate  
Faculty of Health and Applied Social Sciences  
Liverpool John Moores University  
Castle House, North Street  
Liverpool, L3 2AY

Telephone: +44 (0)151 231 4448/4517  
Fax: +44 (0)151 231 4515  
Email: [sexualhealth@ljmu.ac.uk](mailto:sexualhealth@ljmu.ac.uk)  
Web: [www.cph.org.uk/sexualhealth](http://www.cph.org.uk/sexualhealth)

## **Acknowledgements**

A large number of people have been involved in the setting up of the Cheshire and Merseyside enhanced STI surveillance system and in the collection of the data. We would like to thank the clinics involved at Arrowe Park Hospital, the Countess of Chester Hospital, Halton Hospital, Leighton Hospital, Macclesfield GUM, Royal Liverpool University Hospital, St Helens Hospital, Southport and Formby District General Hospital, Warrington Hospital and the Clinical Microbiology and HPA Collaborating Laboratory, University Hospital Aintree. Special thanks go to Harry Mallinson, Karen McNulty, Andrea Dodd, Colm O'Mahony, Keith Greaves, Moira Grobicki, Deborah Ritchie, Elaine Priest, Jeannie Attard, Rob Wilson, Simon Ainscough, Alison Fossard, Mike Abbott and Gillian Appleton.

Special thanks are given to Kazem Khundakar, database manager at the Centre for Public Health for technical expertise for initial data extraction. We also thank Jennifer Downing for input in the establishment of the system, and we acknowledge the valuable work of Matthew Ashton and Pauline Rimmer in carrying out the pilot study on which this is based. Staff in the North West Public Health Observatory provided geographical analysis expertise and tools, and thanks are particularly due to Sacha Wyke, Neil Potter and Karen Tocque. Thanks are also due to staff at the Centre for Public Health including Hannah Madden, Leighton Jones, Lee Tisdall, Corinne Harkins, Penelope Phillips-Howard, Sharon Schofield, Diana Leighton and Jim McVeigh.

We would like to thank all members of the steering group: Julie Kelly, Richard Jones and Susie Gardiner (Liverpool PCT), Deb Mandal (Warrington Hospital), Simon Henning (Cheshire and Merseyside Sexual Health Network Coordinator), Harry Mallinson (Clinical Microbiology and HPA Collaborating Laboratory, University Hospital Aintree), Jeannie Attard (Royal Liverpool University Hospital) and Mick Trafford (Central and Eastern Cheshire PCT) as well as Lorraine Lighton (Regional Sexual Health Lead, Health Protection Agency North West).

	<b>Page</b>
<b>Executive summary</b>	1
<b>Background</b>	3
<b>Aims</b>	3
<b>Methodology</b>	3
<b>Data analysis</b>	3
<b>Results</b>	4
<b>Conclusion</b>	6
<b>References</b>	6
<b>List of abbreviations</b>	6
<b>Table 1</b>	7
Number of key five infections diagnosed in GUM, 2006 and January to June 2007	
<b>Table 2</b>	8
Diagnoses of key infections in Cheshire and Merseyside as a proportion of all attendances, GUM attendees, January-June 2007	
<b>Table 3</b>	12
Chlamydia diagnoses in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007	
<b>Table 4</b>	14
Gonorrhoea diagnoses in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007	
<b>Table 5</b>	16
Diagnoses of key infections by GUM clinic and ethnicity, January to June 2007	
<b>Table 6</b>	18
Number of individuals with two or more infections on the same date by sex and age group, all clinics, January to June 2007	
<b>Table 7</b>	19
Number and total period prevalence (per 100,000 population) of chlamydia diagnosed in GUM and community settings by sex for Cheshire and Merseyside PCTs, January to June 2007	
<b>Table 8</b>	20
Number and total period prevalence (per 100,000 population) of chlamydia diagnoses in GUM and community settings by age group for Cheshire and Merseyside PCTs, January to June 2007	
<b>Table 9</b>	21
Period prevalence (per 100,000 population) of key infections diagnosed in GUM clinics by sex for Cheshire and Merseyside PCT of residence, January to June 2007	
<b>Table 10</b>	22
Period prevalence (per 100,000 population) of key infections diagnosed in GUM clinics by age group for Cheshire and Merseyside PCT of residence, January to June 2007	
<b>Table 11</b>	23
Number of diagnoses of key infections by student status, age and sex for all GUM clinics, January- June 2007	
<b>Table 12</b>	24
Number of key infections by PCT of residence by clinic, January-June 2007	
<b>Figure 1</b>	25
Period prevalence of key five infections by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007	
<b>Figure 2</b>	25
Period prevalence of gonorrhoea by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007	
<b>Figure 3</b>	26
Period prevalence of chlamydia by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007	

<b>Figure 4</b>	Period prevalence of genital herpes by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007	26
<b>Figure 5</b>	Period prevalence of genital warts by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007	27
<b>Figure 6</b>	Period prevalence of key five infections by P <sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007	27
<b>Figure 7</b>	Period prevalence of gonorrhoea by P <sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007	28
<b>Figure 8</b>	Period prevalence of chlamydia by P <sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007	28
<b>Figure 9</b>	Period prevalence of genital herpes by P <sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007	29
<b>Figure 10</b>	Period prevalence of genital warts by P <sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007	29
<b>Appendix A</b>	Description of the P <sup>2</sup> People and Places Categories	30
<b>Appendix B</b>	Number of diagnoses at each clinic by month	32

## Executive summary

Current surveillance of sexually transmitted infections (STIs) is based on quarterly aggregated data from genito-urinary medicine (GUM) clinics (known as the KC60 reporting system), and lacks the information needed for targeted treatment and prevention. A system to gather enhanced data on STIs in Cheshire and Merseyside was established in 2006 following a successful pilot scheme in 2005. The work was commissioned by the Cheshire and Merseyside primary care trusts (PCTs) to use to assess local epidemiology and to measure performance against targets in order to improve monitoring, planning and interventions for both sexual health promotion and treatment and care services.

This report contains data from the nine clinics in Cheshire and Merseyside: Arrowe Park Hospital (APH), Countess of Chester Hospital (CHR), Halton Hospital (HAL), Leighton Hospital (LEI), Macclesfield GUM (MAC), Royal Liverpool University Hospital (RLG), St Helens Hospital (SHH), Southport and Formby District General Hospital (SPG) and Warrington Hospital (WAR). This gave adequate coverage to provide prevalence estimates for all the Cheshire and Merseyside PCTs: Central and Eastern Cheshire, Halton and St Helens, Knowsley, Liverpool, Sefton, Warrington, Western Cheshire and Wirral. Data on chlamydia screening results were also received from Clinical Microbiology and HPA Collaborating Laboratory, University Hospital Aintree to give a more complete picture of the prevalence of chlamydia and gonorrhoea across Cheshire and Merseyside. For this mid year 2007 report, the data items requested from each clinic were: GUM identifier, date of diagnosis, age at diagnosis, sex, diagnosis (KC60 category), geographical marker (postcode of residence), whether an infection was homosexually acquired, ethnicity and student status. Individual records were matched to lower super output area (LSOA, a small geographical area) for the purpose of linking to population statistics, deprivation indices and population segmentation tools.

### Key findings

- Population prevalence of all the key five infections diagnosed in GUM (primary and secondary syphilis, uncomplicated gonorrhoea, uncomplicated chlamydia, genital herpes and genital warts) was greatest in Liverpool (370 per 100,000 population). For each PCT, chlamydia was the most prevalent infection, with the highest prevalence in Warrington PCT (189 per 100,000 population), followed by Halton and St Helens PCT (173 per 100,000).
- Prevalence of the key five infections diagnosed in GUM was highest in the 20-24 year age group for all PCTs except Warrington PCT and Halton and St Helens PCT where the age profile was younger.
- For most of the Cheshire and Merseyside PCTs, the number of diagnoses of chlamydia in the community outnumbered those diagnosed in GUM. Liverpool PCT had the highest total prevalence (402 per 100,000 population) and Central and Eastern Cheshire PCT had the lowest total prevalence (291 per 100,000 population) of infections diagnosed (community and GUM). All PCTs, with the exception of Wirral, showed the same gender pattern, with a greater number of males diagnosed in GUM than in the community and a greater number of females diagnosed in the community than in GUM.
- For all PCTs, the highest prevalence of chlamydia (diagnosed in GUM and in the community) was in those aged 15 to 19 years, ranging from 1,990 per 100,000 population in Warrington PCT to 1,258 per 100,000 population in Knowsley. Amongst 20-24 year olds, Western Cheshire had the highest prevalence (1,522 per 100,000 population). Overall, for those aged 10-64 years, Liverpool PCT had the highest prevalence (400 per 100,000 population) and Central and Eastern Cheshire had the lowest (290 per 100,000 population).
- Diagnoses of gonorrhoea had the clearest relationship of all the key five infections with deprivation where prevalence was nearly three and a half times higher in the most deprived national quintile than in the least deprived. This was confirmed by analysis using the P<sup>2</sup> People and Places population segmentation tool, which showed greater prevalence in the most deprived population groups. For example, those in the 'urban challenge' category were ten times more likely than those in 'mature oaks' or 'blossoming families' to have had a diagnosis of gonorrhoea.
- Numbers of the key five infections were expressed as a proportion of the total attendances. Nearly a quarter (22%) of all attendances by males and 20% amongst females resulted in a diagnosis of one or more of the key five infections, a very similar proportion to 2006.
- For both males and females, the largest proportion of chlamydia diagnoses amongst GUM clinic attendees, were amongst those aged 18-24 years (59% and 64%, respectively). In this age group, rates amongst male attendees ranged from 11% (Liverpool PCT) to 17% in Warrington and Central and Eastern Cheshire PCTs, whilst rates in female attendees were similar with 9% in Liverpool PCT and 16% in Warrington PCT.
- Amongst males, nearly half (49%) of gonorrhoea diagnoses were in those aged 18-24 years and almost half (48%) in those aged 25 or over. Amongst females there were far more diagnoses amongst those aged 18-24 years (59%) than those aged 25 years or over (18%).
- For most clinics involved in the system, the majority of infections diagnosed were amongst individuals of white ethnicity, as high as 98% at HAL and 96% at APH and CHR.
- In total, 7% of infections were classed as concurrent (i.e. individuals diagnosed with two or more of the key infections on the same date).
- For each clinic the majority of the key five infection diagnoses were amongst those living in the host PCT. RLG had the smallest proportion of infections diagnosed amongst individuals living in its host PCT (60%). Over a quarter (29%) of infections diagnosed at CHR were amongst those living outside the region, which is due to the proximity of North Wales. Similarly only 44% of infections at SPG were amongst those resident in Central Lancashire PCT.

## Conclusion

The enhanced STI surveillance scheme for Cheshire and Merseyside has resulted in an information source with the potential for detailed analysis in a way not previously possible using the KC60 reporting scheme, and provides a report which has been tailored to local requirements and is directly relevant and useful for planning and intervention. This enhanced surveillance system is also an opportunity to carry out groundwork for the national residence based STI surveillance scheme, which is currently in preparation to replace the KC60 reporting across the country. In addition, data by lower super output area (LSOA) are available to primary care trusts for detailed local planning (transfer of these small area data is subject to appropriate safeguards to ensure confidentiality, as specified in data transfer protocols with each PCT). Please contact the report authors (see back cover of report) for further details, or for any feedback on the content of this report.

## Background

Rising concern about sexual risk behaviour and increasing rates of sexually transmitted infections (STIs) in the population have led to sexual health being established as a priority area by the Department of Health<sup>1</sup>. There are now a series of targets relating to sexual health for primary care trusts (PCTs) and strategic health authorities (SHAs). For example, public sector agreement (PSA) target area PSA11C1 relates to the number of new diagnoses of gonorrhoea in a calendar year in each PCT<sup>2</sup> and *Every Child Matters* requires knowledge of STI rates by local authority area for those aged under 16 years<sup>3</sup>. Moreover, area of residence is needed to implement payment by results schemes<sup>4</sup>. In addition, the *NHS in England: the operating framework for 2006/07*<sup>5</sup> identifies sexual health as one of the top six priorities for action as part of existing three year plans. However, major limitations in the current surveillance of STIs (known as KC60 reporting) mean that these data are not available and the recent report from the Healthcare Commission, *Performing better? A focus on sexual health services in England*, calls for better data on sexual health<sup>6</sup>. The KC60 system collects aggregated data with limited epidemiological information and no geographical marker, making it of restricted use for timely local monitoring, planning, intervention and control purposes. KC60 data also lacks denominator data<sup>7</sup> to calculate infections as a proportion of total attendances and/or as a proportion of those tested in the case of chlamydia and gonorrhoea.

Following a pilot scheme in 2005<sup>8</sup>, a report was produced using 2006 data from six clinics across Cheshire and Merseyside<sup>9</sup>. Data quality was audited and compared with data from the KC60 system. In 2006, the enhanced STI surveillance system collected 1.2% more diagnoses of the key five infections of primary and secondary syphilis, uncomplicated gonorrhoea, uncomplicated chlamydia, genital herpes and genital warts than the KC60 system.

This report incorporates further clinics in the next phase of the rollout of the system in order to provide data to inform planning and funding of sexual health services. It also provides extra analysis of STI epidemiology in Cheshire and Merseyside, for example by revealing the relationship between deprivation and patterns of STIs.

## Aims

The aim of this report is to present data for January to June 2007 from nine clinics across Cheshire and Merseyside and use these data to provide information on the number of cases and prevalence. It also combines clinic data with community chlamydia screening data to provide estimates of the total prevalence of chlamydia.

## Methodology

Contact was established with and data obtained from all GUM clinics in Cheshire and Merseyside: Arrowe Park Hospital (APH), Countess of Chester Hospital (CHR), Halton Hospital (HAL), Leighton Hospital (LEI), Macclesfield GUM (MAC), Royal Liverpool University Hospital (RLG), St Helens Hospital (SHH), Southport and Formby District General Hospital (SPG) and Warrington Hospital (WAR).

Data on chlamydia screening results were also collected from the Clinical Microbiology and HPA Collaborating Laboratory, University Hospital Aintree to give a more complete picture of the prevalence of chlamydia and gonorrhoea across Cheshire and Merseyside. It has been recognised that dual testing of chlamydia and gonorrhoea in the community influences the number of gonorrhoea cases found in GUM<sup>10</sup>. Clinics were not asked to collect additional data, but rather to take advantage of individual patient episode data that are already collected and stored electronically. As per the 2006 system these were: GUM identifier (unique ID); date of diagnosis; age at diagnosis; sex; diagnosis (KC60 category); geographical marker (postcode/LSOA of residence); homosexually acquired (y/n); ethnicity; and student status (y/n). Concurrent infections and activity data were calculated. All diagnoses and activity information from the clinics were collected, but this report focuses on diagnoses with a KC60 diagnosis code of either A1 or A2 (primary and secondary syphilis); B1 or B2 (uncomplicated gonorrhoea); C4A or C4C (uncomplicated chlamydia); C10A (genital herpes); or C11A (genital warts).

Prevalence was calculated on the population aged 10-64 years. The total prevalence for age groups does not include diagnoses made out of the 10-64 age range.

## Data analysis

The extracted data for each clinic, year and condition were configured to be consistent across the different sources and recoded into a standardised format. Lower super output area (LSOA) and then PCT of residence was assigned using the patient's postcode and a look-up table supplied by the North West Public Health Observatory (NWPHO). All postcodes were removed once an LSOA of residence was allocated. Partial postcodes were mapped to a particular PCT if greater than 90% of individual postcodes within a partial postcode area mapped to one PCT. This method provides a good degree of accuracy when all but the last digit of the postcode is available with 97% of possible partial postcodes matching to a PCT. However, if only a first part postcode (e.g. M12) is available, only 87% match to a PCT, and some first part postcodes do not match to a single region. Partial postcodes that could not be mapped to PCT were allocated to a county if possible, or coded as unknown. A clinic ID number was extracted in order to calculate repeat attendances and co-

infections, but no other patient identifiable data were collected (for example patient's name, full address or date of birth). Analyses are presented by clinic and PCT of residence. Datasets were created to look at diagnosis level data for the general analysis and individual level to calculate concurrent infections. The Index of Multiple Deprivation (IMD) 2004 was assigned on the basis of LSOA of residence. The prevalence for each infection was calculated using LSOA-based population data from the Office of National Statistics. Each LSOA was categorised according to its rank IMD, alongside all English LSOAs and divided into five equal categories (quintiles). Data were also matched to a population segmentation tool, P<sup>2</sup> People and Places which uses 2001 census data, Target Group Index data (TGI, which gives extra descriptive information) and geography to classify people by where they live. The system is categorised in a hierarchical structure and ranked in order of deprivation where 'Mature Oaks' are the least deprived and 'Urban Challenge' the most deprived. A full list of the P2 People and Places categories and their definitions can be found in appendix A.

The chlamydia screening data collected from the Clinical Microbiology and HPA Collaborating Laboratory, University Hospital Aintree were analysed using the assumption that once the records known to have originated from GUM clinics were removed from the laboratory data the remaining cases were diagnosed and treated in the community. For this report, prevalence of chlamydia diagnosed at GUM and in the community were calculated by sex and age group. The majority of the tables in this report contain GUM data only.

In order to calculate attendances used in tables 2 to 4, data were extracted using individual identifiers created from GUM ID and location code, by single date of diagnosis and included all KC60 codes for new and re-registered patients. Therefore, the attendances were the number of times an individual 'walked through the door' rather than overall workload (in other words, if patients received several services on the same date they were only counted once).

## Results

**Table 1** shows the number of diagnoses of syphilis, gonorrhoea, chlamydia, genital herpes and genital warts between January and June 2007 and for 2006. There were three additional clinics for 2007: Halton (HAL), Macclesfield (MAC) and Warrington (WAR), so the whole of Cheshire and Merseyside is covered. As in 2006, chlamydia was the most commonly diagnosed of the five infections, followed by genital warts. These chlamydia diagnoses vary from clinic to clinic, with 798 cases at RLG, compared with 100 cases at HAL, reflecting the overall number of cases of the key five infections.

**Table 2** displays the numbers of the key five infections by age and sex for each clinic. The figures are also expressed as a proportion of the total attendances. Nearly a quarter (22%) of all attendances amongst males and 20% amongst females resulted in a diagnosis of one or more of the key five infections, a very similar proportion to 2006. Amongst males, this proportion varied from 17% at APH to 26% at WAR and amongst females varied from 16% at APH to 27% at SHH and 25% at WAR.

**Table 3** presents chlamydia data by PCT of residence, age group and sex. Data are displayed as numbers and percentages, as well as being expressed as a rate per attendance. For both males and females, the largest proportion of diagnoses were amongst those aged 18 to 24 years (59% and 64% respectively). In the same age group, rates amongst male attendees ranged from 11% in Liverpool to 17% in Warrington and Central and Eastern Cheshire, whilst rates in female attendees ranged from 9% in Liverpool to 16% in Warrington and 17% in Halton and St Helens. Thirty-eight percent of males and 20% of females with a chlamydia diagnosis were aged over 25 years.

**Table 4** shows gonorrhoea data by PCT of residence, age and sex. As for table 3, data are displayed as numbers and percentages, as well as being expressed as a rate per attendance. Data from 2006 reflected national data on gonorrhoea with the age distribution older for males than females. For this dataset, amongst males, a similar proportion of diagnoses were in those aged 18-24 years (49%) and those aged 25 and over (48%). Amongst females there were far more aged 18-24 years (59%) than those aged 25 years or over (18%). Rates of gonorrhoea in both male and female attendees were low for all the Cheshire and Merseyside PCTs, not varying much between one and two percent.

**Table 5** displays key infections by clinic and ethnicity. For most clinics, the majority of infections diagnosed were amongst individuals of white ethnicity, with 98% at HAL and 96% at APH and CHR. MAC and SHH had a large proportion of infections diagnosed where ethnicity was unknown (57% and 44% respectively).

**Table 6** shows the number of individuals diagnosed with two or more of the key infections on the same date by sex and age group. The highest rate of concurrent infection amongst males was in those aged 18-24 years (10%), whilst amongst females it was in those aged under 16 years (12%). However, the actual number of females aged under 16 years with concurrent infections was low (seven compared with 136 males aged 18-24 years).

**Table 7** displays the prevalence of chlamydia when community chlamydia data (from the National Chlamydia Screening Programme) were included in the analysis. Prevalence of chlamydia increased in each PCT when community data were included. Therefore, inclusion of the community chlamydia screening data creates a fuller picture of chlamydia infection within the population. Note that the assumption is that those tested in the community were not also seen in a GUM clinic (the community data and the GUM data do not have the same identifiers, therefore it is not possible to de-duplicate between datasets). For all PCTs except Halton and St Helens PCT and Warrington PCT where numbers of diagnoses in the community and in GUM were very similar, the number of diagnoses in the community outnumbered those diagnosed in GUM. Liverpool PCT had the highest total prevalence (402 per 100,000 population), followed by Warrington PCT and



Western Cheshire PCT (both 361 per 100,000 population). Central and Eastern Cheshire PCT had the lowest total prevalence at 292 per 100,000 population. With the exception of Wirral PCT where there were more males diagnosed in the community than in GUM, all the PCTs showed a similar gender pattern with a greater number of males being diagnosed in GUM than in the community and a greater number of females being diagnosed in the community than in GUM.

**Table 8** shows the prevalence of community and GUM chlamydia data for each PCT by age group for those aged 10-64 years. For all PCTs, the highest prevalence of chlamydia was in those aged between 15 and 19 years, ranging from 1,990 per 100,000 in Warrington PCT to 1,258 per 100,000 in Knowsley. Amongst 20-24 year olds, Western Cheshire had the highest prevalence (1,522 per 100,000 population). Overall, for those aged 10-64 years, Liverpool PCT had the highest prevalence (400 per 100,000 population) with Central and Eastern Cheshire with the lowest (290 per 100,000 population).

**Table 9** shows the prevalence of the key five infections by sex of those aged 10-64 years by all the Cheshire and Merseyside PCTs. The greatest total prevalence of all five infections per 100,000 of the population was in Liverpool PCT (370 per 100,000), followed by 357 per 100,000 in Warrington PCT. Without exception chlamydia, followed by genital warts, are the most prevalent of the key five infections. For all PCTs, with the exception of Halton and St Helens PCT, prevalence of the key five infections diagnosed in GUM clinics is higher amongst males than females.

**Table 10** displays the prevalence of syphilis, gonorrhoea, chlamydia, genital herpes and genital warts by age group (aged 10-64 years). For all PCTs except Warrington and Halton and St Helens, prevalence of the key infections diagnosed in GUM was highest in the 20-24 year age category. Western Cheshire had the highest prevalence in this age group (1,296 per 100,000 population). However, Warrington PCT and Halton and St Helens PCT had a prevalence of 1,711 and 1,353 (respectively) per 100,000 population in the 15-19 age group.

**Table 11** shows the key five infections broken down by age group and sex amongst those classed as students and non-students. Over one thousand (1,089; 18%) infections were amongst those who were classed as students. The inclusion of data on students was raised by the steering group. Cheshire and Merseyside services may be heavily used by the transient student population. However, clinic systems do not distinguish between transient students and resident student population. Furthermore, 31 infections were amongst those whose occupation was classed as student but who were aged under 18 years at diagnosis. This suggests caution needs to be taken in interpreting the results due to differing definitions of student, which could mean school student or college student and does not necessarily refer to transient student populations. Like 2006, females were more likely to be categorised as students with 26% being regarded as students compared to 11% of males.

**Table 12** shows the number of infections by PCT of residence for each clinic. For each clinic, the majority of infections were amongst those living in the host PCT, for example, 82% of those with infections diagnosed at LEI resided in Central and Eastern Cheshire PCT and 82% of those with infections diagnosed at APH lived within Wirral PCT. RLG had the smallest proportion of infections diagnosed amongst individuals living in its host PCT (60%) with 13% living in Sefton and 10% living in Knowsley PCTs. Twenty-nine percent of infections diagnosed at CHR were amongst those classed as living outside the region, which is most likely due to the proximity of North Wales. Similarly, 44% of infections at SPG were amongst those resident in Central Lancashire PCT.

**Figures 1-5** show prevalence of the total key five infections, gonorrhoea, chlamydia, genital herpes and genital warts diagnosed in GUM by index of multiple deprivation (IMD) (2004) national quintiles. The IMD is categorised into quintiles on the basis of deprivation relative to the rest of England. The infection with the clearest relationship with IMD was gonorrhoea, where prevalence was nearly three and a half times greater in the most deprived quintile than in the least deprived.

**Figures 6-10** display the prevalence of the total key five infections, gonorrhoea, chlamydia, genital herpes and genital warts diagnosed in GUM by the population segmentation tool, P<sup>2</sup> People and Places (see methodology for explanation of P<sup>2</sup> People and Places). Figure 6 illustrates that there are three categories in particular that stand out as having higher prevalence of the key five STIs. These are 'qualified metropolitans', 'new starters' and 'multicultural centres'. The peaks in the 'qualified metropolitans' and 'multicultural centres' have large confidence intervals which means that the sample sizes are small and the prevalence estimate is less reliable. However, the peak amongst 'new starters' has smaller confidence intervals showing a more accurate peak in prevalence. 'New starters' are mainly young adults aged between 16 and 34 years and include students and young working adults who are interested in politics and read broadsheet newspapers. Charts by individual infections have smaller sample sizes so some confidence intervals are too wide from which to draw any inference. However, the clear relationship between deprivation (increasing from right to left) and gonorrhoea is apparent with those in the 'urban challenge' category ten times more likely than those in 'mature oaks' or 'blossoming families' to have had a diagnosis of gonorrhoea (figure 7). For chlamydia, the lower than expected prevalence in the deprived groups of 'urban challenge' and 'disadvantaged households' suggest that these groups are less likely to access GUM and screening activity could focus on these.

**Figures B1-B11** (appendix B) illustrate monthly diagnoses for each clinic.

## Conclusion

The enhanced STI surveillance scheme for Cheshire and Merseyside has resulted in an information source with the potential for detailed analysis in a way not previously possible using the KC60 reporting scheme, and provides a report which has been tailored to local requirements and is directly relevant and useful for planning and intervention. This enhanced surveillance system is also an opportunity to carry out groundwork for the national residence based STI surveillance scheme, which is currently in preparation to replace the KC60 reporting across the country. In addition, data by lower super output area (LSOA) are available to primary care trusts for detailed local planning (transfer of these small area data is subject to appropriate safeguards to ensure confidentiality, as specified in data transfer protocols with each PCT). Please contact the report authors (see back cover of report) for further details, or for any feedback on the content of this report.

## References

- <sup>1</sup> Department of Health (2004) Choosing Health: making healthy choices easier, London.
- <sup>2</sup> HM Government (2005) Government response to the Health Select Committee's Third Report of Session 2004-2005 on New Developments in Sexual Health and HIV/AIDS Policy.
- <sup>3</sup> Department of Health (2004) Every Child Matters: change for children, London.
- <sup>4</sup> Payment by Results (PbR)  
<http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/NHSFinancialReforms/fs/en>.
- <sup>5</sup> Department of Health (2006) The NHS in England: the operating framework for 2006/07, London.
- <sup>6</sup> Healthcare Commission (2007) Performing better? A focus on sexual health services in England. Commission for Healthcare Audit and Inspection. <http://www.healthcarecommission.org.uk>.
- <sup>7</sup> Slater W, Sadler K, Cassell JA, Horner P, Low N (2007) What can be gained from comprehensive disaggregate surveillance? The Avon Surveillance System for Sexually Transmitted Infections. *Sexually Transmitted Infections* 2007;83:411-415.
- <sup>8</sup> Ashton M, Rimmer P, Cook PA, Quigley C, Syed Q, Bellis MA (2005) Enhanced surveillance of sexually transmitted infections in the North West of England: a report on the STI pilot surveillance system. Centre for Public Health, Liverpool John Moores University.
- <sup>9</sup> Hargreaves SC, Cook PA, Bellis MA (2007) Enhanced surveillance of sexually transmitted infections in Cheshire and Merseyside 2006. Centre for Public Health, Liverpool John Moores University.
- <sup>10</sup> Lavelle SJ, Mallinson H, Henning SJ, Webb AMC, Hughes S, Abbott M (2007) Impact on gonorrhoea case reports through concomitant/dual testing in a chlamydia screening population in Liverpool. *Sexually Transmitted Infections* 2007; 83:593-594.

## List of abbreviations

<b>APH</b>	Arrowe Park Hospital	<b>SHH</b>	St Helens Hospital
<b>CHR</b>	Countess of Chester Hospital	<b>SPG</b>	Southport and Formby District General Hospital
<b>HAL</b>	Halton Hospital	<b>WAR</b>	Warrington Hospital
<b>LEI</b>	Leighton Hospital	<b>GUM</b>	Genito-urinary medicine
<b>MAC</b>	Macclesfield GUM, Assura Health and Wellbeing Centre	<b>STI</b>	Sexually transmitted infection
<b>RLG</b>	Royal Liverpool University Hospital	<b>PCT</b>	Primary care trust

**Table 1:** Number of key five infections diagnosed in GUM, 2006, January to June 2007

	Infection	2006	Jan-Jun 07
APH	Primary and secondary syphilis	11	2
	Uncomplicated gonorrhoea	102	27
	Uncomplicated chlamydia	559	160
	Genital herpes	77	29
	Genital warts	515	118
CHR	Primary and secondary syphilis	12	10
	Uncomplicated gonorrhoea	76	35
	Uncomplicated chlamydia	623	281
	Genital herpes	174	91
	Genital warts	448	271
HAL	Primary and secondary syphilis		1
	Uncomplicated gonorrhoea		6
	Uncomplicated chlamydia		100
	Genital herpes		8
	Genital warts		91
LEI	Primary and secondary syphilis	4	
	Uncomplicated gonorrhoea	64	29
	Uncomplicated chlamydia	411	270
	Genital herpes	91	51
	Genital warts	310	213
MAC	Primary and secondary syphilis		2
	Uncomplicated gonorrhoea		23
	Uncomplicated chlamydia		152
	Genital herpes		38
	Genital warts		115
RLG	Primary and secondary syphilis	37	12
	Uncomplicated gonorrhoea	364	183
	Uncomplicated chlamydia	1538	798
	Genital herpes	324	214
	Genital warts	1530	788
SHH	Primary and secondary syphilis	11	1
	Uncomplicated gonorrhoea	78	51
	Uncomplicated chlamydia	504	300
	Genital herpes	71	46
	Genital warts	294	192
SPG*	Primary and secondary syphilis	12	4
	Uncomplicated gonorrhoea	53	29
	Uncomplicated chlamydia	566	307
	Genital herpes	99	54
	Genital warts	339	193
WAR	Primary and secondary syphilis		2
	Uncomplicated gonorrhoea		37
	Uncomplicated chlamydia		329
	Genital herpes		29
	Genital warts		211
<b>Total</b>		<b>9297</b>	<b>5903</b>

\*Includes data from Ormskirk and District General Hospital.  
Data for Halton, Macclesfield and Warrington were not collected for 2006.

**Table 2:** Diagnoses of key infections amongst males in Cheshire and Merseyside as a proportion of all attendances\*, GUM attendees, January-June 2007

Infection	Age group - male										Total male	% of attendances- male
	Under 16	% of attendances- under 16	16-17	% of attendances- 16-17	18-24	% of attendances- 18-24	25+	% of attendances- 25+				
APH	Primary and secondary syphilis		2.6	1	2.6	8	2.0	1	0.2	2	0.2	
	Uncomplicated gonorrhoea		2.6	1	2.6	53	13.0	31	4.9	85	7.8	
	Uncomplicated chlamydia		2.6	1	2.6	3	0.7	10	1.6	13	1.2	
	Genital herpes		7.7	3	7.7	35	8.6	31	4.9	69	6.3	
<b>APH total attendances</b>	<b>10</b>		<b>39</b>		<b>409</b>		<b>637</b>		<b>1095</b>			
CHR	Primary and secondary syphilis		3.6	1	3.6	5	0.9	5	0.4	10	0.5	
	Uncomplicated gonorrhoea		7.1	2	7.1	8	1.4	14	1.2	23	1.3	
	Uncomplicated chlamydia	1	25.0	2	7.1	79	13.6	72	5.9	154	8.4	
	Genital herpes		3.6	1	3.6	8	1.4	21	1.7	29	1.6	
Genital warts			28		58	10.0	83	6.8	142	7.8		
<b>CHR total attendances</b>	<b>4</b>		<b>28</b>		<b>582</b>		<b>1212</b>		<b>1826</b>			
HAL	Primary and secondary syphilis	1	20.0	1	3.8	1	0.5	3	1.4	1	0.2	
	Uncomplicated gonorrhoea		11.5	3	11.5	29	13.6	15	7.2	47	10.4	
	Uncomplicated chlamydia		7.7	2	7.7	1	0.5	20	9.7	1	0.2	
	Genital herpes			26		24	11.3	20	9.7	46	10.2	
<b>HAL total attendances</b>	<b>5</b>		<b>26</b>		<b>213</b>		<b>207</b>		<b>451</b>			
LEI	Primary and secondary syphilis		11.8	4	11.8	11	2.3	11	1.9	22	2.0	
	Uncomplicated gonorrhoea		5.9	2	5.9	83	17.1	49	8.6	136	12.4	
	Uncomplicated chlamydia		11.8	4	11.8	4	0.8	12	2.1	18	1.6	
	Genital herpes		13.4	4	11.8	65	13.4	54	9.5	123	11.2	
Genital warts			34		484		570		1094			
<b>LEI total attendances</b>	<b>6</b>		<b>34</b>		<b>484</b>		<b>570</b>		<b>1094</b>			
MAC	Primary and secondary syphilis		2.1	6	2.1	6	2.1	1	0.2	1	0.1	
	Uncomplicated gonorrhoea		14.0	4	14.8	40	14.0	29	6.5	73	9.6	
	Uncomplicated chlamydia		3.7	1	3.7	4	1.4	14	3.1	19	2.5	
	Genital herpes		3.7	1	3.7	29	10.1	28	6.3	58	7.6	
Genital warts			27		286		446		763			
<b>MAC total attendances</b>	<b>4</b>		<b>27</b>		<b>286</b>		<b>446</b>		<b>763</b>			

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

Continued on next page

**Table 2 continued:** Diagnoses of key infections amongst males in Cheshire and Merseyside as a proportion of all attendances\*, GUM attendees, January-June 2007

Infection	Age group – male								Total male	% of attendances- male	
	Under 16	% of attendances- under 16	16-17	% of attendances- 16-17	18-24	% of attendances- 18-24	25+	% of attendances- 25+			
<b>RLG</b>	Primary and secondary syphilis				2	0.1	10	0.4	12	0.2	
	Uncomplicated gonorrhoea			3	2.8	58	2.7	50	1.8	111	2.2
	Uncomplicated chlamydia			7	6.5	239	11.0	180	6.5	426	8.4
	Genital herpes			1	0.9	23	1.1	39	1.4	63	1.2
Genital warts			4	3.7	184	8.5	204	7.3	392	7.7	
<b>RLG total attendances</b>	<b>8</b>		<b>107</b>		<b>2170</b>		<b>2781</b>		<b>5066</b>		
<b>SHH</b>	Primary and secondary syphilis						1	0.2	1	0.1	
	Uncomplicated gonorrhoea			1	1.8	14	2.8	17	2.6	32	2.6
	Uncomplicated chlamydia	1	9.1	12	21.8	84	16.7	43	6.6	140	11.5
	Genital herpes	2	18.2			6	1.2	13	2.0	21	1.7
Genital warts			3	5.5	47	9.4	52	8.0	102	8.4	
<b>SHH total attendances</b>	<b>11</b>		<b>55</b>		<b>502</b>		<b>651</b>		<b>1219</b>		
<b>SPG**</b>	Primary and secondary syphilis						4	0.6	4	0.3	
	Uncomplicated gonorrhoea					9	1.5	11	1.7	20	1.5
	Uncomplicated chlamydia			5	7.7	103	17.2	49	7.6	157	11.9
	Genital herpes					7	1.2	18	2.8	25	1.9
Genital warts			1	1.5	56	9.3	39	6.0	96	7.3	
<b>SPG total attendances</b>	<b>8</b>		<b>65</b>		<b>599</b>		<b>645</b>		<b>1317</b>		
<b>WAR</b>	Primary and secondary syphilis						2	0.4	2	0.2	
	Uncomplicated gonorrhoea					14	2.5	5	0.9	19	1.6
	Uncomplicated chlamydia			7	13.7	95	17.0	53	9.5	155	13.1
	Genital herpes					4	0.7	7	1.3	11	0.9
Genital warts			3	5.9	68	12.2	51	9.1	122	10.3	
<b>WAR total attendances</b>	<b>12</b>		<b>51</b>		<b>559</b>		<b>559</b>		<b>1181</b>		
<b>Total diagnoses</b>	<b>5</b>		<b>79</b>		<b>1567</b>		<b>1366</b>		<b>3017</b>		
<b>Total attendances all</b>	<b>68</b>		<b>432</b>		<b>5804</b>		<b>7708</b>		<b>14012</b>		

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

\*\*Includes some data from Ormskirk and District General Hospital GUM.

Continued on next page

**Table 2 continued:** Diagnoses of key infections amongst females in Cheshire and Merseyside as a proportion of all attendances\*, GUM attendees, January-June 2007

Infection	Age group - female											
	Under 16	% of attendances- under 16	16-17	% of attendances- 16-17	18-24	% of attendances 18-24	25+	% of attendances- 25+	Total female	% of attendances- female		
<b>APH</b>	Primary and secondary syphilis											
	Uncomplicated gonorrhoea			1	1.2	9	2.0	3	0.7	13	1.4	
	Uncomplicated chlamydia			14	17.3	42	9.3	19	4.7	75	7.9	
	Genital herpes					10	2.2	6	1.5	16	1.7	
Genital warts			3	30.0	5	6.2	22	4.9	19	4.7	49	5.2
<b>APH total attendances</b>		<b>10</b>		<b>81</b>		<b>450</b>		<b>406</b>		<b>947</b>		
<b>CHR</b>	Primary and secondary syphilis											
	Uncomplicated gonorrhoea			1	1.9	9	1.1	2	0.2	12	0.7	
	Uncomplicated chlamydia			1	1.9	101	12.1	25	2.7	127	7.0	
	Genital herpes			1	12.5	23	2.7	36	4.0	62	3.4	
Genital warts					4	7.7	80	9.5	45	4.9	129	7.1
<b>CHR total attendances</b>		<b>8</b>		<b>52</b>		<b>838</b>		<b>911</b>		<b>1809</b>		
<b>HAL</b>	Primary and secondary syphilis											
	Uncomplicated gonorrhoea			1	5.6					1	0.2	
	Uncomplicated chlamydia			1	5.6	13	18.3	26	11.1	13	8.0	
	Genital herpes					2	2.8	2	0.9	3	1.9	
Genital warts			2	11.1	9	12.7	23	9.8	11	6.8	45	9.3
<b>HAL total attendances</b>		<b>18</b>		<b>71</b>		<b>234</b>		<b>162</b>		<b>485</b>		
<b>LEI</b>	Primary and secondary syphilis											
	Uncomplicated gonorrhoea			2	5.4	2	1.9	3	0.5		7	0.6
	Uncomplicated chlamydia			6	16.2	20	18.5	82	13.1	26	6.5	
	Genital herpes			2	5.4	1	0.9	11	1.8	19	4.8	
Genital warts			3	8.1	11	10.2	47	7.5	29	7.3	90	7.7
<b>LEI total attendances</b>		<b>37</b>		<b>108</b>		<b>626</b>		<b>398</b>		<b>1169</b>		
<b>MAC</b>	Primary and secondary syphilis											
	Uncomplicated gonorrhoea					3	3.4	4	1.2	1	0.4	
	Uncomplicated chlamydia			6	37.5	222	25.3	40	12.3	11	3.9	
	Genital herpes							9	2.8	10	3.5	
Genital warts			1	6.3	7	8.0	28	8.6	21	7.4	57	8.0
<b>MAC total attendances</b>		<b>16</b>		<b>87</b>		<b>326</b>		<b>284</b>		<b>713</b>		

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

Continued on next page

**Table 2 continued:** Diagnoses of key infections amongst females in Cheshire and Merseyside as a proportion of all attendances\*, GUM attendees, January-June 2007

Infection	Age group- female										
	Under 16 attendances- under 16	% of attendances- under 16	16-17	% of attendances- 16-17	18-24	% of attendances 18-24	25+	% of attendances- 25+	Total female	% of attendances- female	
<b>RLG</b>	Primary and secondary syphilis										
	Uncomplicated gonorrhoea	1	4.3	8	3.8	41	1.5	22	1.0	72	1.4
	Uncomplicated chlamydia	1	4.3	19	9.0	274	9.7	78	3.6	372	7.1
	Genital herpes			12	5.7	85	3.0	54	2.5	151	2.9
Genital warts	4	17.4	33	15.7	251	8.9	108	5.0	396	7.6	
<b>RLG total attendances</b>	<b>23</b>		<b>210</b>		<b>2821</b>		<b>2175</b>		<b>5229</b>		
<b>SHH</b>	Primary and secondary syphilis										
	Uncomplicated gonorrhoea	1	3.1	6	4.5	11	2.2	1	0.2	19	1.8
	Uncomplicated chlamydia	9	28.1	29	21.8	95	19.2	27	6.4	160	14.8
	Genital herpes	1	3.1	8	6.0	9	1.8	7	1.7	25	2.3
Genital warts	3	9.4	12	9.0	40	8.1	35	8.3	90	8.3	
<b>SHH total attendances</b>	<b>32</b>		<b>133</b>		<b>494</b>		<b>424</b>		<b>1083</b>		
<b>SPG**</b>	Primary and secondary syphilis										
	Uncomplicated gonorrhoea			1	0.5	8	1.0			9	0.6
	Uncomplicated chlamydia	6	12.2	25	13.3	91	11.4	28	5.5	150	9.7
	Genital herpes	1	2.0	3	1.6	15	1.9	10	2.0	29	1.9
Genital warts	2	4.1	14	7.4	49	6.2	32	6.3	97	6.3	
<b>SPG total attendances</b>	<b>49</b>		<b>188</b>		<b>796</b>		<b>509</b>		<b>1542</b>		
<b>WAR</b>	Primary and secondary syphilis										
	Uncomplicated gonorrhoea	1	1.6	8	4.2	9	1.6			18	1.5
	Uncomplicated chlamydia	5	8.2	39	20.6	95	16.4	35	9.4	174	14.5
	Genital herpes			2	1.1	10	1.7	6	1.6	18	1.5
Genital warts	2	3.3	21	11.1	38	6.6	28	7.5	89	7.4	
<b>WAR total attendances</b>	<b>61</b>		<b>189</b>		<b>578</b>		<b>373</b>		<b>1201</b>		
<b>Total diagnoses</b>	<b>65</b>		<b>358</b>		<b>1692</b>		<b>771</b>		<b>2886</b>		
<b>Total attendances all</b>	<b>254</b>		<b>1119</b>		<b>7163</b>		<b>5642</b>		<b>14178</b>		

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

\*\*Includes some data from Ormskirk and District General Hospital GUM.

Continued on next page

**Table 3:** Chlamydia diagnoses amongst males in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007

	Number of diagnoses - Male					Male total	Age distribution within chlamydia diagnoses, male (%)					Male total		
	Under 16	16-17	18-24	25+			Under 16	16-17	18-24	25+				
Central and Eastern Cheshire		7	103	62	172									
Halton and St Helens		12	101	48	161									
Knowsley	1	1	42	36	80	1.3	7.5	62.7	29.8	50.0	16.4	15.8	6.9	11.4
Liverpool		5	145	111	261						5.9	15.1	9.3	11.7
Sefton		3	74	51	128						6.3	10.5	6.5	8.2
Warrington		6	82	36	124						6.3	12.9	7.6	9.9
Western Cheshire		1	49	47	97						14.6	16.6	8.6	12.8
Wirral		1	46	28	75						4.5	12.5	6.1	8.2
Ashton, Leigh and Wigan		1	9	6	16						2.7	12.5	4.7	7.4
Blackburn with Darwen											100.0	25.7	10.7	17.2
Blackpool														
Bolton			1	1	2			50.0	50.0			100.0	50.0	66.7
Bury														
Central Lancashire		3	52	17	72									
Cumbria			1		1			100.0	23.6		13.0	23.0	6.9	14.3
East Lancashire												25.0	25.0	16.7
Heywood, Middleton and Rochdale														
Manchester			1	3	4			25.0	75.0			5.0	5.9	5.6
North Lancashire														
Oldham														
Salford				1	1				100.0				3.0	2.8
Stockport			3	1	4			75.0	25.0			21.4	4.8	11.1
Tameside and Glossop														
Tatford				1	1				100.0				5.3	4.5
Out of region	1	2	43	40	86		1.2	2.3	50.0	50.0	20.0	14.0	7.2	9.9
Unknown		3	49	30	82			3.7	59.8	36.6	13.0	11.7	5.1	7.9
Cheshire unknown			3	1	4			75.0	25.0			15.8	2.8	6.8
Merseyside unknown				1	1				100.0				3.6	2.4
Greater Manchester unknown			1		1			100.0						33.3
Lancashire unknown														
<b>Total</b>	<b>2</b>	<b>45</b>	<b>805</b>	<b>521</b>	<b>1373</b>	<b>0.1</b>	<b>3.3</b>	<b>58.6</b>	<b>37.9</b>	<b>2.9</b>	<b>10.4</b>	<b>13.9</b>	<b>6.8</b>	<b>9.8</b>
<b>Total attendances</b>	<b>68</b>	<b>432</b>	<b>5804</b>	<b>7708</b>	<b>14012</b>	<b>0.5</b>	<b>3.1</b>	<b>41.4</b>	<b>55.0</b>					

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

Continued on next page



**Table 3 continued: Chlamydia diagnoses amongst females in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007**

	Number of diagnoses - Female					Female total	Age distribution within chlamydia diagnoses, female (%)					Female total	Rate of chlamydia in female attendees (%)					Female total
	Under 16	16-17	18-24	25+			Under 16	16-17	18-24	25+			Under 16	16-17	18-24	25+		
Central and Eastern Cheshire	12	38	105	31	186	6.5	20.4	56.5	16.7	25.5	23.8	13.4	5.5	12.0				
Halton and St Helens	9	41	125	37	212	4.2	19.3	59.0	17.5	15.8	20.6	16.6	6.8	13.6				
Knowsley		4	33	13	50	8.0	66.0	26.0		12.5	10.6	4.7	8.0					
Liverpool		9	171	52	232	3.9	73.7	22.4		7.1	9.2	3.6	6.8					
Sefton	7	17	67	20	111	6.3	15.3	60.4	18.0	17.9	11.6	9.7	3.8	7.9				
Warrington	5	34	79	27	145	3.4	23.4	54.5	18.6	11.1	20.2	16.3	8.9	14.5				
Western Cheshire		2	62	20	84	2.4	73.8	23.8		5.3	10.7	3.3	6.9					
Wirral		9	43	16	68	13.2	63.2	23.5		11.7	9.7	3.7	7.1					
Ashton, Leigh and Wigan	1		6	4	11	9.1	54.5	36.4		100.0	15.4	8.7	12.5					
Blackburn with Darwen																		
Blackpool																		
Bolton				1	1			100.0					50.0	20.0				
Bury																		
Central Lancashire		11	57	13	81	13.6	70.4	16.0		15.7	14.9	6.3	12.1					
Cumbria																		
East Lancashire																		
Heywood, Middleton and Rochdale			1	1	1		100.0	100.0			100.0		12.5	50.0				
Manchester									100.0					5.6				
North Lancashire																		
Oldham																		
Salford				1	1			100.0					14.3	7.7				
Stockport																		
Tameside and Glossop			1		1		100.0				100.0		50.0					
Trafford																		
Out of region		1	55	12	68	1.5	80.9	17.6		4.0	14.3	3.7	9.1					
Unknown		11	37	12	60	18.3	61.7	20.0		19.3	10.3	4.3	8.5					
Cheshire unknown		1	3	1	5	20.0	60.0	20.0		14.3	10.0	3.6	7.4					
Merseyside unknown		4	1	1	6	66.7	16.7	16.7		66.7	12.5	5.3	17.6					
Greater Manchester unknown																		
Lancashire unknown																		
<b>Total</b>	<b>34</b>	<b>182</b>	<b>846</b>	<b>262</b>	<b>1324</b>	<b>2.6</b>	<b>13.7</b>	<b>63.9</b>	<b>19.8</b>	<b>13.4</b>	<b>16.3</b>	<b>11.8</b>	<b>4.6</b>	<b>9.3</b>				
<b>Total attendances</b>	<b>254</b>	<b>1119</b>	<b>7163</b>	<b>5642</b>	<b>14178</b>	<b>1.8</b>	<b>7.9</b>	<b>50.5</b>	<b>39.8</b>									

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

**Table 4:** Gonorrhoea diagnoses amongst males in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007

	Number of diagnoses - Male					Male total	Age distribution within gonorrhoea diagnoses, male (%)					Male total								
	Under 16	16-17	18-24	25+			Under 16	16-17	18-24	25+										
Central and Eastern Cheshire			10	10	10	20			50.0	50.0										
Halton and St Helens		2	11	11	15	28		7.1	39.3	53.6		2.7	1.7	2.2	2.0					
Knowsley			8	8	6	14			57.1	42.9			2.9	1.5	2.0					
Liverpool		3	39	31	31	73		4.1	53.4	42.5		3.8	2.8	1.8	2.3					
Sefton			6	10	10	16			37.5	62.5			1.0	1.5	1.2					
Warrington			12	5	5	17			70.6	29.4			2.4	1.2	1.8					
Western Cheshire			5	5	7	12			41.7	58.3			1.3	0.9	1.0					
Wirral		1	8	8	4	13		7.7	61.5	30.8		2.7	2.2	0.7	1.3					
Ashton, Leigh and Wigan			1	1	2	3			33.3	66.7			2.9	3.6	3.2					
Blackburn with Darwen																				
Blackpool																				
Bolton																				
Bury																				
Central Lancashire			5	5	5	10			50.0	50.0			2.2	2.0	2.0					
Cumbria																				
East Lancashire																				
Heywood, Middleton and Rochdale				3	1	4			75.0	25.0			15.0	2.0	5.6					
Manchester																				
North Lancashire																				
Oldham																				
Salford																				
Stockport			1	1	1	2			50.0	50.0			7.1	4.8	5.6					
Tameside and Glossop																				
Tatford																				
Out of region		1	6	6	18	25		4.0	24.0	72.0		10.0	1.9	3.3	2.9					
Unknown			14	14	8	22			63.6	36.4			3.3	1.4	2.1					
Cheshire unknown																				
Merseyside unknown					2	2				100.0				7.1	4.9					
Greater Manchester unknown																				
Lancashire unknown																				
<b>Total</b>		<b>7</b>	<b>129</b>	<b>125</b>	<b>261</b>								<b>1.6</b>	<b>2.2</b>	<b>1.6</b>					<b>1.9</b>
<b>Total attendances</b>	<b>68</b>	<b>432</b>	<b>5804</b>	<b>7708</b>	<b>14012</b>			<b>0.5</b>	<b>2.7</b>	<b>49.4</b>	<b>55.0</b>									

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

Continued on next page

**Table 4 continued: Gonorrhoea diagnoses amongst females in Cheshire and Merseyside by PCT of residence, GUM attendees, January to June 2007**

	Number of diagnoses - Female					Female total	Age distribution within gonorrhoea diagnoses, female (%)					Rate of gonorrhoea in female attendees (%)					
	Under 16	16-17	18-24	25+			Under 16	16-17	18-24	25+		Under 16	16-17	18-24	25+	Female total	
Central and Eastern Cheshire	2	4	5	1	12	16.7	33.3	41.7	8.3	4.3	2.5	0.6	0.2	0.8			
Halton and St Helens	2	4	11	2	19	10.5	21.1	57.9	10.5	3.5	2.0	1.5	0.4	1.2			
Knowsley	1	1	10	2	13	7.7	76.9	15.4	15.4	3.1	3.1	3.2	0.7	2.1			
Liverpool	1	7	25	13	46	2.2	15.2	54.3	28.3	6.3	5.5	1.4	0.9	1.3			
Sefton	1	1	4	2	7	14.3	57.1	28.6	28.6	0.7	0.7	0.6	0.4	0.5			
Warrington	1	6	7	1	14	7.1	42.9	50.0	12.5	2.2	3.6	1.4	0.2	1.4			
Western Cheshire	1	1	6	1	8	12.5	75.0	12.5	12.5	2.6	2.6	1.0	0.2	0.7			
Wirral			9	4	13	69.2		30.8	30.8			2.0	0.9	1.4			
Ashton, Leigh and Wigan			1		1	100.0		100.0				2.6		1.1			
Blackburn with Darwen																	
Blackpool																	
Bolton																	
Bury																	
Central Lancashire			6		6	100.0		100.0				1.6		0.9			
Cumbria																	
East Lancashire																	
Heywood, Middleton and Rochdale																	
Manchester																	
North Lancashire																	
Oldham																	
Salford																	
Stockport																	
Tameside and Glossop																	
Trafford																	
Out of region			4		4	100.0		100.0				1.0		0.5			
Unknown		5	6	4	15	33.3	40.0	26.7	26.7	8.8	8.8	1.7	1.4	2.1			
Cheshire unknown																	
Merseyside unknown		1			1	100.0		100.0				16.7		2.9			
Greater Manchester unknown																	
Lancashire unknown																	
<b>Total</b>	<b>6</b>	<b>30</b>	<b>94</b>	<b>29</b>	<b>159</b>	<b>3.8</b>	<b>18.9</b>	<b>59.1</b>	<b>18.2</b>	<b>2.4</b>	<b>2.7</b>	<b>1.3</b>	<b>0.5</b>	<b>1.1</b>			
<b>Total attendances</b>	<b>254</b>	<b>1119</b>	<b>7163</b>	<b>5642</b>	<b>14178</b>	<b>1.8</b>	<b>7.9</b>	<b>50.5</b>	<b>39.8</b>								

\*Attendances are defined as one individual and one diagnosis date, excluding follow-ups.

**Table 5: Diagnoses of key infections by GUM clinic and ethnicity, January to June 2007**

	White	Black Caribbean	Black African	Black Other	Indian/ Pakistani /Bangladeshi	Other Asian/ Oriental	Other/Mixed	Unknown	Total
<b>APH</b>	Primary and secondary syphilis	2 (100%)						1 (3.7%)	2
	Uncomplicated gonorrhoea	26 (96.3%)						3 (1.9%)	27
	Uncomplicated chlamydia	154 (96.3%)		2 (1.3%)				1 (3.4%)	160
	Genital herpes	28 (96.6%)						2 (1.7%)	29
	Genital warts	114 (96.6%)						2 (1.7%)	118
<b>Total</b>	<b>324 (96.4%)</b>		<b>2 (0.6%)</b>			<b>1 (0.3%)</b>	<b>2 (0.6%)</b>	<b>7 (2.1%)</b>	<b>336</b>
<b>CHR</b>	Primary and secondary syphilis	8 (80%)				2 (20%)			10
	Uncomplicated gonorrhoea	32 (91.4%)				2 (5.7%)	1 (2.9%)		35
	Uncomplicated chlamydia	269 (95.7%)		3 (1.1%)		1 (0.4%)	2 (0.7%)		281
	Genital herpes	87 (95.6%)			1 (1.1%)	2 (2.2%)	1 (1.1%)		91
	Genital warts	261 (96.3%)	1 (0.4%)			4 (1.5%)	3 (1.1%)		271
<b>Total</b>	<b>657 (95.5%)</b>	<b>1 (0.1%)</b>	<b>3 (0.4%)</b>	<b>1 (0.1%)</b>	<b>5 (0.7%)</b>	<b>14 (2%)</b>	<b>4 (0.6%)</b>	<b>3 (0.4%)</b>	<b>688</b>
<b>HAL</b>	Primary and secondary syphilis	1 (100%)							1
	Uncomplicated gonorrhoea	6 (100%)							6
	Uncomplicated chlamydia	98 (98%)					2 (2%)		100
	Genital herpes	8 (100%)							8
	Genital warts	88 (96.7%)					2 (2.2%)	1 (1.1%)	91
<b>Total</b>	<b>201 (97.6%)</b>						<b>4 (1.9%)</b>	<b>1 (0.5%)</b>	<b>206</b>
<b>LEI</b>	Primary and secondary syphilis								
	Uncomplicated gonorrhoea	24 (82.8%)			1 (3.4%)		1 (3.4%)	3 (10.3%)	29
	Uncomplicated chlamydia	221 (81.9%)	3 (1.1%)	1 (0.4%)			1 (0.4%)	3 (1.1%)	270
	Genital herpes	39 (76.5%)					1 (2%)	11 (21.6%)	51
	Genital warts	185 (86.9%)			1 (0.5%)		3 (1.4%)	24 (11.3%)	213
<b>Total</b>	<b>469 (83.3%)</b>	<b>3 (0.5%)</b>	<b>1 (0.2%)</b>	<b>2 (0.4%)</b>		<b>1 (0.2%)</b>	<b>8 (1.4%)</b>	<b>79 (14%)</b>	<b>563</b>
<b>MAC</b>	Primary and secondary syphilis	1 (50%)						1 (50%)	2
	Uncomplicated gonorrhoea	11 (47.8%)						12 (52.2%)	23
	Uncomplicated chlamydia	66 (43.4%)		1 (0.7%)			1 (0.7%)	82 (53.9%)	152
	Genital herpes	7 (18.4%)						31 (81.6%)	38
	Genital warts	52 (45.2%)						63 (54.8%)	115
<b>Total</b>	<b>137 (41.5%)</b>		<b>1 (0.3%)</b>			<b>1 (0.3%)</b>	<b>2 (0.6%)</b>	<b>189 (57.3%)</b>	<b>330</b>

Continued on next page

**Table 5 continued: Diagnoses of key infections by GUM clinic and ethnicity, January to June 2007**

	White	Black Caribbean	Black African	Black Other	Indian/ Pakistani/ Bangladeshi	Other Asian/ Oriental	Other/Mixed	Unknown	Total
<b>RLG</b>	Primary and secondary syphilis	10 (83.3%)		3 (1.6%)	1 (8.3%)			1 (8.3%)	12
	Uncomplicated gonorrhoea	168 (91.8%)			4 (2.2%)	1 (0.5%)	3 (1.6%)	2 (1.1%)	183
	Uncomplicated chlamydia	709 (88.8%)	6 (0.8%)	11 (1.4%)	16 (2%)	3 (0.4%)	1 (0.1%)	33 (4.1%)	798
	Genital herpes	194 (90.7%)	3 (1.4%)	2 (0.9%)	3 (1.4%)	3 (1.4%)	1 (0.5%)	8 (3.7%)	214
	Genital warts	735 (93.3%)	2 (0.3%)	7 (0.9%)	3 (0.4%)	3 (0.4%)	1 (0.1%)	25 (3.2%)	788
<b>Total</b>	<b>1816 (91%)</b>	<b>11 (0.6%)</b>	<b>23 (1.2%)</b>	<b>27 (1.4%)</b>	<b>10 (0.5%)</b>	<b>5 (0.3%)</b>	<b>69 (3.5%)</b>	<b>34 (1.7%)</b>	<b>1995</b>
<b>SHH</b>	Primary and secondary syphilis	1 (100%)							1
	Uncomplicated gonorrhoea	29 (56.9%)						22 (43.1%)	51
	Uncomplicated chlamydia	172 (57.3%)			1 (0.3%)		3 (1%)	124 (41.3%)	300
	Genital herpes	24 (52.2%)						22 (47.8%)	46
	Genital warts	96 (50%)			1 (0.5%)		1 (0.5%)	94 (49%)	192
<b>Total</b>	<b>322 (54.6%)</b>			<b>2 (0.3%)</b>		<b>4 (0.7%)</b>		<b>262 (44.4%)</b>	<b>590</b>
<b>SPG<sup>2</sup></b>	Primary and secondary syphilis	4 (100%)							4
	Uncomplicated gonorrhoea	28 (96.6%)					1 (3.4%)		29
	Uncomplicated chlamydia	278 (90.6%)	2 (0.7%)	2 (0.7%)			22 (7.2%)	2 (0.7%)	307
	Genital herpes	50 (92.6%)					3 (5.6%)		54
	Genital warts	171 (88.6%)		2 (1%)	1 (0.5%)	1 (0.5%)	13 (6.7%)	4 (2.1%)	193
<b>Total</b>	<b>531 (90.5%)</b>	<b>2 (0.3%)</b>	<b>4 (0.7%)</b>	<b>1 (0.2%)</b>	<b>1 (0.2%)</b>	<b>39 (6.6%)</b>	<b>6 (1%)</b>	<b>587</b>	
<b>WAR</b>	Primary and secondary syphilis	2 (100%)							2
	Uncomplicated gonorrhoea	34 (91.9%)			1 (2.7%)			2 (5.4%)	37
	Uncomplicated chlamydia	291 (88.4%)		2 (0.6%)			5 (1.5%)	28 (8.5%)	329
	Genital herpes	28 (96.6%)				1 (3.4%)			29
	Genital warts	193 (91.5%)		1 (0.5%)		1 (0.5%)	2 (0.9%)	14 (6.6%)	211
<b>Total</b>	<b>548 (90.1%)</b>		<b>3 (0.5%)</b>	<b>1 (0.2%)</b>	<b>2 (0.3%)</b>	<b>5 (0.8%)</b>	<b>5 (0.8%)</b>	<b>44 (7.2%)</b>	<b>608</b>

\*Includes some data from Ormskirk and District General Hospital GUM.

**Table 6:** Number of individuals with two or more infections on the same date by sex and age group, all clinics, January to June 2007

	Age	One infection	Concurrent infections	Total (100%)
<b>Male</b>	Under 16	5 (100%)		5
	16-17	69 (93.2%)	5 (6.8%)	74
	18-24	1293 (90.5%)	136 (9.5%)	1429
	25+	1245 (95.4%)	60 (4.6%)	1305
	<b>Subtotal</b>	<b>2612 (92.9%)</b>	<b>201 (7.1%)</b>	<b>2813</b>
<b>Female</b>	Under 16	50 (87.7%)	7 (12.3%)	57
	16-17	293 (90.2%)	32 (9.8%)	325
	18-24	1482 (93.4%)	104 (6.6%)	1586
	25+	733 (97.5%)	19 (2.5%)	752
	<b>Subtotal</b>	<b>2558 (94%)</b>	<b>162 (6%)</b>	<b>2720</b>
<b>Total</b>	<b>5170 (93.4%)</b>	<b>363 (6.6%)</b>	<b>5533</b>	

\*Key infections only (syphilis, gonorrhoea, chlamydia, genital herpes and genital warts).

**Table 7:** Number and total period prevalence (per 100,000 population)\* of chlamydia diagnosed in GUM and community settings\*\* by sex for Cheshire and Merseyside PCTs, January to June 2007

Setting	Male	Female	Total
<b>Central and Eastern Cheshire</b>			
GUM (number)	172	186	358
Community (number)	142	432	574
<b>Total number</b>	<b>314</b>	<b>618</b>	<b>932</b>
<b>Prevalence</b>	<b>197.1</b>	<b>385.7</b>	<b>291.7</b>
<b>Halton and St Helens</b>			
GUM (number)	161	212	373
Community (number)	53	298	351
<b>Total number</b>	<b>214</b>	<b>510</b>	<b>724</b>
<b>Prevalence</b>	<b>202.1</b>	<b>466.5</b>	<b>336.4</b>
<b>Knowsley</b>			
GUM (number)	80	50	130
Community (number)	47	164	211
<b>Total number</b>	<b>127</b>	<b>214</b>	<b>341</b>
<b>Prevalence</b>	<b>245.1</b>	<b>381.7</b>	<b>316.1</b>
<b>Liverpool</b>			
GUM (number)	261	232	493
Community (number)	178	672	850
<b>Total number</b>	<b>439</b>	<b>904</b>	<b>1343</b>
<b>Prevalence</b>	<b>267.6</b>	<b>532.2</b>	<b>402.2</b>
<b>Sefton</b>			
GUM (number)	128	111	239
Community (number)	79	284	363
<b>Total number</b>	<b>207</b>	<b>395</b>	<b>602</b>
<b>Prevalence</b>	<b>216.4</b>	<b>391.4</b>	<b>306.2</b>
<b>Warrington</b>			
GUM (number)	124	145	269
Community (number)	34	211	245
<b>Total number</b>	<b>158</b>	<b>356</b>	<b>514</b>
<b>Prevalence</b>	<b>221.3</b>	<b>500.1</b>	<b>360.5</b>
<b>Western Cheshire</b>			
GUM (number)	97	84	181
Community (number)	83	332	415
<b>Total number</b>	<b>180</b>	<b>416</b>	<b>596</b>
<b>Prevalence</b>	<b>220.8</b>	<b>497.9</b>	<b>361.0</b>
<b>Wirral</b>			
GUM (number)	75	68	143
Community (number)	166	431	597
<b>Total number</b>	<b>241</b>	<b>499</b>	<b>740</b>
<b>Prevalence</b>	<b>226.0</b>	<b>441.8</b>	<b>337.0</b>

\*Prevalence calculated on population aged 10-64 years.

\*\*The total chlamydia prevalence is indicative only.

Note: Caution is needed when interpreting the results as it is possible that an individual has been tested both in the community and in a GUM setting for the same episode of chlamydia infection.

Population data source: Office for National Statistics, © Crown Copyright 2007.

**Table 8:** Number and total period prevalence (per 100,000 population)\* of chlamydia diagnoses in GUM and community settings\*\* by age group for Cheshire and Merseyside PCTs, January to June 2007

	Age group											Total †
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	
<b>Central and Eastern Cheshire</b>												
GUM (number)	8	148	122	35	16	10	11	4	2	1	1	358
Community (number)	30	294	144	45	28	14	7	5				567
<b>Total number</b>	<b>38</b>	<b>442</b>	<b>266</b>	<b>80</b>	<b>44</b>	<b>24</b>	<b>18</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>925</b>
<b>Prevalence</b>	<b>129.1</b>	<b>1595.8</b>	<b>1228.5</b>	<b>385.9</b>	<b>156.6</b>	<b>68.8</b>	<b>49.4</b>	<b>28.5</b>	<b>6.7</b>	<b>3.0</b>	<b>3.8</b>	<b>289.5</b>
<b>Halton and St Helens</b>												
GUM (number)	8	164	123	48	16	7	4	2		1		373
Community (number)	25	175	84	39	9	7	4	1				344
<b>Total number</b>	<b>33</b>	<b>339</b>	<b>207</b>	<b>87</b>	<b>25</b>	<b>14</b>	<b>8</b>	<b>3</b>		<b>1</b>		<b>717</b>
<b>Prevalence</b>	<b>161.6</b>	<b>1656.2</b>	<b>1165.0</b>	<b>542.9</b>	<b>127.4</b>	<b>63.8</b>	<b>36.0</b>	<b>14.8</b>		<b>4.8</b>		<b>333.1</b>
<b>Knowsley</b>												
GUM (number)	1	31	59	17	13	8	1					130
Community (number)	10	114	54	18	10	4		1				211
<b>Total number</b>	<b>11</b>	<b>145</b>	<b>113</b>	<b>35</b>	<b>23</b>	<b>12</b>	<b>1</b>	<b>1</b>				<b>341</b>
<b>Prevalence</b>	<b>100.7</b>	<b>1258.2</b>	<b>1158.6</b>	<b>454.0</b>	<b>248.0</b>	<b>102.5</b>	<b>8.3</b>	<b>9.3</b>				<b>316.1</b>
<b>Liverpool</b>												
GUM (number)		133	225	79	34	15	3	3	1			493
Community (number)	18	414	291	77	21	16	3	1				841
<b>Total number</b>	<b>18</b>	<b>547</b>	<b>516</b>	<b>156</b>	<b>55</b>	<b>31</b>	<b>6</b>	<b>4</b>	<b>1</b>			<b>1334</b>
<b>Prevalence</b>	<b>68.1</b>	<b>1608.8</b>	<b>1109.0</b>	<b>473.5</b>	<b>179.1</b>	<b>98.5</b>	<b>18.5</b>	<b>13.4</b>	<b>3.9</b>			<b>399.5</b>
<b>Sefton</b>												
GUM (number)	4	79	95	35	10	1	7	3	5			239
Community (number)	7	190	104	25	17	7	4	2				356
<b>Total number</b>	<b>11</b>	<b>269</b>	<b>199</b>	<b>60</b>	<b>27</b>	<b>8</b>	<b>11</b>	<b>5</b>	<b>5</b>			<b>595</b>
<b>Prevalence</b>	<b>56.9</b>	<b>1391.0</b>	<b>1247.0</b>	<b>473.0</b>	<b>179.6</b>	<b>41.2</b>	<b>50.2</b>	<b>24.9</b>	<b>27.4</b>			<b>302.7</b>
<b>Warrington</b>												
GUM (number)	4	127	91	31	5	5	4	2				269
Community (number)	6	123	70	24	8	4	6	2				243
<b>Total number</b>	<b>10</b>	<b>250</b>	<b>161</b>	<b>55</b>	<b>13</b>	<b>9</b>	<b>10</b>	<b>4</b>				<b>512</b>
<b>Prevalence</b>	<b>77.2</b>	<b>1989.7</b>	<b>1454.4</b>	<b>515.7</b>	<b>97.4</b>	<b>55.8</b>	<b>60.9</b>	<b>29.3</b>				<b>359.1</b>
<b>Western Cheshire</b>												
GUM (number)		53	76	23	8	5	9	5	1	1		181
Community (number)	10	203	126	37	14	6	3	2	1	2	3	407
<b>Total number</b>	<b>10</b>	<b>256</b>	<b>202</b>	<b>60</b>	<b>22</b>	<b>11</b>	<b>12</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>588</b>
<b>Prevalence</b>	<b>68.3</b>	<b>1721.1</b>	<b>1522.2</b>	<b>518.9</b>	<b>154.9</b>	<b>64.6</b>	<b>66.3</b>	<b>43.7</b>	<b>13.2</b>	<b>18.1</b>	<b>22.0</b>	<b>356.2</b>
<b>Wirral</b>												
GUM (number)		54	54	19	6	4	2	1	1	1	1	143
Community (number)	28	342	143	45	19	9	1	1	3	2		593
<b>Total number</b>	<b>28</b>	<b>396</b>	<b>197</b>	<b>64</b>	<b>25</b>	<b>13</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>736</b>
<b>Prevalence</b>	<b>132.8</b>	<b>1834.7</b>	<b>1118.2</b>	<b>435.5</b>	<b>141.3</b>	<b>59.5</b>	<b>12.9</b>	<b>9.2</b>	<b>19.6</b>	<b>13.5</b>	<b>5.7</b>	<b>335.2</b>

\*Prevalence calculated on population aged 10-64 years.

\*\*The total chlamydia prevalence is indicative only.

†The total prevalence for age groups does not include diagnoses made amongst those outside the 10-64 age range and so do not match the total prevalence on Table 7.

Note: Caution is needed when interpreting the results as it is possible that an individual has been tested both in the community and in a GUM setting for the same episode of chlamydia infection.

Population data source: Office for National Statistics, © Crown Copyright 2007.



**Table 9:** Period prevalence (per 100,000 population)\* of key infections diagnosed in GUM clinics by sex for Cheshire and Merseyside PCT of residence, January to June 2007

Infection	Male	Female	Total
<b>Central and Eastern Cheshire</b>			
Primary and secondary syphilis	1.9		0.9
Uncomplicated gonorrhoea	12.6	7.5	10.0
Uncomplicated chlamydia	108.0	116.1	112.0
Genital herpes	17.6	30.0	23.8
Genital warts	96.7	78.0	87.3
<b>Total**</b>	<b>236.6</b>	<b>231.5</b>	<b>234.1</b>
<b>Halton and St Helens</b>			
Primary and secondary syphilis	2.8		1.4
Uncomplicated gonorrhoea	26.4	17.4	21.8
Uncomplicated chlamydia	152.0	193.9	173.3
Genital herpes	13.2	29.3	21.4
Genital warts	127.5	121.7	124.5
<b>Total**</b>	<b>322.0</b>	<b>362.2</b>	<b>342.4</b>
<b>Knowsley</b>			
Primary and secondary syphilis	1.9		0.9
Uncomplicated gonorrhoea	27.0	23.2	25.0
Uncomplicated chlamydia	154.4	89.2	120.5
Genital herpes	13.5	16.1	14.8
Genital warts	117.7	98.1	107.5
<b>Total**</b>	<b>314.6</b>	<b>226.5</b>	<b>268.8</b>
<b>Liverpool</b>			
Primary and secondary syphilis	3.7		1.8
Uncomplicated gonorrhoea	44.5	27.1	35.6
Uncomplicated chlamydia	159.1	136.6	147.7
Genital herpes	23.2	54.2	38.9
Genital warts	145.7	146.0	145.9
<b>Total**</b>	<b>376.2</b>	<b>363.8</b>	<b>369.9</b>
<b>Sefton</b>			
Primary and secondary syphilis	4.2		2.0
Uncomplicated gonorrhoea	16.7	6.9	11.7
Uncomplicated chlamydia	133.8	110.0	121.6
Genital herpes	25.1	37.7	31.5
Genital warts	113.9	107.0	110.4
<b>Total**</b>	<b>293.7</b>	<b>261.6</b>	<b>277.2</b>
<b>Warrington</b>			
Primary and secondary syphilis	2.8		1.4
Uncomplicated gonorrhoea	23.8	19.7	21.7
Uncomplicated chlamydia	173.7	203.7	188.7
Genital herpes	15.4	21.1	18.2
Genital warts	142.9	111.0	127.0
<b>Total**</b>	<b>358.6</b>	<b>355.4</b>	<b>357.0</b>
<b>Western Cheshire</b>			
Primary and secondary syphilis	6.1		3.0
Uncomplicated gonorrhoea	14.7	9.6	12.1
Uncomplicated chlamydia	119.0	100.5	109.6
Genital herpes	27.0	50.3	38.8
Genital warts	122.6	106.5	114.5
<b>Total**</b>	<b>289.4</b>	<b>266.9</b>	<b>278.0</b>
<b>Wirral</b>			
Primary and secondary syphilis	2.8		1.4
Uncomplicated gonorrhoea	12.2	11.5	11.8
Uncomplicated chlamydia	70.3	60.2	65.1
Genital herpes	8.4	17.7	13.2
Genital warts	60.0	47.8	53.7
<b>Total**</b>	<b>153.8</b>	<b>137.2</b>	<b>145.3</b>

\*Prevalence calculated on population aged 10-64 years.

\*\*Total prevalence calculation includes double counting of individuals with more than one infection.

Population data source: Office for National Statistics, © Crown Copyright 2007.

**Table 10:** Period prevalence (per 100,000 population)\* of key infections diagnosed in GUM clinics by age group for Cheshire and Merseyside PCT of residence, January to June 2007

	Prevalence by age group											Total †
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	
<b>Central and Eastern Cheshire PCT</b>												
Primary and secondary syphilis			9.2	4.8								0.9
Uncomplicated gonorrhoea	3.4	57.8	18.5	9.6	10.7	5.7	2.7	3.2	3.4		3.8	10.0
Uncomplicated chlamydia	27.2	534.3	563.4	168.8	57.0	28.6	30.2	12.6	6.7	3.0	3.8	112.0
Genital herpes	3.4	50.5	69.3	57.9	42.7	20.1	13.7	19.0	3.4	3.0	3.8	23.5
Genital warts	6.8	328.5	364.8	202.6	85.4	57.3	27.4	15.8	10.1	3.0		86.7
<b>Total**</b>	<b>40.8</b>	<b>971.2</b>	<b>1025.3</b>	<b>443.8</b>	<b>195.8</b>	<b>111.7</b>	<b>74.1</b>	<b>50.6</b>	<b>23.6</b>	<b>9.1</b>	<b>11.4</b>	<b>233.1</b>
<b>Halton and St Helens PCT</b>												
Primary and secondary syphilis		4.9					9.0					1.4
Uncomplicated gonorrhoea	4.9	92.8	67.5	62.4	5.1	9.1	4.5		5.1			21.8
Uncomplicated chlamydia	39.2	801.3	692.3	299.5	81.6	31.9	18.0	9.8		4.8		173.3
Genital herpes	4.9	83.1	61.9	31.2	30.6	9.1	4.5	4.9			6.3	20.9
Genital warts	9.8	371.3	523.4	212.2	127.4	68.4	58.5	44.3				124.1
<b>Total**</b>	<b>58.7</b>	<b>1353.3</b>	<b>1345.1</b>	<b>605.3</b>	<b>244.7</b>	<b>118.5</b>	<b>94.5</b>	<b>59.0</b>	<b>5.1</b>	<b>4.8</b>	<b>6.3</b>	<b>341.5</b>
<b>Knowsley PCT</b>												
Primary and secondary syphilis				13.0								0.9
Uncomplicated gonorrhoea		52.1	143.5	25.9	21.6	17.1						24.1
Uncomplicated chlamydia	9.2	269.0	604.9	220.5	140.2	68.3	8.3					120.5
Genital herpes	9.2	34.7	30.8	25.9	10.8	8.5	16.6		11.1	11.8		14.8
Genital warts	9.2	277.7	420.4	194.6	151.0	59.8	33.2	18.7				107.5
<b>Total**</b>	<b>27.5</b>	<b>633.5</b>	<b>1199.6</b>	<b>480.0</b>	<b>323.5</b>	<b>153.8</b>	<b>58.1</b>	<b>18.7</b>	<b>11.1</b>	<b>11.8</b>		<b>267.9</b>
<b>Liverpool PCT</b>												
Primary and secondary syphilis				3.0	3.3	6.4		3.3		4.0		1.8
Uncomplicated gonorrhoea	3.8	108.8	94.6	45.5	19.5	15.9	15.4	10.0	7.8	4.0		35.6
Uncomplicated chlamydia		391.2	483.6	239.8	110.7	47.7	9.2	10.0	3.9			147.7
Genital herpes		88.2	94.6	57.7	48.9	19.1	24.7	3.3	7.8	12.0	5.3	38.6
Genital warts	11.3	376.5	410.5	221.6	143.3	63.5	52.4	16.7	7.8	4.0	10.6	145.6
<b>Total**</b>	<b>15.1</b>	<b>964.7</b>	<b>1083.2</b>	<b>567.6</b>	<b>325.7</b>	<b>152.5</b>	<b>101.7</b>	<b>43.5</b>	<b>27.3</b>	<b>24.1</b>	<b>15.9</b>	<b>369.3</b>
<b>Sefton PCT</b>												
Primary and secondary syphilis						5.1	13.7					2.0
Uncomplicated gonorrhoea		25.9	37.6	31.5	13.3	5.1	4.6	10.0	11.0			11.7
Uncomplicated chlamydia	20.7	408.5	595.3	275.9	66.5	5.1	31.9	15.0	27.4			121.6
Genital herpes	5.2	93.1	81.5	55.2	59.9	20.6	27.4	10.0	5.5			31.0
Genital warts	10.4	382.6	407.3	291.7	86.5	56.6	18.3	29.9	16.5	10.6		110.4
<b>Total**</b>	<b>36.2</b>	<b>910.1</b>	<b>1121.7</b>	<b>654.4</b>	<b>226.2</b>	<b>92.6</b>	<b>95.8</b>	<b>64.8</b>	<b>60.3</b>	<b>10.6</b>		<b>276.7</b>
<b>Warrington PCT</b>												
Primary and secondary syphilis			9.0	9.4								1.4
Uncomplicated gonorrhoea	7.7	143.3	72.3	9.4			12.2		8.2			21.7
Uncomplicated chlamydia	30.9	1010.7	822.0	290.6	37.5	31.0	24.3	14.6				188.7
Genital herpes		79.6	63.2	46.9	7.5	6.2		7.3	8.2			18.2
Genital warts	7.7	477.5	496.8	243.8	104.9	55.8	54.8	43.9		7.7		127.0
<b>Total**</b>	<b>46.3</b>	<b>1711.1</b>	<b>1463.4</b>	<b>600.0</b>	<b>149.9</b>	<b>93.0</b>	<b>91.3</b>	<b>65.9</b>	<b>16.4</b>	<b>7.7</b>		<b>357.0</b>
<b>Western Cheshire PCT</b>												
Primary and secondary syphilis			15.1			5.9			13.2			3.0
Uncomplicated gonorrhoea	47.1	52.8	34.6				11.0					12.1
Uncomplicated chlamydia	356.3	572.7	198.9	56.3	29.4	49.7	31.2	6.6	6.0			109.6
Genital herpes	47.1	135.6	129.7	42.2	23.5	33.1	31.2	6.6	6.0			38.2
Genital warts	316.0	520.0	268.1	77.4	76.4	49.7	12.5	26.5			22.0	114.5
<b>Total**</b>	<b>766.4</b>	<b>1296.2</b>	<b>631.4</b>	<b>176.0</b>	<b>135.2</b>	<b>143.6</b>	<b>74.9</b>	<b>52.9</b>	<b>12.0</b>	<b>22.0</b>		<b>277.4</b>
<b>Wirral PCT</b>												
Primary and secondary syphilis		4.6			5.7	4.6						1.4
Uncomplicated gonorrhoea	46.3	56.8	13.6	5.7	9.2	4.3						11.8
Uncomplicated chlamydia	250.2	306.5	129.3	33.9	18.3	8.6	4.6	4.9	4.5	5.7		65.1
Genital herpes	41.7	34.1	34.0	5.7	4.6	12.9	13.8					12.8
Genital warts	14.2	152.9	238.4	102.1	50.9	36.6	12.9	4.6	9.8	9.0		53.7
<b>Total**</b>	<b>14.2</b>	<b>495.7</b>	<b>635.7</b>	<b>279.0</b>	<b>101.8</b>	<b>73.3</b>	<b>38.7</b>	<b>23.0</b>	<b>14.7</b>	<b>13.5</b>	<b>5.7</b>	<b>144.8</b>

\* Total population aged 10-64 years.

\*\* Total prevalence calculation includes double counting of individuals with more than one infection. Totals may not add up due to rounding.

† The total prevalence for age groups does not include diagnoses made amongst those outside the 10-64 age range and so do not match the total prevalence on Table 9.

Population data source: Office for National Statistics, © Crown Copyright 2007.

**Table 11:** Number of diagnoses of key infections by student status\*, age and sex for all GUM clinics, January- June 2007

Infection	Male				Female				Total (100%)			
	Under 16	16-17	18-24	25+	Male total	Under 16	16-17	18-24		25+	Female total	
Non-student	Primary and secondary syphilis	1 (3.1%)	1 (3.1%)	6 (18.8%)	23 (71.9%)	31 (96.9%)	4 (1.2%)	24 (6.9%)	63 (18.2%)	28 (8.1%)	119 (34.3%)	32
	Uncomplicated gonorrhoea		4 (1.2%)	102 (29.4%)	122 (35.2%)	228 (65.7%)	24 (1.1%)	125 (5.8%)	586 (27.2%)	241 (11.2%)	976 (45.2%)	2158
	Uncomplicated chlamydia	2 (0.1%)	27 (1.3%)	656 (30.4%)	497 (23%)	1182 (54.8%)	2 (0.4%)	13 (2.9%)	107 (23.8%)	146 (32.5%)	268 (59.7%)	449
	Genital herpes		2 (0.4%)	53 (11.8%)	126 (28.1%)	181 (40.3%)	10 (0.6%)	60 (3.4%)	369 (20.9%)	308 (17.4%)	747 (42.3%)	1767
	Genital warts		16 (0.9%)	468 (26.5%)	536 (30.3%)	1020 (57.7%)						
<b>Total non-student</b>	<b>3 (0.1%)</b>	<b>50 (1.1%)</b>	<b>1285 (27%)</b>	<b>1304 (27.4%)</b>	<b>2642 (55.6%)</b>	<b>40 (0.8%)</b>	<b>222 (4.7%)</b>	<b>1125 (23.7%)</b>	<b>724 (15.2%)</b>	<b>2111 (44.4%)</b>	<b>4753</b>	
Student	Primary and secondary syphilis			1 (100%)		1 (100%)						1
	Uncomplicated gonorrhoea		3 (4.5%)	23 (34.8%)	3 (4.5%)	29 (43.9%)	2 (3%)	6 (9.1%)	28 (42.4%)	1 (1.5%)	37 (56.1%)	66
	Uncomplicated chlamydia		18 (3.5%)	136 (26.8%)	19 (3.7%)	173 (34.1%)	10 (2%)	56 (11%)	253 (49.8%)	16 (3.1%)	335 (65.9%)	508
	Genital herpes	2 (1.8%)	2 (1.8%)	6 (5.5%)	7 (6.4%)	17 (15.6%)	3 (2.8%)	17 (15.6%)	67 (61.5%)	5 (4.6%)	92 (84.4%)	109
	Genital warts		6 (1.5%)	92 (22.7%)	18 (4.4%)	116 (28.6%)	10 (2.5%)	55 (13.6%)	208 (51.4%)	16 (4%)	289 (71.4%)	405
<b>Total student</b>	<b>2 (0.2%)</b>	<b>29 (2.7%)</b>	<b>258 (23.7%)</b>	<b>47 (4.3%)</b>	<b>336 (30.9%)</b>	<b>25 (2.3%)</b>	<b>134 (12.3%)</b>	<b>556 (51.1%)</b>	<b>38 (3.5%)</b>	<b>753 (69.1%)</b>	<b>1089</b>	
Unknown	Primary and secondary syphilis				1 (100%)	1 (100%)						1
	Uncomplicated gonorrhoea			4 (57.1%)		4 (57.1%)			3 (42.9%)		3 (42.9%)	7
	Uncomplicated chlamydia			13 (41.9%)	5 (16.1%)	18 (58.1%)		1 (3.2%)	7 (22.6%)	5 (16.1%)	13 (41.9%)	31
	Genital herpes			1 (50%)	1 (50%)	2 (100%)						2
	Genital warts			6 (30%)	8 (40%)	14 (70%)		1 (5%)	1 (5%)	4 (20%)	6 (30%)	20
<b>Total unknown</b>			<b>24 (39.3%)</b>	<b>15 (24.6%)</b>	<b>39 (63.9%)</b>		<b>2 (3.3%)</b>	<b>11 (18%)</b>	<b>9 (14.8%)</b>	<b>22 (36.1%)</b>	<b>61</b>	
<b>Total</b>	<b>5 (0.1%)</b>	<b>79 (1.3%)</b>	<b>1567 (26.5%)</b>	<b>1366 (23.1%)</b>	<b>3017 (51.1%)</b>	<b>65 (1.1%)</b>	<b>358 (6.1%)</b>	<b>1692 (28.7%)</b>	<b>771 (13.1%)</b>	<b>2886 (48.9%)</b>	<b>5903</b>	

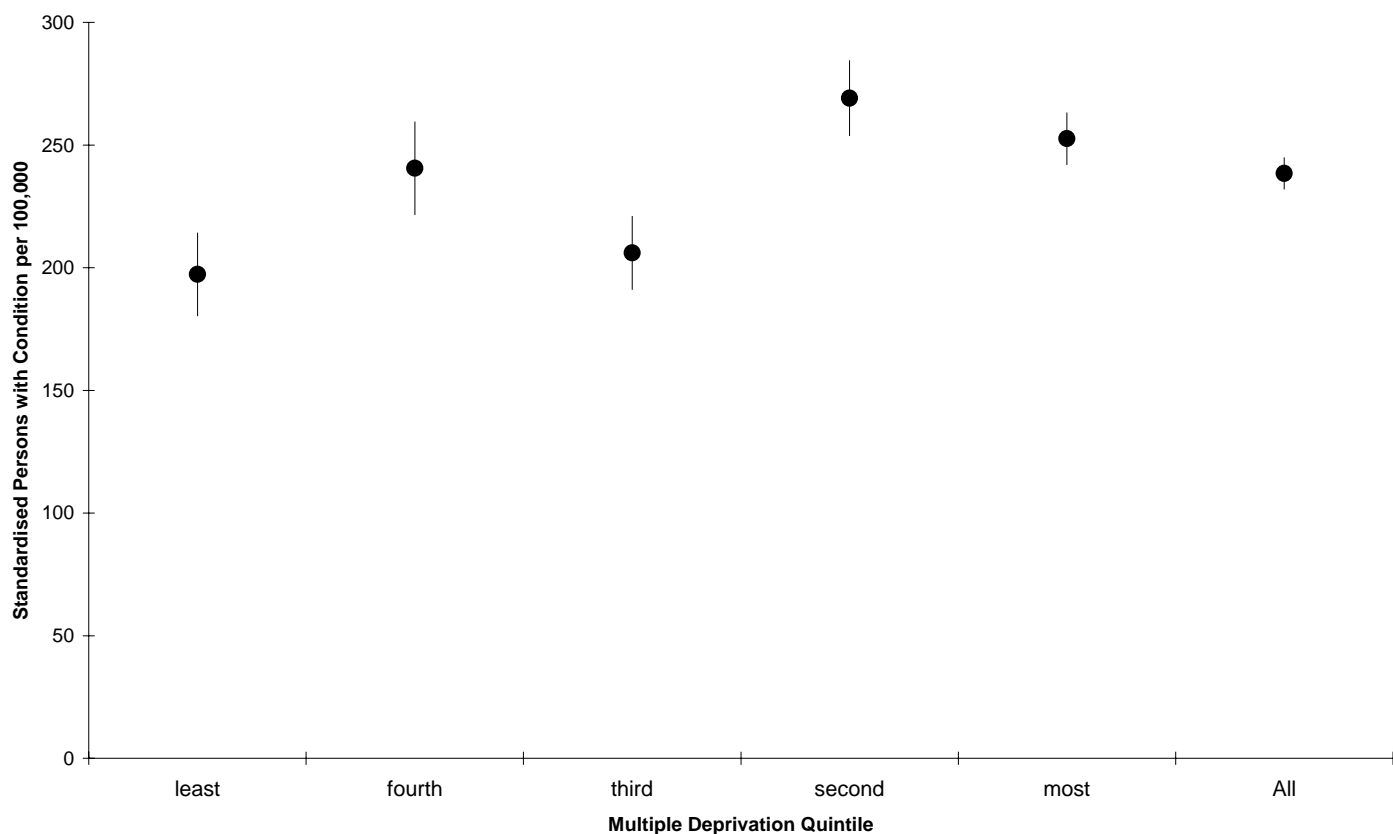
\* Students are defined as those with an entry of 'student' or 'college' in any part of the occupation field.

**Table 12:** Number of key infections\* by PCT of residence by clinic, January-June 2007

PCT	Location										Total
	APH	CHR	HAL	LEI	MAC	RLG	SHH	SPG	WAR		
Central and Eastern Cheshire	1 (0.3%)	25 (3.6%)	4 (1.9%)	462 (82.1%)	246 (74.5%)	3 (0.2%)	461 (78.1%)	6 (1%)	7 (1.2%)	748 (12.7%)	
Halton and St Helens		2 (0.3%)	166 (80.6%)	1 (0.2%)		36 (1.8%)	461 (78.1%)	6 (1%)	65 (10.7%)	737 (12.5%)	
Knowsley	4 (1.2%)	3 (0.4%)	3 (1.5%)			200 (10%)	70 (11.9%)	9 (1.5%)	1 (0.2%)	290 (4.9%)	
Liverpool	11 (3.3%)	1 (0.1%)	2 (1%)			1188 (59.5%)	20 (3.4%)	12 (2%)	1 (0.2%)	1235 (20.9%)	
Sefton						254 (12.7%)	4 (0.7%)	287 (48.9%)		545 (9.2%)	
Warrington	3 (0.9%)	1 (0.1%)	20 (9.7%)	2 (0.4%)		2 (0.1%)	6 (1%)	2 (0.3%)	473 (77.8%)	509 (8.6%)	
Western Cheshire	19 (5.7%)	420 (61%)	2 (1%)	13 (2.3%)		2 (0.1%)	1 (0.2%)		2 (0.3%)	459 (7.8%)	
Wirral	276 (82.1%)	14 (2%)		1 (0.2%)		26 (1.3%)		1 (0.2%)	1 (0.2%)	319 (5.4%)	
Ashton, Leigh and Wigan		1 (0.1%)	1 (0.5%)			9 (0.5%)	12 (2%)	7 (1.2%)	21 (3.5%)	51 (0.9%)	
Bolton							1 (0.2%)	1 (0.2%)	1 (0.2%)	3 (0.1%)	
Central Lancashire						8 (0.4%)	2 (0.3%)	258 (44%)		268 (4.5%)	
Cumbria						1 (0.1%)		1 (0.2%)		2 (0%)	
East Lancashire								1 (0.2%)		1 (0%)	
Heywood, Middleton and Rochdale		1 (0.1%)								1 (0%)	
Manchester		1 (0.1%)			3 (0.9%)	6 (0.3%)	5 (0.8%)		3 (0.5%)	18 (0.3%)	
North Lancashire						2 (0.1%)		1 (0.2%)		3 (0.1%)	
Salford						2 (0.1%)	1 (0.2%)		2 (0.3%)	5 (0.1%)	
Stockport					8 (2.4%)	2 (0.1%)				10 (0.2%)	
Tameside and Glossop		1 (0.1%)								1 (0%)	
Trafford					3 (0.9%)					3 (0.1%)	
Out of region	4 (1.2%)	202 (29.4%)	1 (0.5%)	29 (5.2%)	50 (15.2%)	33 (1.7%)	3 (0.5%)	1 (0.2%)	6 (1%)	329 (5.6%)	
Unknown	5 (1.5%)	11 (1.6%)	7 (3.4%)	41 (7.3%)	16 (4.8%)	220 (11%)	4 (0.7%)		24 (3.9%)	328 (5.6%)	
Cheshire unknown		2 (0.3%)		14 (2.5%)	2 (0.6%)				1 (0.2%)	19 (0.3%)	
Merseyside unknown	13 (3.9%)	3 (0.4%)				1 (0.1%)				17 (0.3%)	
Greater Manchester unknown					2 (0.6%)					2 (0%)	
<b>Total (100%)</b>	<b>336</b>	<b>688</b>	<b>206</b>	<b>563</b>	<b>330</b>	<b>1995</b>	<b>590</b>	<b>587</b>	<b>608</b>	<b>5903</b>	

\*Key infections only (syphilis, gonorrhoea, chlamydia, genital herpes and genital warts).

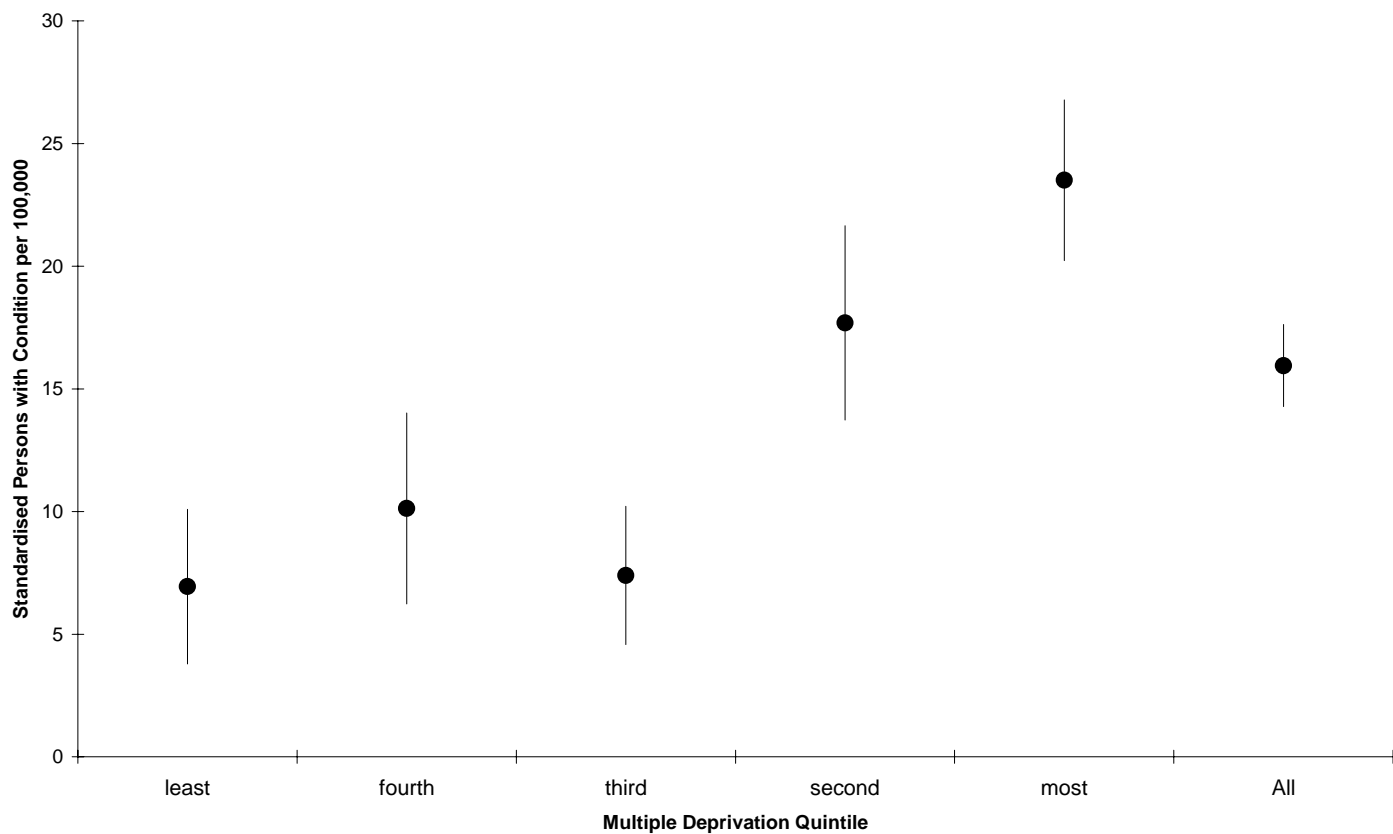
**Figure 1:** Period prevalence of key five infections\* by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

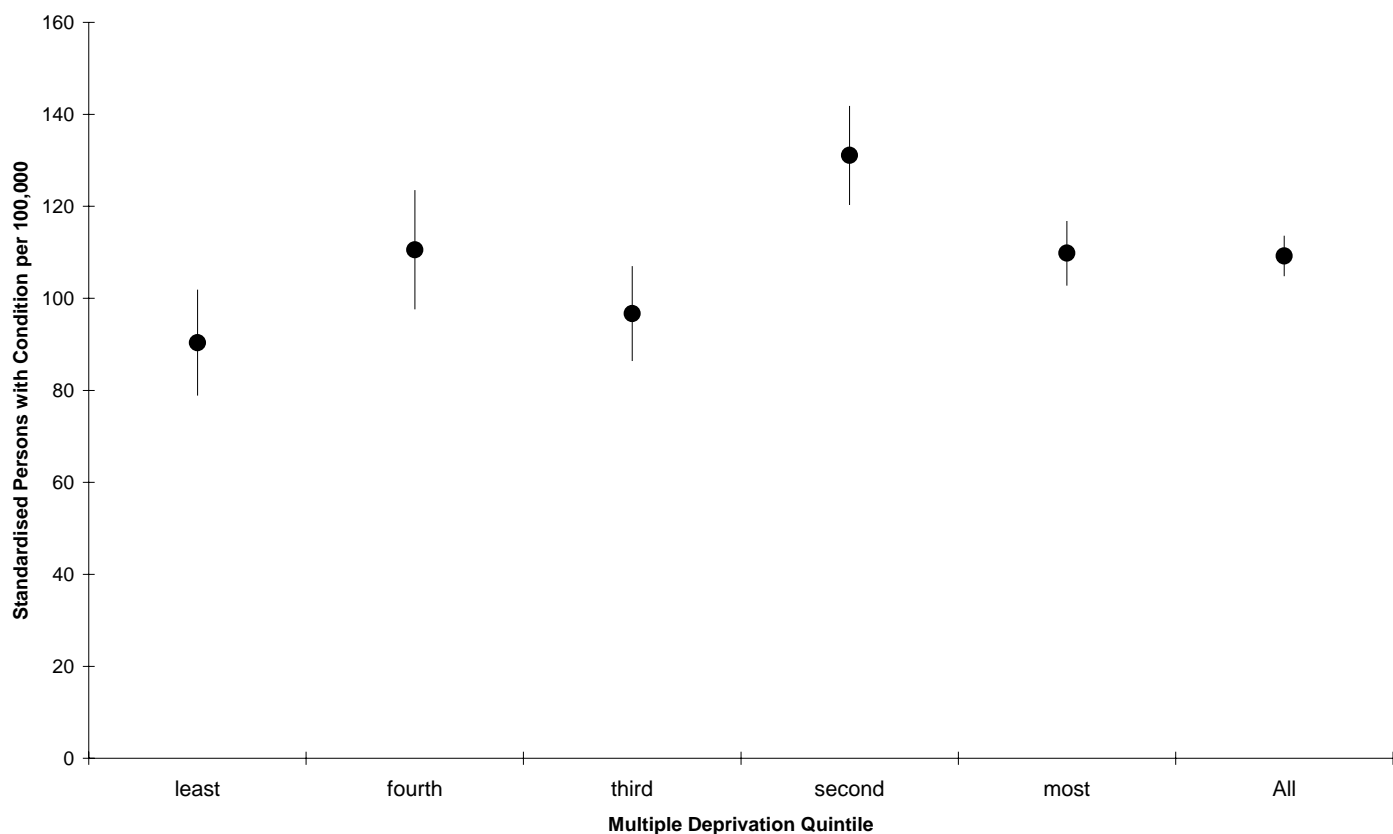
\*Syphilis, gonorrhoea, chlamydia, genital herpes, genital warts.

**Figure 2:** Period prevalence of gonorrhoea by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007



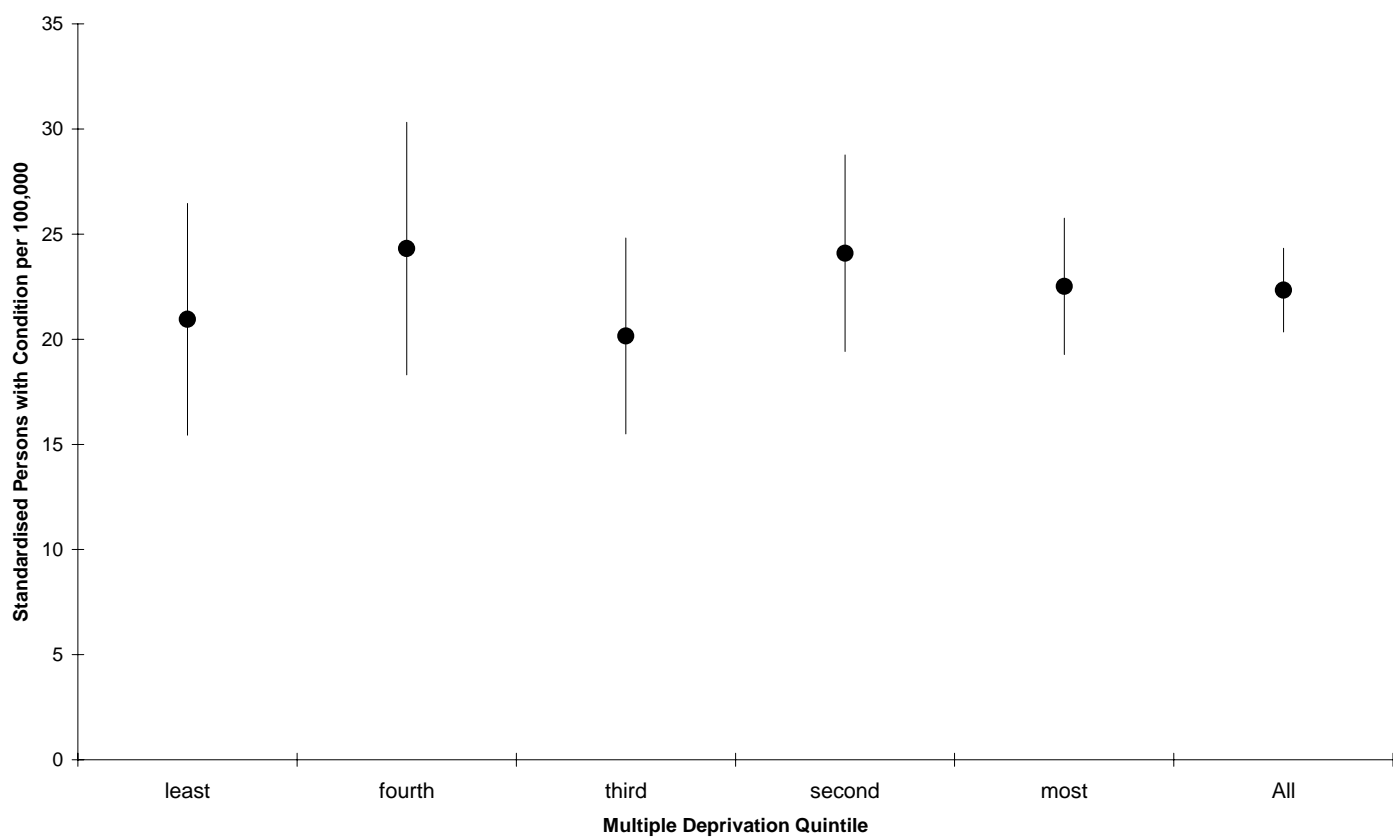
Population data source: Office for National Statistics, © Crown Copyright 2007.

**Figure 3:** Period prevalence of chlamydia by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007



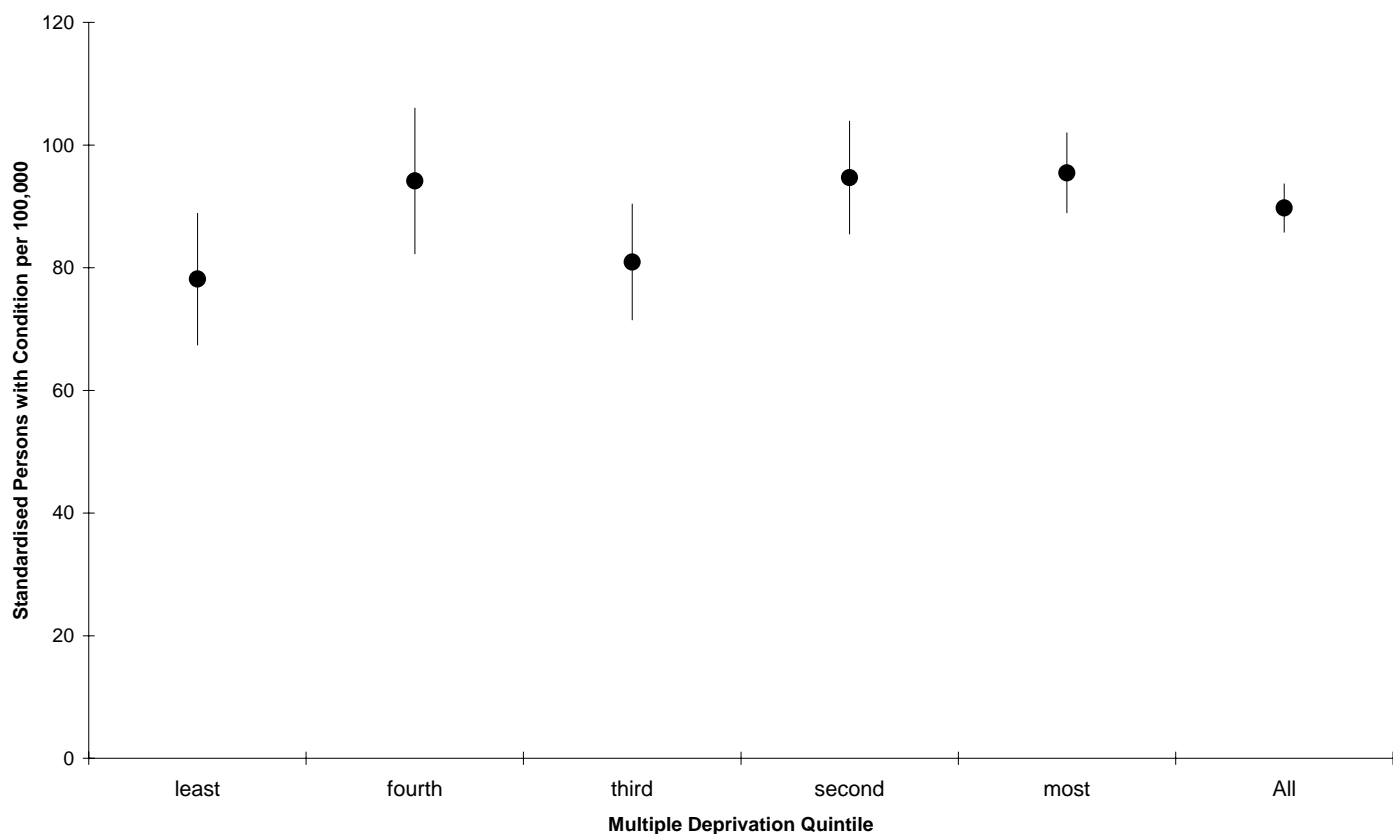
Population data source: Office for National Statistics, © Crown Copyright 2007.

**Figure 4:** Period prevalence of genital herpes by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007



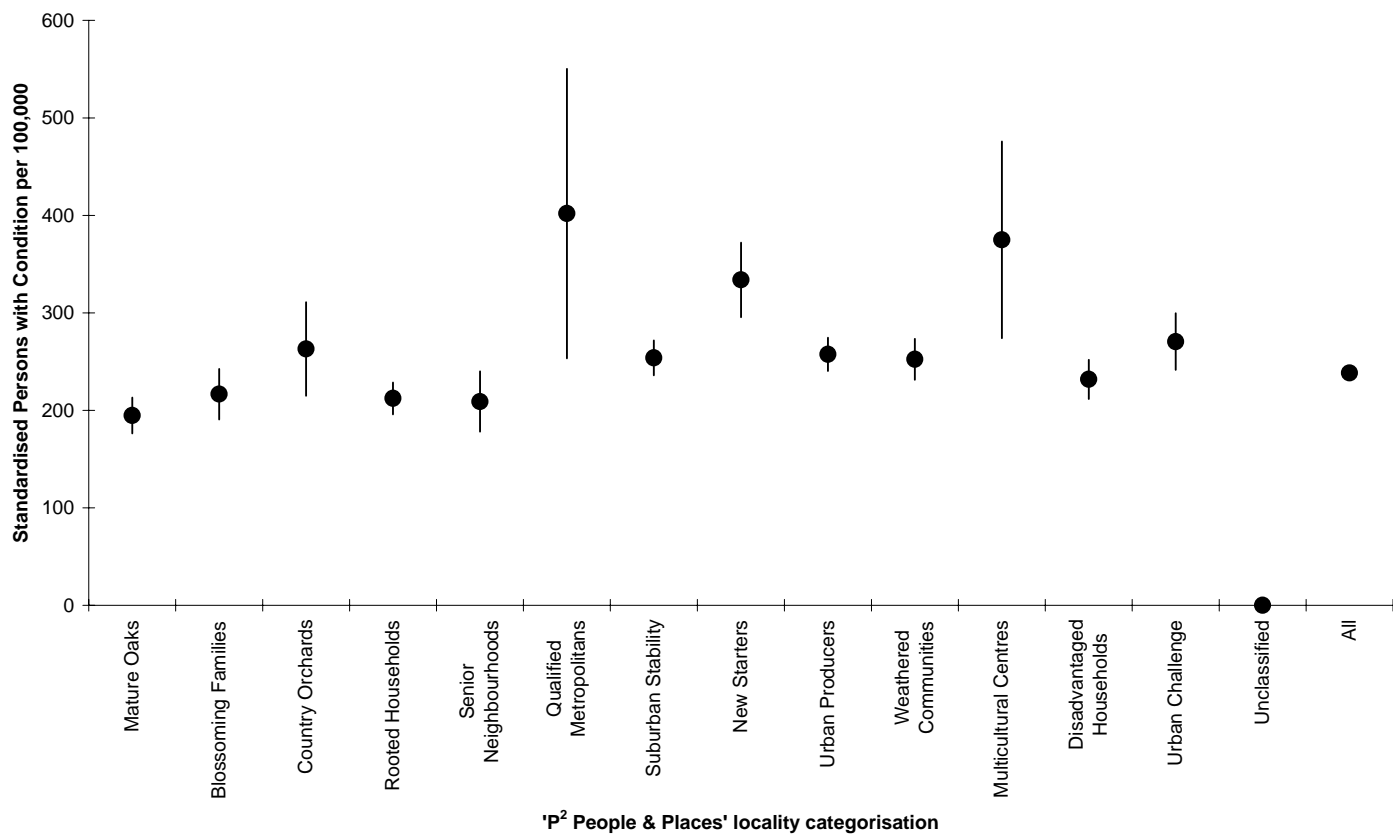
Population data source: Office for National Statistics, © Crown Copyright 2007.

**Figure 5:** Period prevalence of genital warts by index of multiple deprivation quintile, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

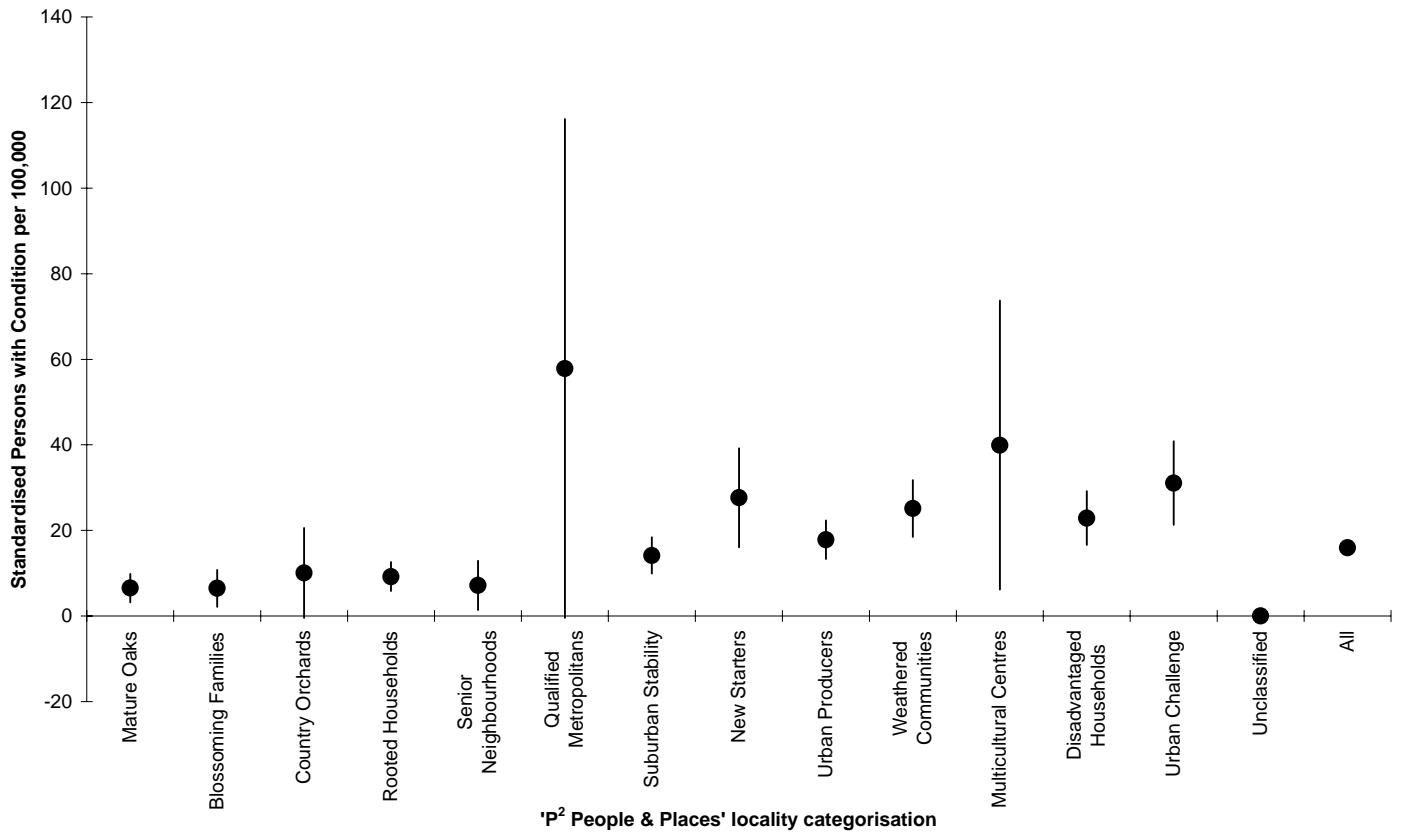
**Figure 6:** Period prevalence of key five infections\* by P<sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

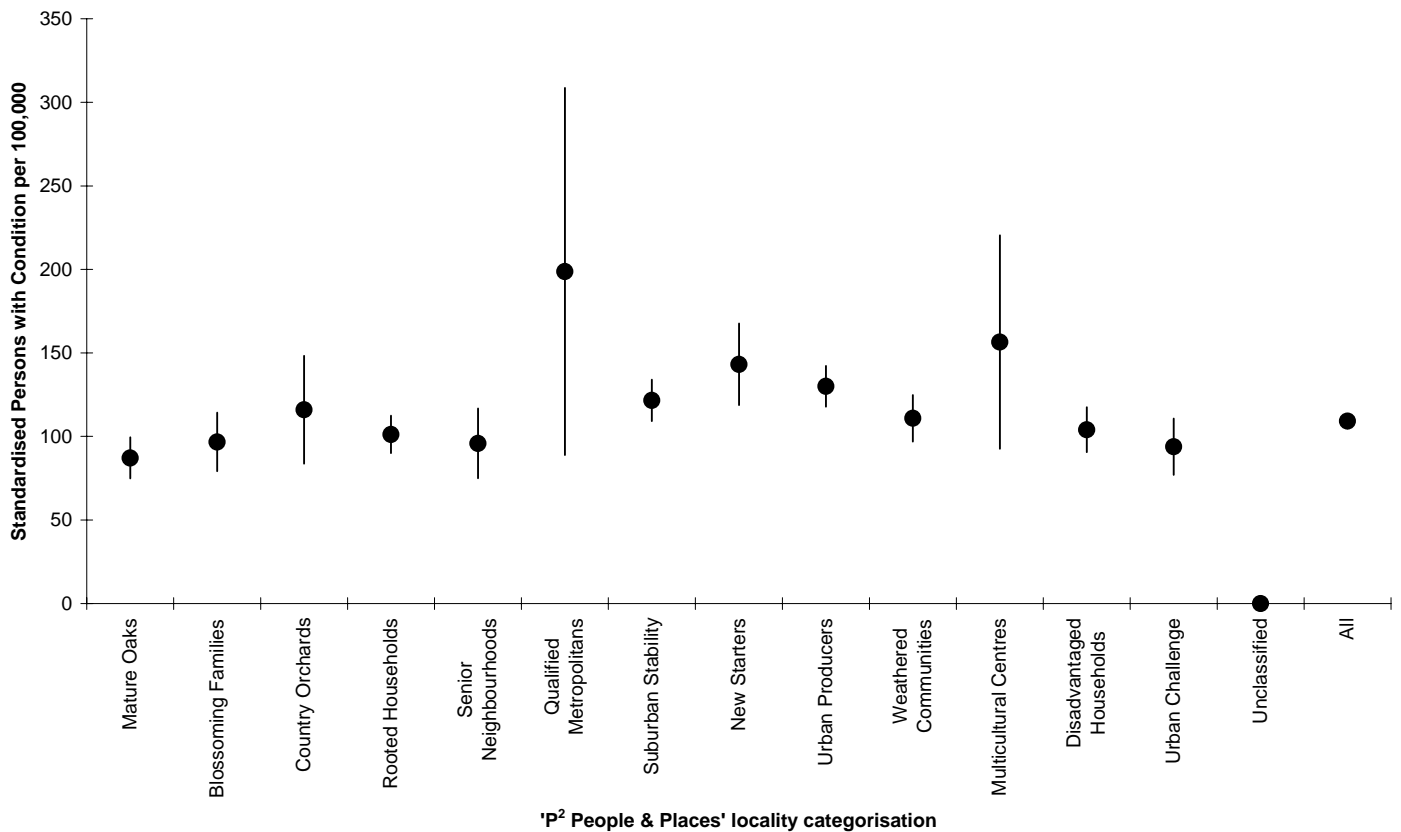
\*Syphilis, gonorrhoea, chlamydia, genital herpes, genital warts.

**Figure 7:** Period prevalence of gonorrhoea by P<sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

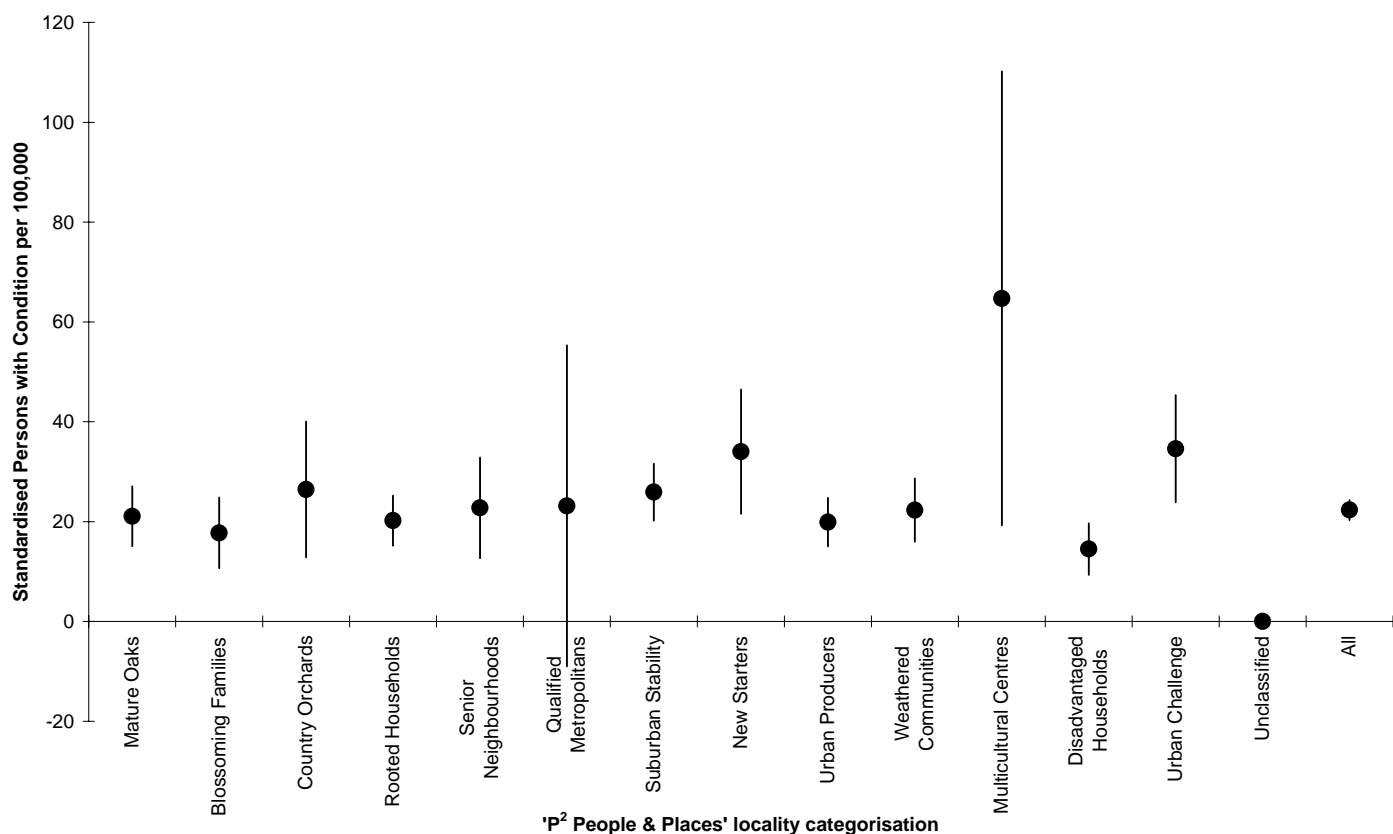
**Figure 8:** Period prevalence of chlamydia by P<sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

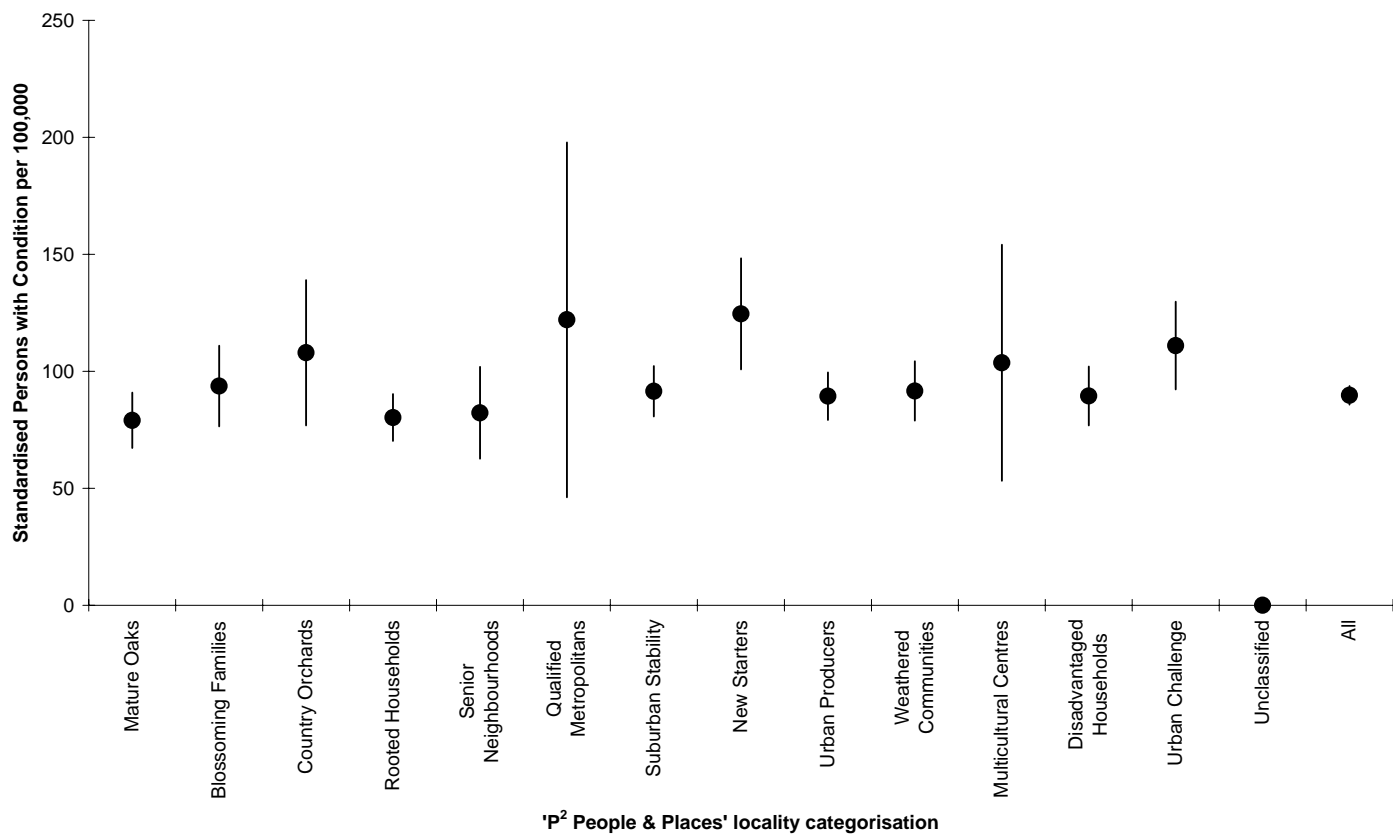


**Figure 9:** Period prevalence of genital herpes by P<sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

**Figure 10:** Period prevalence of genital warts by P<sup>2</sup> People and Places classification, Cheshire and Merseyside residents, January to June 2007



Population data source: Office for National Statistics, © Crown Copyright 2007.

## Appendix A Description of the P2 People and Places Categories

Adapted from Beacon Dodsworth Ltd, [www.p2peopleandplaces.co.uk](http://www.p2peopleandplaces.co.uk)

### 1. Mature Oaks

- Older, prosperous adults. May include pensioners;
- Tend to live in large detached houses which they own outright having finished paying mortgage;
- Live as married couples, grown up children who have moved away;
- Tendency for them to have a car each, generally powerful;
- Read broadsheet and black top newspapers and have keen interest in politics;
- Use leisure time to go on holiday;
- Tend to shop in Sainsbury's;
- Likely to have worked as managers, professionals or employers, many work from home;
- Likely to hold academic qualifications and command a good income.

### 2. Country Orchards

- People working in agriculture in rural areas;
- Older adults, mostly as part of family units;
- Each household has two cars, which are likely to have powerful engines;
- Keen interest in politics and read broadsheet newspapers;
- Tesco supermarket of choice;
- Split between land owners and less wealthy farmers and agricultural workers;
- Many work from home on their own farms. Can have a high income and many also be well educated.

### 3. Blossoming families

- Young families with the parents being young adults aged 25-34 with young infants;
- Parents likely to be a married couple;
- Still paying a mortgage on their homes which tend to be detached properties or semi-detached or terraced;
- These families have at least two cars. Majority have large powerful engines. Family cars with mid-sized engines also popular;
- Black top newspapers are read and shopping mainly done in Sainsbury's, although Tesco is popular;
- Adults well qualified and well paid. Tend to be professionals, managers or employers;
- A large proportion of the females in this category work.

### 4. Rooted households

- Made up of older adults, generally aged 45 and over. Also includes some young families where the parents are aged 25-34;
- Generally semi-detached properties and mortgages are still being paid though some will own their houses outright;
- Typically will have two or more cars, predominantly family cars with mid-sized engines;
- Generally not interested in politics and read black top newspapers;
- Tend to do grocery shopping at Tesco;
- Tend to be skilled manual workers on high wages.

### 5. Qualified metropolitans

- Mainly single, highly qualified adults living in cities, predominantly London;
- Live in single households, mainly flats and bedsits and tend to rent their homes;
- Tend not to have cars and use public transport to get to work, mainly trains;
- Extremely interested in politics and read broadsheet newspapers;
- Majority shop in Sainsbury's;
- Hold higher qualifications and work as professionals in well paid jobs;
- Also includes some cultural diversity.

### 6. Senior neighbourhoods

- Live in detached houses that they own, having finished off paying their mortgages. Some may own a second home;
- Likely to have one car, varying sizes and power;
- Very interested in politics and read broadsheet and black top newspapers;
- Grocery shopping varies from Aldi and Lidl to Tesco, Morrisons and Somerfield;
- Contains pensioners, incomes generally low. However, for some affluence comes from assets rather than income.

### 7. Suburban stability

- The average group encompassing all ages living in the suburbs;
- Families common with parents aged between 25 and 34. Also co-habiting couples in same age group and older adults up to pensionable age;
- Tend to be buying the houses and will still have mortgages to pay. Some also live in rental accommodation, housing association and council properties. Mostly semi-detached or terraced properties;
- Households likely to have one car, generally with a small engine;
- Adults tend not to be interested in politics and read tabloids. Grocery shopping generally done in Asda but also Aldi, Lidl, Morrisons and Somerfield;
- Tend to be skilled manual workers with some being in routine and semi-routine occupations and use cars, bus or foot to get to work.

### 8. New starters

- Young adults aged between 16 and 34. Include students and young working adults;
- Live mainly in single households and women are well represented amongst them;
- Accommodation rented and tends to be bedsits and purpose built flats. Though many live in single households, also a high proportion of couples co-habiting;
- New starters likely to not have a car;
- Very interested in politics and read broadsheet newspapers;
- Likely to smoke;

- Shopping done cheaply in Aldi and Lidl;
- Predominantly students with high levels of qualifications but do not work.

### 9. Multicultural centres

- Predominantly families and includes a broad ethnic mix and includes those of different ethnicity and religion;
- This category includes some richer and some poorer families;
- Live mostly in terraced housing that is housing association or council property. Many also live in bedsits or purpose built flats;
- Generally do not have a car, commuting by train;
- Quite interested in politics and predominantly read tabloid newspapers, although some read broadsheets;
- Some likely to be smokers. Shopping is split between Aldi and Lidl and Sainsbury's;
- Tend to be employed as semi-skilled manual and unskilled workers.

### 10. Urban producers

- Younger adults between the ages of 16 and 34, many with children. A lot of families are single parent households;
- Tend to live in terraced housing, many of these homes can be without central heating;
- Likely to have one car with a small engine per household;
- Not interested in politics and tend to read tabloid newspapers;
- Likely to be smokers and to shop in Asda;
- Do not hold academic qualifications and tend to work as in routine and semi-routine occupations as well as skilled manual, semiskilled manual or unskilled labour;
- Incomes are low and unemployment and long-term unemployment are high, as is long-term illness.

### 11. Weathered communities

- Contains mostly pensioners but also some young adults, aged 16-24 years with children who tend to be single parent families;
- The pensioners in these communities tend to live alone;
- Housing likely to be housing association or council housing, small, semi-detached or purpose build flats;
- Households unlikely to have a car;
- Uninterested in politics and likely to read tabloid newspapers and likely to shop in Asda, Aldi and Lidl;
- Mostly made up of retired adults but some work in routine and semi-routine as well as semi-skilled manual and unskilled jobs which tend to be in manufacturing;
- Unemployment also high as is unemployment due to long-term illness.

### 12. Disadvantaged households

- Conventional and single parent families. Young adults between the ages of 25 and 34 with children;
- Live in council and housing association properties which are mainly purpose built flats and terraced houses which are unlikely to have central heating;
- Unlikely to have a car;
- Not interested in politics, read tabloid newspapers.
- Extremely likely to smoke and do their shopping at Asda;
- Unlikely to have qualifications and employed in routine and semi-routine as well as semi-skilled manual and unskilled labour.
- Many in this category are unemployed and also a lot of long-term illness preventing employment.

### 13. Urban challenge

- Mainly pensioners, particularly aged over 75. Also some young adults between 16 and 24 years, centred mainly in urban areas;
- Tend to be purpose built flats. Accommodation tends to be small and council or housing association owned;
- A lot of these households are pensioners who live alone;
- Very unlikely to own a car;
- Unlikely to be interested in politics and tend to read tabloid newspapers;
- Tend to be smokers and shop at Asda;
- Very unlikely to have any qualifications. Those with jobs work in routine and semi-routine occupations;
- Unemployment, including long term unemployment s high, as are incidences of long term illness.

### Notes:

Unclassified: these describe people whose characteristics are too different for them to fall into another category;

Occupations: routine occupations include jobs such as machine operators, packers, cleaners, labourers, sales assistants, HGV drivers and bar staff.

Semi-routine occupations include jobs such as salesmen, agricultural workers, those working in childcare and service industries.

Newspapers: Broadsheets include The Times, The Telegraph, The Guardian, The Independent, Financial Times. Black tops include The Daily Mail and The Daily Express. Tabloids include The Sun, The Mirror, The Daily Star and The Daily Record.

Appendix B

Figure B1: Number of diagnoses at Arrowe Park Hospital by month, 2006-end June 2007

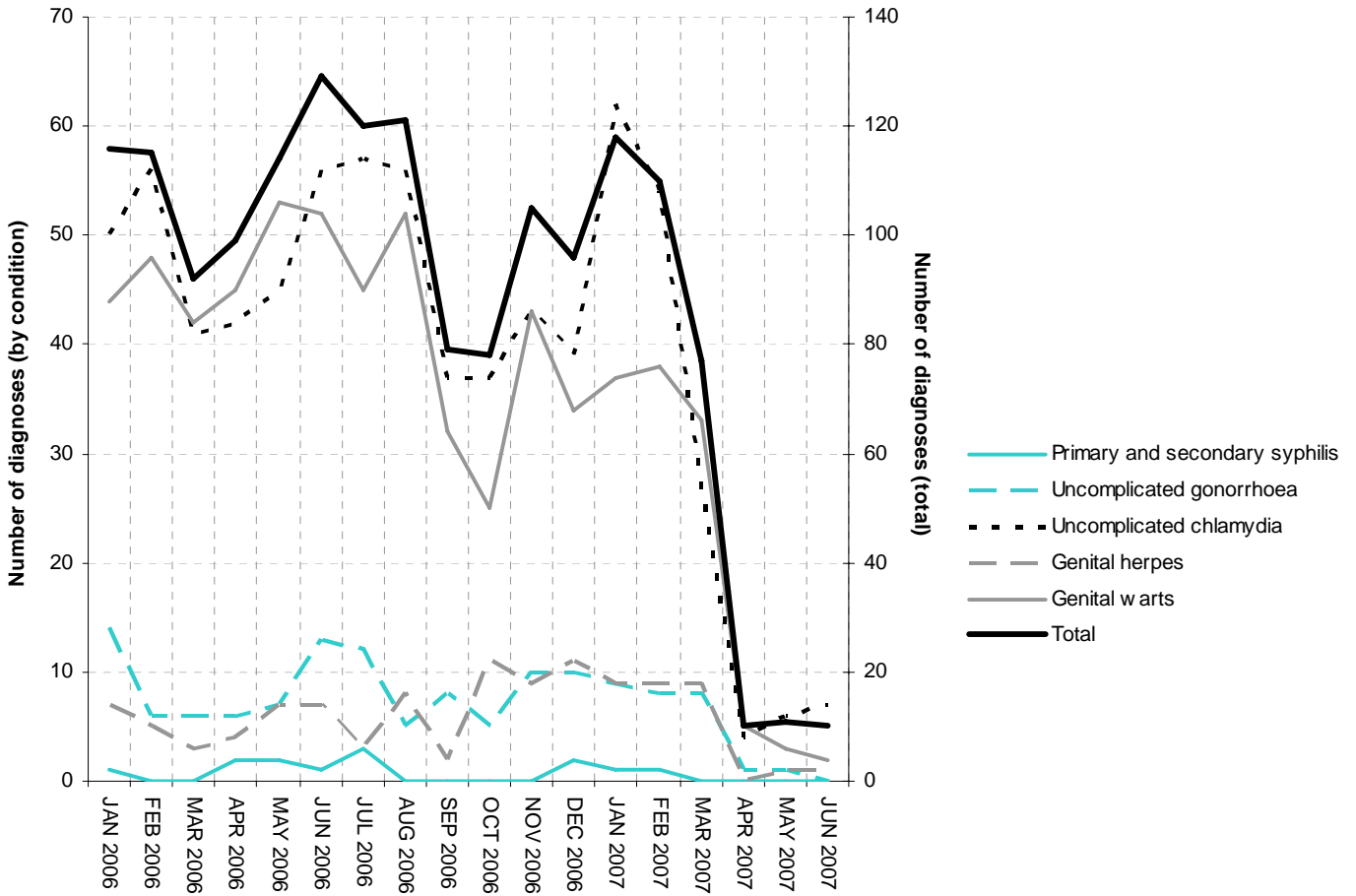
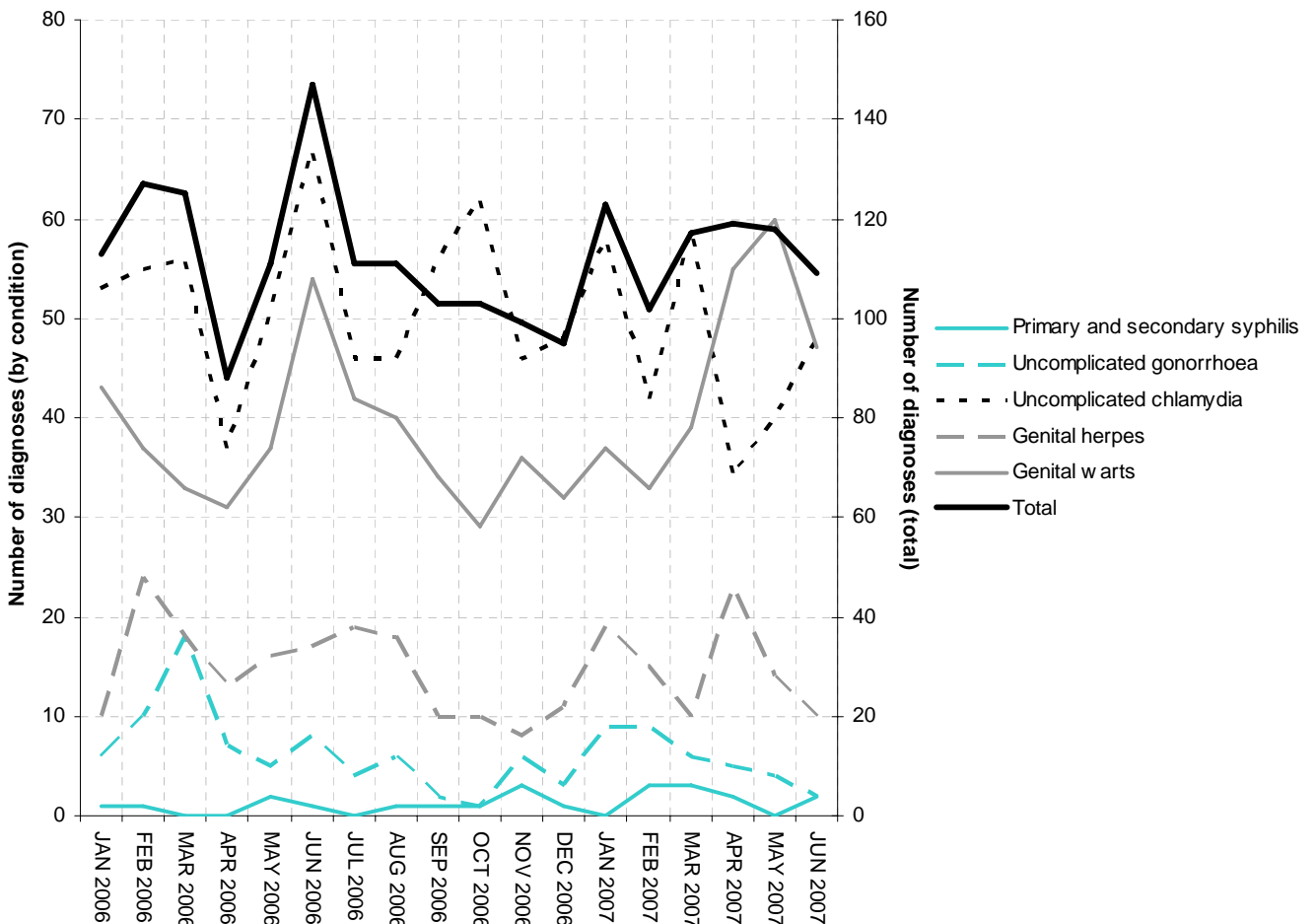
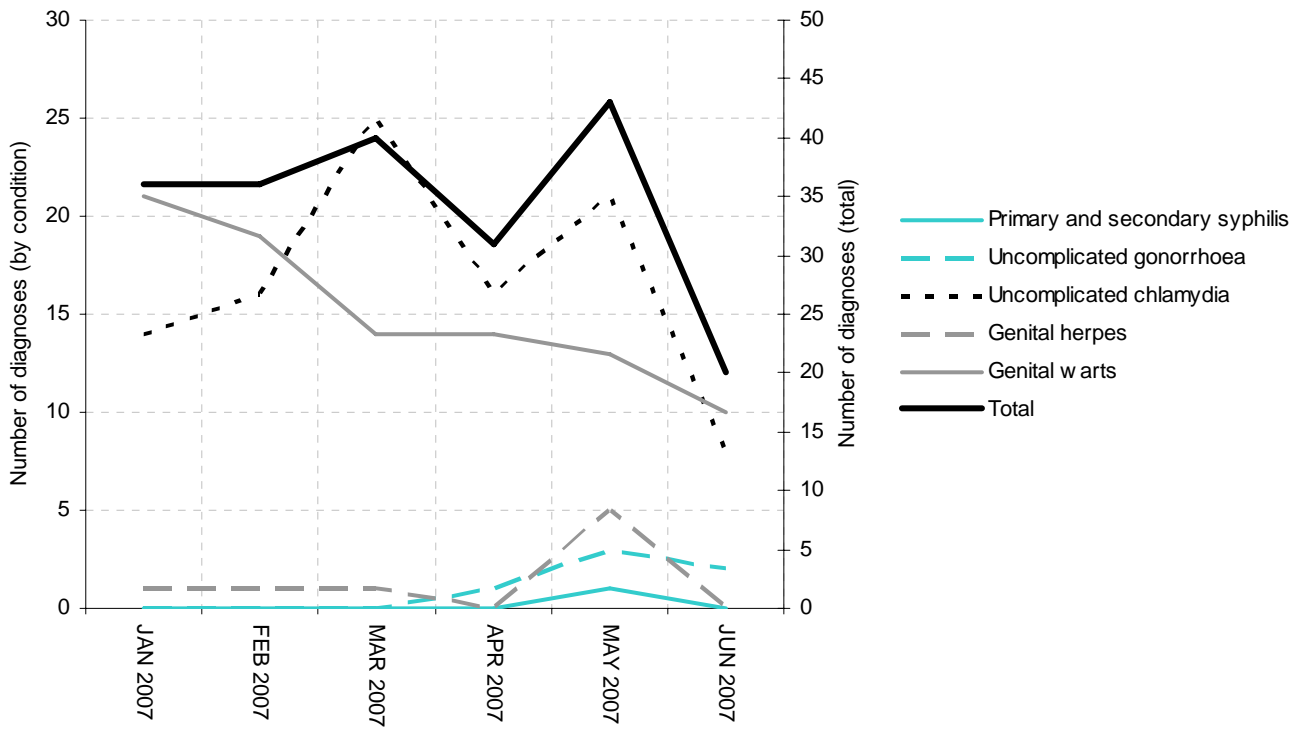


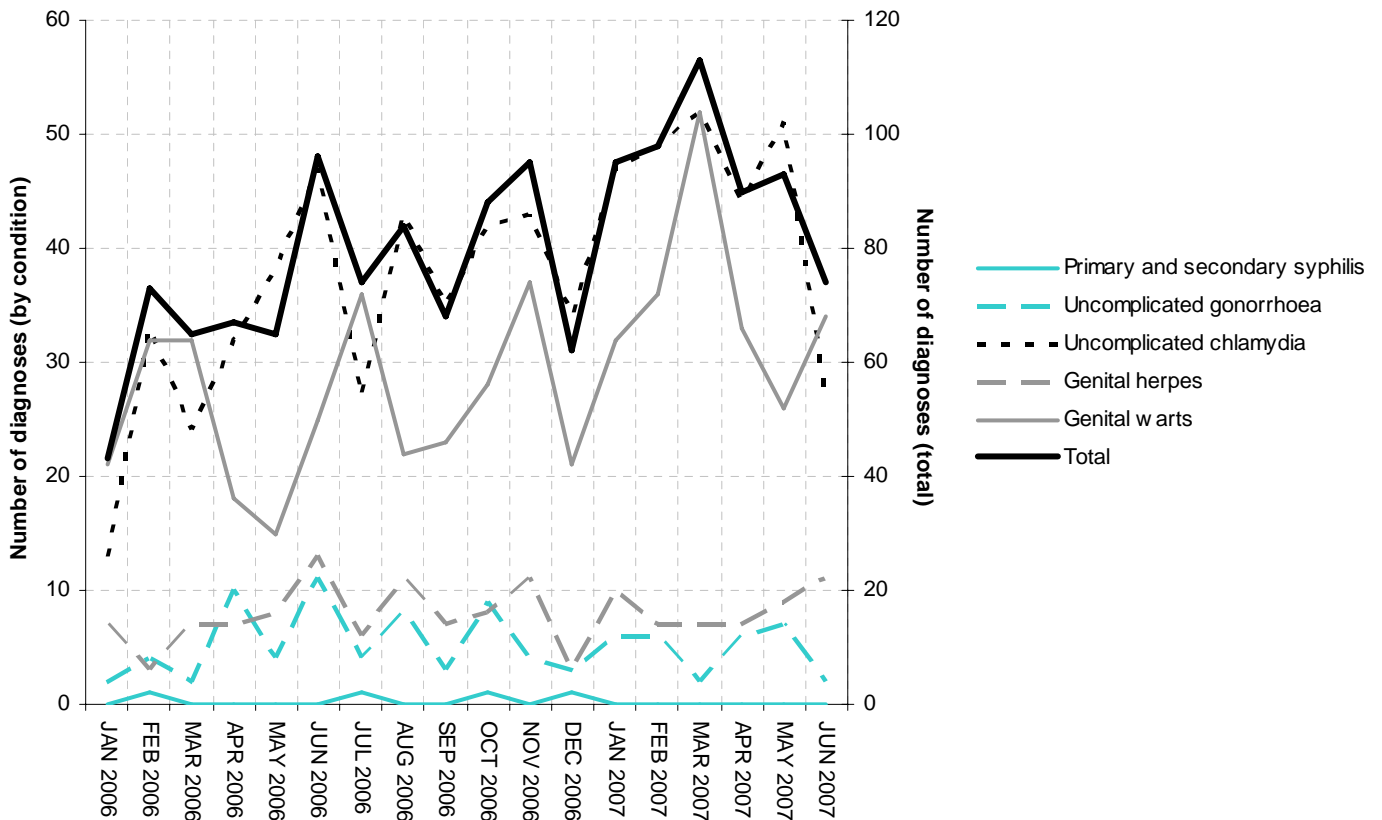
Figure B2: Number of diagnoses at the Countess of Chester Hospital by month, 2006-end June 2007



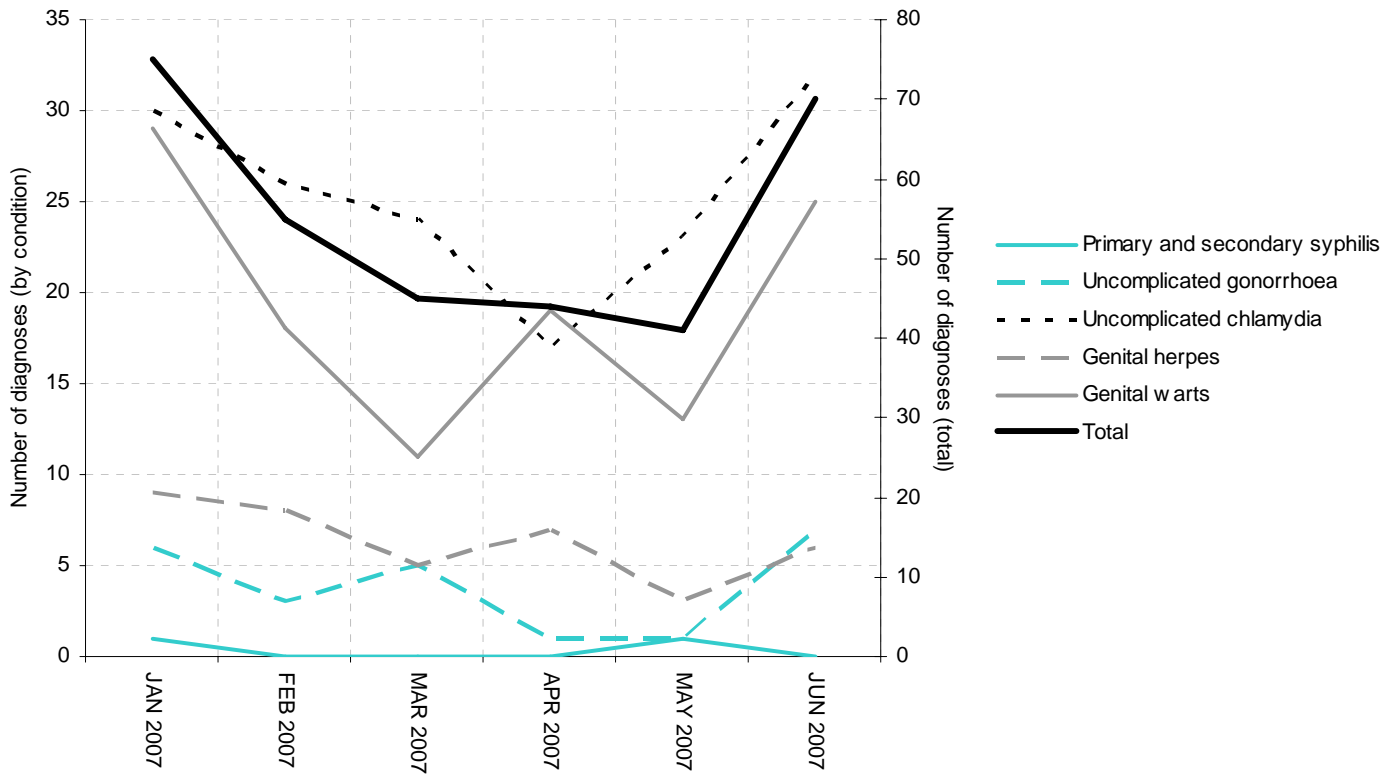
**Figure B3:** Number of diagnoses at Halton Hospital by month, January to June 2007



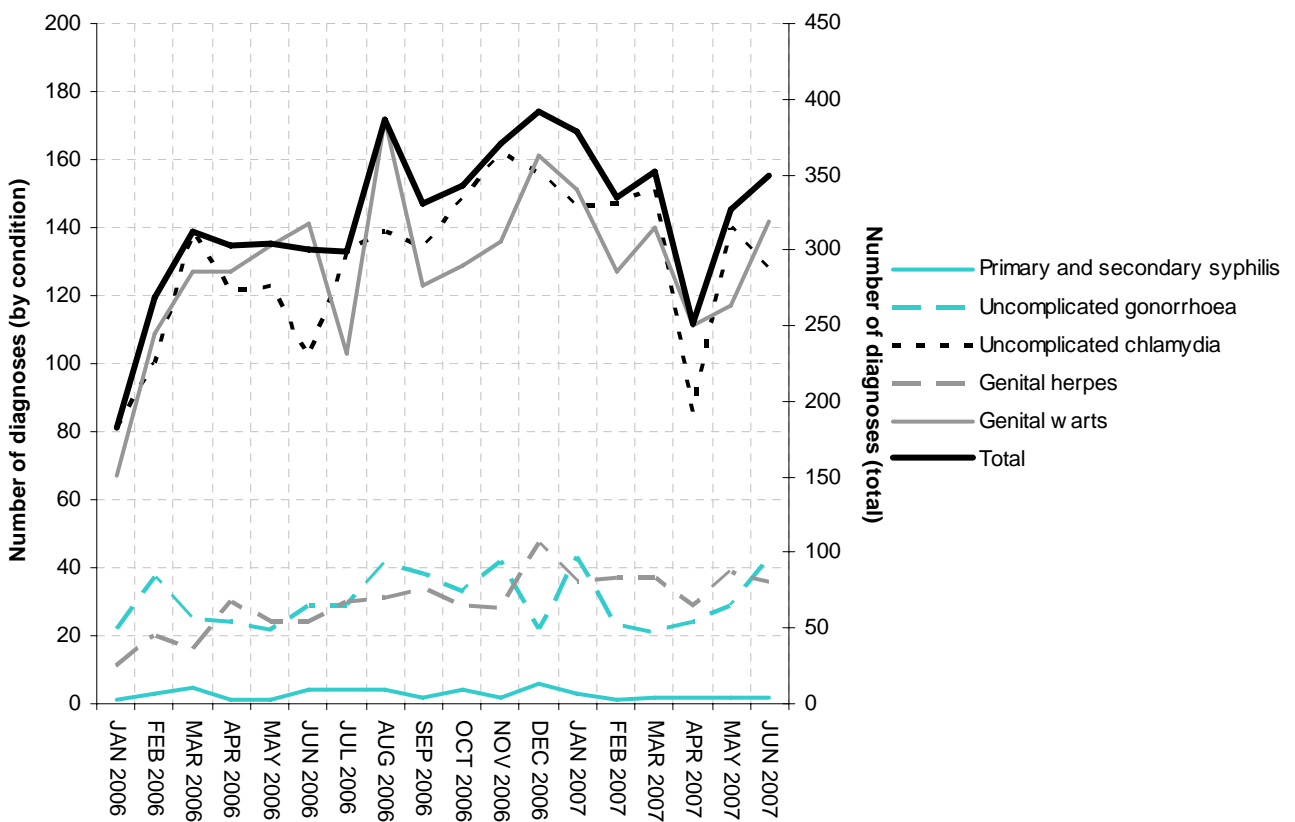
**Figure B4:** Number of diagnoses at Leighton Hospital by month, 2006-end June 2007



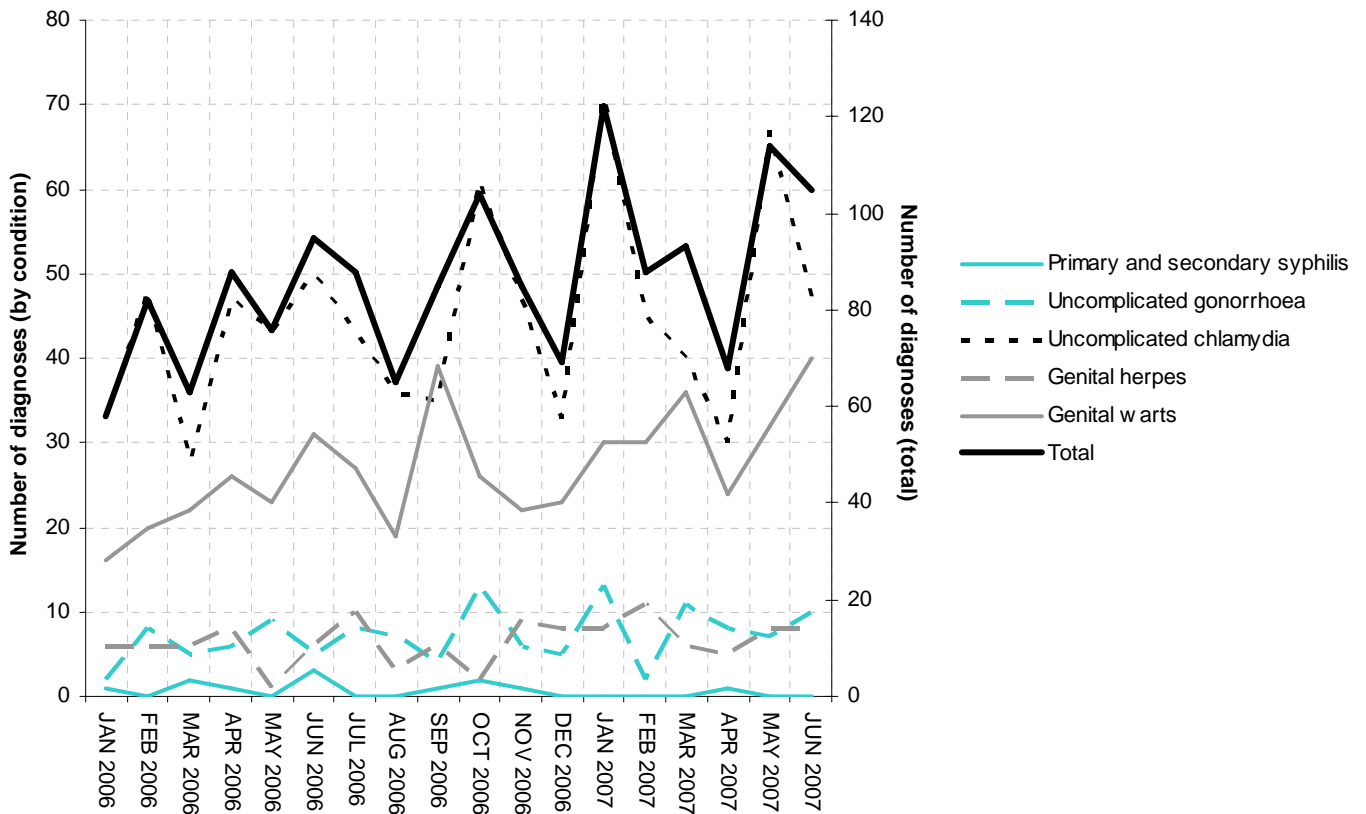
**Figure B5:** Number of diagnoses at Macclesfield GUM by month, January to June 2007



**Figure B6:** Number of diagnoses at the Royal Liverpool University Hospital by month, 2006-end June 2007

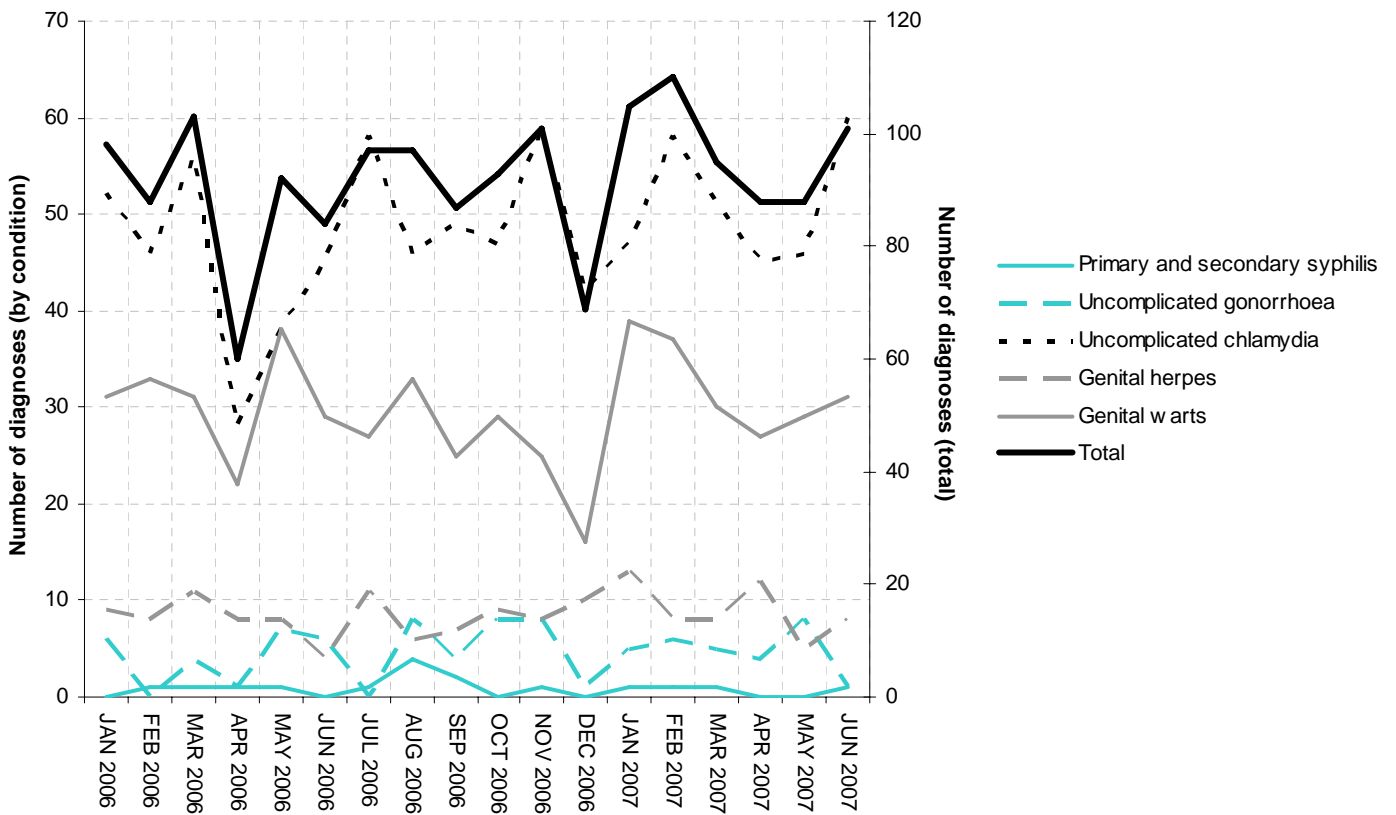


**Figure B7:** Number of diagnoses at St Helens Hospital by month, 2006-end June 2007

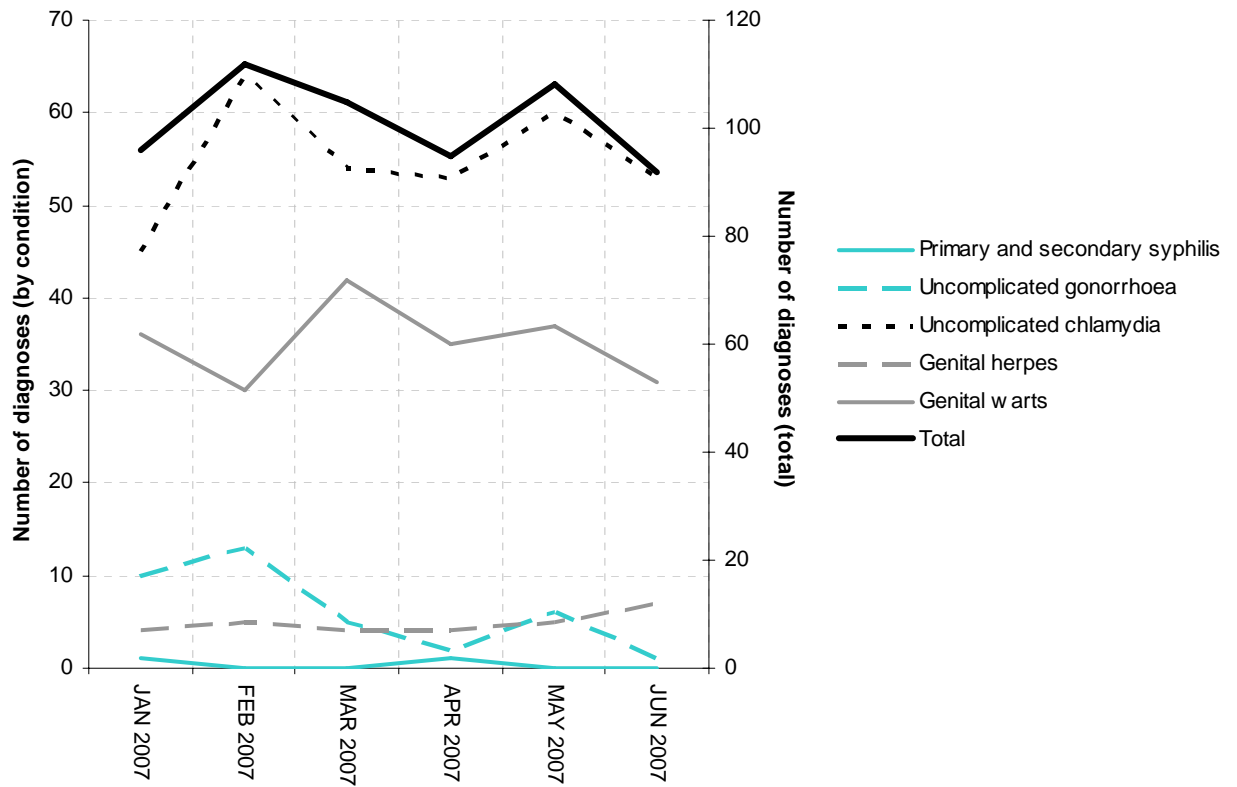


**Figure B8:** Number of diagnoses at Southport and Formby District General Hospital\* by month, 2006-end June 2007

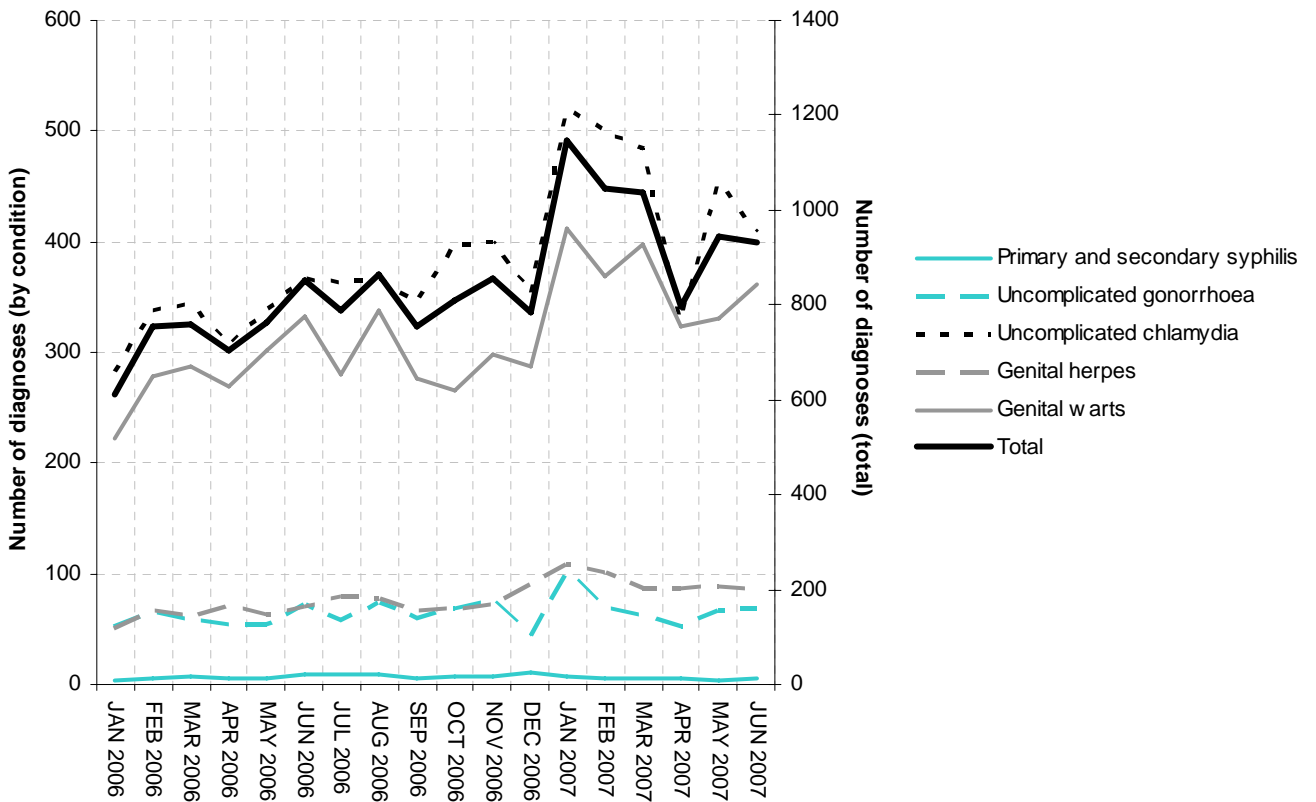
\*Includes some data from Ormskirk and District General Hospital



**Figure B9:** Number of diagnoses at Warrington Hospital by month, January to June 2007

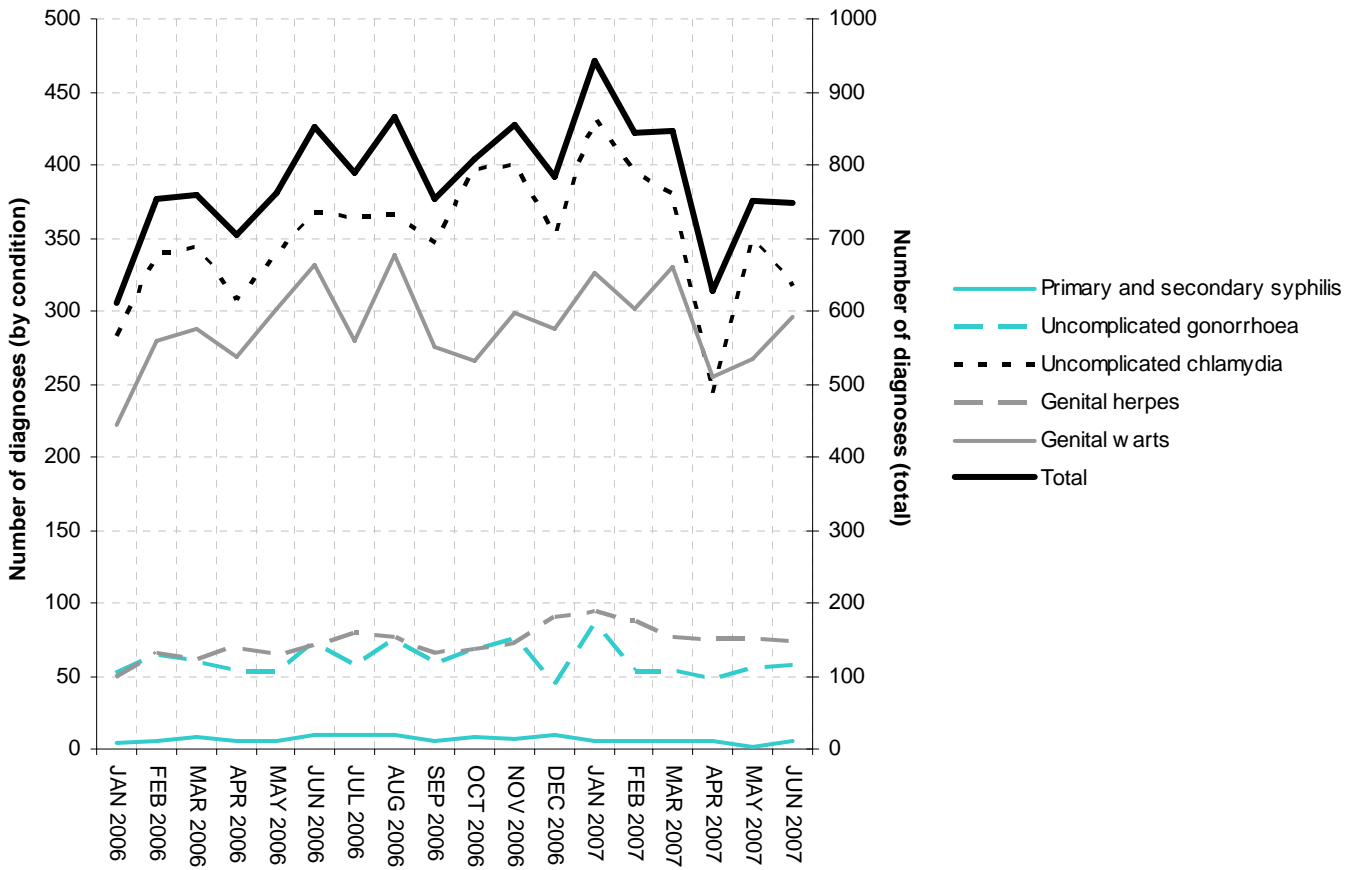


**Figure B10:** Number of diagnoses by month for all clinics, 2006-2007





**Figure B11:** Number of diagnoses by month for clinics involved in surveillance in 2006 and 2007\*  
 \*Clinics involved in both years: APH, CHR, LEI, RLG, SHH and SPG





Enhanced Surveillance of  
**Sexually Transmitted Infections**  
in Cheshire and Merseyside Mid Year 2007

Suzy C. Hargreaves, Penny A. Cook and Mark A. Bellis

Published by the  
Sexual Health Team,  
Centre for Public Health, Research Directorate  
Faculty of Health and Applied Social Sciences  
Liverpool John Moores University  
Castle House, North Street  
Liverpool, L3 2AY  
Telephone: +44 (0)151 231 4448/4517  
Fax: +44 (0)151 231 4515

September 2008

ISBN: 978-1-906591-10-6 (web version)

[www.cph.org.uk](http://www.cph.org.uk)