Moving Forward

Sexually Transmitted Infections, including HIV, in Scotland 2005
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Key epidemiological facts and figures: changes between 2004 - 2005

◊ Genito-urinary Medicine (GUM) clinic workload
   a 10% increase in workload was observed.

◊ Genital chlamydia
   numbers of diagnoses increased by 8% to 17,289; more than half were managed in non-GUM clinic settings. Chlamydia predominantly affects young people.

◊ Pelvic Inflammatory Disease and Ectopic Pregnancy
   no evidence of a rise in the levels of hospital admissions for these conditions was evident.

◊ Gonorrhoea
   the number of diagnoses increased by 7% to 904; half of cases were men who had sex with men (MSM).

◊ Genital Herpes
   the number of diagnoses increased by 4% to 1,332; a 9% increase in women and a 4% decrease in men was observed.

◊ Infectious Syphilis
   the number of diagnoses remained static at 188; 91% of cases were MSM.

◊ Genital Warts
   the number of diagnoses increased by 3% to 6,451; this is the outcome of the most common acute viral STI (human papilloma virus) diagnosed in the GUM clinic setting.

◊ HIV infection
   the number of diagnoses increased by 11% to 405; this is the highest annual number of newly identified cases on record.
Introduction

This is the second annual report on sexually transmitted infections (STIs) in Scotland produced by the Sexually Transmitted Infection Epidemiology Advisory Group (STIEAG). This report brings together information from a number of sources, including laboratories, genitourinary medicine (GUM) clinics, and primary care, and also some of the more specialised data collection systems relating to HIV.

The layout is similar to that of last year and includes for the first time sections on ethnicity and on two conditions which are related and may be long-term consequences of STI – ectopic pregnancy and pelvic inflammatory disease.

Last year, we included a section which described the healthcare settings involved with STIs and the nature and source of the surveillance data (Chapter 1 in “Setting the Scene”). This year we have included this information as an appendix.

During the preparation of this report, we have liaised with colleagues in the Health Protection Agency (HPA) in London and have arranged that the HPA’s UK report and our Scottish report will be published at the same time. This will enable readers to see the Scottish information in the context of the situation in the rest of the UK. Both reports are being published shortly before World AIDS day in order to maximize the impact of the information.

The sexual health strategy for Scotland, “Respect and Responsibility”, recognizes the importance of information as a way of describing and understanding the sexual health of the population, and also monitoring change. This report is contributing to this process and the editorial group are keen to improve future publications. We would therefore like to receive feedback from readers. Please tell us what information you would find helpful. In particular, we would be interested to know whether it would be useful to expand the scope of this report to cover other aspects of sexual health such as teenage pregnancy and contraception use.
Chapter 1

The Genitourinary Medicine Service: Policy and Workload

Policy

Respect and Responsibility

◊ In January 2005, after extensive consultation, *Respect and Responsibility: A Strategy and Action Plan for Improving Sexual Health* was published by the Scottish Executive. This strategy has been supported by extra investment of £15 million over the three financial years April 2005 to March 2008.

◊ The strategy has highlighted the importance of STIs and has already led to the improvement of GUM clinic services; this includes the development of outreach clinics in Edinburgh and integrated community sexual health clinics in Glasgow.

◊ To support the implementation of *Respect and Responsibility*, a “National Sexual Health Advisory Committee” (NSHAC) was formed. Two of the specific actions of this committee are of direct relevance to STI surveillance.

• Action 12 relates to the development of a number of key clinical indicators to help monitor the progress of the strategy. Five indicators have been developed and data will be available soon; others are being developed. Three of the initial five indicators are directly relevant to STIs:
  
  » Key Clinical Indicator 1 – *Chlamydia*. The proportion of the population within each NHS Board having a chlamydia test and the proportion of those tests which are positive. The data will be analysed by gender and be age stratified.
  
  » Key Clinical Indicator 4 – *HIV Therapy*. The proportion of HIV positive people in specialist care and eligible for anti-retroviral therapy (ART) who have been treated and the proportion of those treated who have an undetectable viral load.
  
  » Key Clinical Indicator 5: *Hepatitis B Vaccination for men who have sex with men*. The proportion of men who have sex with men attending a GUM clinic and eligible for hepatitis B vaccine who receive their first dose in this setting.

• Action 13 seeks to improve data collection and will make recommendations to NSHAC regarding a national data collection framework for sexual health:
  
  » This work is progressing and is likely to propose a number of changes to the collection of surveillance data.

◊ NHS Quality Improvement Scotland are developing standards for sexual health services.

◊ The National Clinical Dataset Development Programme (NCDDP) is developing data standards for sexual health. This standardizes the descriptions of data collected in sexual health care settings so that any information developments in Scotland which relate to sexual health will all use the same definitions.

National Sexual Health System (NaSH)

◊ NaSH is a new clinic management system which is being developed to support sexual health services throughout Scotland. This is part of the NHSScotland National eHealth Strategy.

◊ The NaSH system will be provided for GUM clinics and Family Planning clinics. Eventually, it may be used in other settings providing sexual health care.

For further information see: http://www.nash.scot.nhs.uk/index.html
Workload

◊ There is a sixfold variation in rates of attendance by NHS Board of residence of patients with the highest being among the residents of Lothian NHS Board.

◊ Some patients choose to cross NHS Board boundaries to obtain treatment, but some of the variation in rates probably relates to lack of provision of local services.

◊ Overall workload (all diagnoses, screens and conditions seen) continues to rise: a 10% increase was observed between 2004 and 2005. This is partly explained by the large increase in uptake of HIV testing which had a particular impact in 2004.

◊ A high proportion of new attendees at GUM clinics in 2005 received an STI screen and an HIV test.
Sexually Transmitted Infections

Chapter 2

Genital chlamydia

Background and recent trends

- Genital chlamydia infection is caused by the organism *Chlamydia trachomatis*. Most cases are asymptomatic. In women, chlamydia can cause tubal scarring which may result in infertility. This can be prevented by early detection and treatment.

- The number of chlamydia diagnoses in Scotland increased by 8% (16 069 to 17 289) between 2004 and 2005 and by 63% (10 638 to 17 289) between 2001 and 2005.

- Most chlamydia infections (54%) were diagnosed and managed in non-GUM clinic settings.

- Throughout Scotland sensitive molecular nucleic acid amplification tests (NAAT) are used to detect chlamydia; these allow the testing of non-invasive urine or self-taken vulvovaginal swabs.

Who was affected: 2005?

- Almost twice as many genital chlamydia diagnoses were made in women; (1.8:1 ratio).

- 12% and 6% rises in the number of diagnoses in men and women, respectively, were observed between 2004 and 2005.

- Approximately two thirds of women were diagnosed in non-GUM clinic settings whereas two thirds of men were diagnosed in a GUM setting.

- Over 70% of genital chlamydia diagnoses were in those aged less than 25 with the majority of diagnoses in those aged 20-24 for both men and women.

- 3.4% of all women diagnosed at GUM clinics had suspected upper genital tract or pelvic infection. This was most prevalent among women aged less than 25 (78%).

- Nearly 5% of men diagnosed with chlamydia had a rectal infection. Two thirds of these rectal infections occurred in men aged 25-44.
Geographical distribution: 2005

- For all clinical settings, the highest diagnosis rates among both men and women were observed in Tayside, Lothian and Greater Glasgow NHS Boards.

- Between 2004 and 2005, diagnoses in women in all clinical settings increased in seven NHS Boards, with the largest increases in Tayside, Lanarkshire and Shetland, although the numbers are low in the latter NHS Board.

- In men, an increase was observed in nine NHS Boards – the largest increases were observed in Lanarkshire, Tayside and Orkney NHS Boards, although the numbers are low in the latter NHS Board.

- In the GUM clinic setting, the highest diagnosis rates among women were noted in residents of Tayside, Fife and Forth Valley, and among men, in residents of Fife, Lothian and Tayside NHS Boards.

- For both men and women, an increase in diagnosis rates at GUM services was observed in nine of the 15 NHS Boards in existence in 2005.

- The largest increases in diagnoses among women were observed among residents of Lanarkshire, Grampian and Lothian NHS Boards.

- In men, the largest increases were in Lanarkshire, Tayside and Dumfries & Galloway NHS Boards, although the numbers are low in the latter NHS Board.
Chlamydia testing in Scotland

- The Scottish Intercollegiate Guidelines Network (SIGN) guidelines on the management of chlamydia infection recommend the opportunistic screening of all sexually active women aged less than 25, all men attending GUM clinics and symptomatic men in any clinical setting.\(^3\)

- Data on persons undergoing chlamydia testing were available for 2005 from 14 of the 15 testing laboratories throughout Scotland as part of the requirement to address key clinical indicators for the National Sexual Health Advisory Committee (NSHAC).

- All testing laboratories use highly sensitive and specific molecular-based diagnostic assays (nucleic acid amplification tests, NAATs) as recommended by SIGN guideline 42.\(^3\)

- Chlamydia testing remains suboptimally targeted to those who most need it: the majority of chlamydia testing is performed in persons aged over 25. Almost four times as many positive diagnoses were made in young women (aged less than 25) undergoing testing than in older women.

- In men, 18% aged less than 25 were positive for chlamydia compared to 12% of young women. Among men who are tested, higher positivity rates at all ages are consistently observed.

- These data suggest significant retargeting of chlamydia testing to those at risk is required for maximal case detection.

- The development of a prospective system to monitor chlamydia testing practice at a national, regional and local level is required.

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#### Table 2.1: Prevalence of genital chlamydia in those undergoing testing by age group in men and women in Scotland, 2005.*

<table>
<thead>
<tr>
<th>Age group (y)</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number tested (%)</td>
<td>Number positive (%)</td>
</tr>
<tr>
<td>&lt;25</td>
<td>79 994 (46.2)</td>
<td>9253 (11.6)</td>
</tr>
<tr>
<td>&gt;25</td>
<td>93 118 (53.8)</td>
<td>2597 (2.8)</td>
</tr>
<tr>
<td>All ages</td>
<td>173 112 (100)</td>
<td>11 850 (6.8)</td>
</tr>
</tbody>
</table>

* Data are provisional as some results may include duplicates and apply to a small number of ophthalmic samples.

Data source: chlamydia testing laboratories in Scotland.
Pelvic inflammatory disease and ectopic pregnancy

- Ascending chlamydia infection may cause acute pelvic inflammatory disease (PID); a number of other micro-organisms can also cause PID, most notably other sexually transmitted infections such as gonorrhoea.4
- The natural history of chlamydia infection is not fully elucidated but in an appreciable proportion of women chronic inflammation leads to scarring and damage to the fallopian tubes. This may lead to ectopic pregnancy and also infertility.
- The numbers of admissions to hospital for PID have fallen over the past 25 years and admissions for ectopic pregnancy have also fallen slightly over recent years.
- Some of the fall in levels of PID may relate to diagnostic accuracy or to a tendency to treat women earlier and in the community, rather than by admission to hospital. Nevertheless, there is certainly no evidence of an increasing problem.
- The majority of ectopic pregnancies will generate a hospital episode, so the pattern of an increase until the mid nineties followed by a slight fall and a leveling off is probably an accurate representation of the underlying disease incidence.
- It is reassuring that despite high and rising levels of diagnosed chlamydia infection, there does not seem to be a concomitant rise in PID or ectopic pregnancy.

**Figure 2.6: Admissions to hospital with a primary diagnosis of either ectopic pregnancy or pelvic inflammatory disease, 1981-2005**

Data source: SMR01 and SMR02
Gonorrhoea

Background and recent trends

◊ In 2005, 904 diagnoses of gonorrhoea were made – a 7% increase from 2004 (845)
◊ This is the highest number of diagnoses recorded during the past ten years.
◊ The increase observed during 2005 reflects an increase in the number of diagnoses in both men (6%) and women (10%).
◊ In 2005, 84% of infections among men and 62% among women, were diagnosed in GUM clinics.
◊ In the GUM clinic setting, in other areas of the UK, diagnoses of gonorrhoea have been decreasing, most notably in all regions of England, particularly in the East of England region and in London.  
◊ Since the mid 1990s the number of diagnoses has been increasing each year, almost doubling between 1998 and 2001; much of this increase reflects transmission among men who have sex with men (MSM).
◊ During 2005, gonorrhoea diagnosis rates per 100 000 population among women and men in Scotland were lower than those in the majority of English Health Authority areas – only six of the 28 English areas had lower rates.

Who was affected: 2005?

◊ Three quarters (78%) of gonorrhoea diagnoses were among men.
◊ Almost half (48%) of all men with gonorrhoea infection were men who had sex with other men (MSM). This fraction is higher in Scotland than in any other part of the UK.
◊ Twelve per cent of infected men had rectal gonorrhoea - an indicator of recent, unprotected anal intercourse. This proportion is similar to that reported in 2004.
◊ Fourteen per cent of MSM with gonorrhoea had chlamydia co-infection. This rate has decreased from 22% in 2004.
◊ 40% of all women with gonorrhoea had chlamydia co-infection.

Figure 2.7: Diagnoses of gonorrhoea, made in GUM clinic settings, by gender, 1996-2005.

Data source: STISS

Figure 2.8: Proportion of diagnoses of gonorrhoea, made in GUM clinic settings, who have chlamydia co-infection, by sexual orientation, 1996-2005.

Data source: STISS
Gonorrhoea affects young women but older men; two thirds of women, compared to one third of men, infected with gonorrhoea were aged less than 25.

Age at gonorrhoea diagnosis ranged from 14 to 69 years with a median age of 25.

Between 2004 and 2005, an increase in diagnoses in men in all age groups under 45 was observed; this was greatest in those men aged 15-19.

Geographical distribution: 2005

The highest rates of gonorrhoea in men and women were observed among Lothian and Greater Glasgow NHS Board residents.

The lowest rates of gonorrhoea in men were observed among Borders and Dumfries & Galloway NHS Board residents and in women, among Ayrshire & Arran and Dumfries & Galloway NHS Board residents. This is similar to those reported during 2004.

In comparison to 2004, a decrease in diagnoses rates among women was noted in Forth Valley and Highland NHS Boards and in men in residents of Ayrshire & Arran and Tayside NHS Boards.
Antibiotic resistance: 2005

- Almost one quarter (24%) of all strains of gonorrhoea circulating in the infected population in Scotland were resistant to the antibiotic, ciprofloxacin.
- This represents a 4% increase on that reported during 2004.
- Overall resistance to one or more antibiotics was detected in almost one half (49%) of gonococcal isolates. This has increased from 34% in 2004, despite the discontinued use of ciprofloxacin as a first line treatment since 2003.
- During 2005, levels of resistance were highest (over 30%) in isolates circulating in Ayrshire & Arran, Tayside, Forth Valley, and Grampian NHS Boards. The high level of resistance observed in Ayrshire & Arran is likely to be due to chance since the finding is based on only 8 isolates.
- Third generation cephalosporins, for example, oral cefixime, remain the recommended first line therapy for gonorrhoea infection due to increasing resistance to ciprofloxacin.

Sequence typing and molecular epidemiology: 2005

- Work is also progressing to develop an electronic enhanced system of surveillance for gonorrhoea.
- Behavioural information will be captured via STISS and linked (anonymously) to antimicrobial resistance and sequence data from the Scottish Neisseria gonorrhoeae Reference Laboratory. Such information will provide a greater understanding of the epidemiology, including transmission networks, of gonorrhoea infection in Scotland.
Genital Herpes

Background and recent trends

- Genital herpes is caused by the herpes simplex virus (HSV), types 1 and 2. These viruses are transmitted by close contact of mucous membranes or infected body fluids of infectious persons. It is possible to be infected with both viruses.
- HSV infection may cause ulceration but may also be asymptomatic. Following initial infection, HSV remains dormant in cells and can reactivate with varying frequency, requiring follow up visits for the treatment of recurrent infection.
- Genital herpes may be presumptively diagnosed on the first clinical presentation with genital symptoms. Laboratory confirmation may not always be possible.
- In 2005, 75% of suspected diagnoses were confirmed by detecting HSV through laboratory testing. The data presented include information on both the laboratory confirmed and unconfirmed clinical diagnoses made in the GUM clinic setting.
- In 2005, 1332 persons attending GUM clinics were diagnosed with genital herpes for the first time.
- This represents a 4% increase on 2004 with a slight decrease in men (4%) and increase in women (9%).
- The number of new diagnoses in GUM clinics has increased by almost 50% since 1996.
- In 2005, over 800 people (with equal numbers of men and women) attended a GUM clinic with recurrent genital herpes; consultations at GUM clinics for the treatment of recurrent herpes lesions have increased by 77% since 1996. These observations are similar to those in 2004.

Who was affected: 2005?
Moving Forward - Sexually Transmitted Infections, including HIV, in Scotland 2005

- Approximately two thirds of genital herpes diagnoses made in GUM clinics (62%) were in women.
- More diagnoses of genital herpes were made in women aged 20-24 and men aged 25-34, than in any other age group.
- Between 2004 and 2005, there was a 30% increase in diagnoses among women aged 15-19.
- Half (53%) of the genital herpes diagnoses in women and one third (34%) of those in men were made in persons aged less than 25. This is a consistent observation during the previous ten years.
- Diagnoses due to HSV type 1 predominated in women (1.5:1 ratio) and those due to HSV type 2 predominated in men (1.1:1 ratio). These observations are similar to those in 2004.

Geographical distribution: 2005

- In GUM clinics, the highest rates of genital herpes in women were observed among Greater Glasgow, Fife, Tayside and Lothian NHS Board residents and in men, among Lothian, Fife, and Borders NHS Board residents.
- In women the overall rates observed are similar to those in 2004. In men, the changes reflect an increase in diagnoses among Borders NHS residents and a decrease in diagnoses among Grampian and Greater Glasgow NHS Board residents.
- In comparison to 2004, there has been an increase in rates of diagnoses in men and in women in nine and seven NHS Boards, respectively.
- Decreased rates among women were noted in Ayrshire & Arran, Borders and Highland NHS Board and among men in Grampian, Greater Glasgow and Highland NHS Boards.
- The lowest rates of genital herpes in men and women were observed among Dumfries & Galloway and Lanarkshire NHS Board residents.

Diagnoses of first occurrence of infection with herpes simplex virus
Data source: STISS
Infectious Syphilis

Background and recent trends

- Syphilis is caused by infection with the bacteria, *Treponema pallidum* subspecies *pallidum*.
- Infectious syphilis is characterised by three phases - primary, secondary, and early latent – all of which represent cases diagnosed within two years of infection.
- Syphilis re-emerged in Scotland during 2000/2001 following outbreaks elsewhere in the UK.
- In 2005, 188 cases were recorded at GUM clinics. This compares with 89 cases recorded in 2004 – the highest annual total since 1952.
- Between 2001 and 2005, there has been an almost 700% increase in diagnoses at GUM clinics – this is primarily due to a 25-fold increase in diagnoses among MSM.
- Information from enhanced surveillance suggests there is a steady year-on-year increase in cases of heterosexually acquired syphilis: 20 and 29 in 2004 and 2005, respectively.

Who was affected: 2005?

- 95% of all cases were men and, of these, 87% were MSM.
- The highest number of diagnoses was observed in men aged 35-44; the largest increase was noted in those aged 20-24.
- In MSM, age at diagnosis ranged from 16-60 with a median age of 35.
Geographical distribution: 2005

- The majority of diagnoses in men (including MSM) were made in the GUM clinics of Lothian and Greater Glasgow NHS Boards. These observations are similar to those in 2003 and 2004.
- The small number of diagnoses in women were made in GUM clinics in Greater Glasgow, Lanarkshire, Lothian and Tayside NHS Boards.
- Three quarters of diagnosed MSM and women probably acquired their infection in Scotland.
- For 31 cases with multiple locations of possible exposure, 25 (81%) also included a Scottish locality.

HIV co-infection and aspects of syphilis transmission: 2005

- One quarter (25%) of MSM with syphilis, whose HIV status was known, were HIV positive.
- Less than 10% of heterosexuals diagnosed with syphilis who had had an HIV test were HIV positive.
- Almost half (48%) of diagnosed MSM probably acquired their syphilis infection through oral sex.

Table 2.2: Social networks and types of venues described by 108 MSM, 2005.

<table>
<thead>
<tr>
<th>Social Networks</th>
<th>Frequency of reporting use of venues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bars and/or Clubs</td>
<td>38</td>
</tr>
<tr>
<td>Sauna</td>
<td>37</td>
</tr>
<tr>
<td>Internet chatrooms/chatlines</td>
<td>33</td>
</tr>
<tr>
<td>Public sex environments/cruising</td>
<td>26</td>
</tr>
<tr>
<td>Other (regular or ex partner)</td>
<td>9</td>
</tr>
</tbody>
</table>

Data source: NESISS

- Of the MSM who described their social network(s), 28% said they used more than one venue or network for meeting potential partners; gay bars and/or clubs and saunas were the most popular venues. (Table 2.2)

- Three quarters of MSM with syphilis reported between one and five partners during the three months prior to their syphilis diagnosis.

- A total of 859 partners were reported by 158 MSM during the three months prior to syphilis diagnosis. (Table 2.3)

- Partner management is challenging among MSM diagnosed with syphilis because of the number of multiple anonymous contacts. When more than five partners were reported, the percentage of traceable contacts decreased from 65% to 11%.

Table 2.3: Number of contacts for cases of infectious syphilis among MSM reported to HPS, 2005

<table>
<thead>
<tr>
<th>Reported No. Partners</th>
<th>No. of cases reporting</th>
<th>Total No. Contacts</th>
<th>No. Traceable Contacts</th>
<th>% Traced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>39</td>
<td>39</td>
<td>33</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>44</td>
<td>88</td>
<td>53</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>87</td>
<td>53</td>
<td>61</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>36</td>
<td>24</td>
<td>67</td>
</tr>
<tr>
<td>5-9</td>
<td>9</td>
<td>50</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>10-19</td>
<td>18</td>
<td>228</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>20-30</td>
<td>7</td>
<td>155</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>&gt;40</td>
<td>3</td>
<td>176</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
<td>859</td>
<td>231</td>
<td>27</td>
</tr>
</tbody>
</table>

Data source: NESISS
Genital Warts

Background and recent trends

◊ Genital warts result from infection with human papilloma virus (HPV). Despite the existence of nearly 200 genotypes of HPV, the vast majority of genital warts are caused by types 6 and 11.8

◊ The majority of genital HPV infections are asymptomatic; the diagnosis of genital warts is based on clinical examination when warts are visible. No diagnostic laboratory tests are performed.

◊ Genital warts are the most common acute viral STI diagnosed in the GUM clinic setting. 6451 new cases were seen during 2005; this represents a 3% increase on the total for 2004. 32% of new cases were referred by their GP.

◊ The total number of new diagnoses increased by 30% over the previous 10 years. This represents a 37% and 22% increase in diagnoses in men and women, respectively.

◊ Genital warts often recur, causing significant distress and requiring repeated clinic visits for treatment. In 2005, 3403 people attended GUM clinics for the treatment of recurrent infection.

◊ A quadrivalent vaccine offering protection against infection with four genotypes of HPV - those most commonly associated with cervical cancer (types 16 and 18) and with genital warts (types 6 and 11) - is now licensed in Europe and the USA. It has been shown to be highly safe and efficacious in studies among women aged 16-26.9

Who was affected: 2005?

◊ Just over half of all new diagnoses of genital warts were in men (54%). This has been a consistent finding during the previous 10 years.

◊ Since 2001, there has been a 24% increase in diagnoses among women compared with a 16% increase among men.

◊ Most diagnoses in both men and women were made in those aged 20-24.
Geographical distribution: 2005

- For women, the highest diagnoses rates were found in Lothian, Greater Glasgow and Forth Valley NHS Board residents.
- In 2005, a decrease in diagnoses was observed among residents of six NHS Boards; these included a decrease in the two NHS Boards (Fife and Tayside) which reported the highest rates in 2004.
- Outside the island NHS Boards, the lowest rates were observed among women resident in Dumfries & Galloway and Borders NHS Boards. This finding is similar to that reported in 2004.
- For men, the highest diagnosis rates were observed in Greater Glasgow, Lothian and Fife NHS Board residents.
- An increase in diagnosis rates was observed among men resident in eight NHS Boards; the largest increases were noted in Fife and Forth Valley NHS Boards.
- Outside the island NHS Boards, the lowest rates were among men resident in Dumfries & Galloway and Argyll & Clyde NHS Boards. This finding is similar to that reported in 2004.

Treatment in the Primary care setting

- Many cases of genital warts can be, and are, managed by general practitioners (GP). Self-applied therapies in the home are more convenient.
- The most commonly used self-applied treatments are Imiquimod cream and Podophyllotoxin cream or solution.
- Treatment is cosmetic, not curative, and helps to relieve the discomfort and distress experienced by patients. Recurrence following treatment is common.
- Since 2001, there has been a twofold increase in GP prescriptions for genital wart therapies.
HIV infection

Background and recent trends

◊ In 2005 405 new cases of HIV were identified; most were new diagnoses but some had been diagnosed previously elsewhere in the UK or abroad
◊ The 2005 total is the highest annual number of newly identified cases on record. The average annual figure ranged between 150 and 180 during the 1990s, and was 258 and 364 in 2003 and 2004, respectively
◊ The numbers of AIDS diagnoses and AIDS related deaths in HIV infected individuals have fallen since the introduction of effective therapies in the mid-1990s. In 2005, there were 34 reports of AIDS and 42 deaths.

In 2005, 2177 HIV infected persons were alive and receiving HIV specialist care in Scotland. The majority of the cases in specialist care resided in Greater Glasgow (563), Lothian (842), Tayside (184) and Grampian (147) NHS Boards.
◊ Of those cases undergoing CD4 monitoring, 1296 (60%) had recorded a CD4 cell count ≤200/mm^3, at some point since being diagnosed HIV positive, and were therefore eligible for ART
◊ Across Scotland, 1134 (93%) of cases who have ever recorded a CD4 cell count ≤200/mm^3 received ART during 2005. Of those cases receiving ART in 2005, 886 (78%) had an undetectable viral load (≤50 copies/ml) at the latest attendance

Who is affected: 2005

◊ Two thirds of new cases identified were men
◊ The 156 cases among MSM is the highest annual figure ever recorded for this population group; 13% were MSM aged less than 25.
◊ Of the 184 HIV infections diagnosed among non-IDU heterosexual men and women, 59% were female
◊ The number of injecting drug users (IDUs) diagnosed with HIV increased; 21 were diagnosed in 2005 compared to 14 in 2004.
Geographical issues: 2005

- Nearly two-thirds of new cases were identified in Lothian (136) and Greater Glasgow (135) NHS Boards.
- The highest number of new cases in MSM (64 and 61 of 156, respectively), and non-IDU heterosexuals (59 and 58 of 184, respectively) were reported from Lothian and Greater Glasgow NHS Boards.
- Approximately 10% of MSM probably acquired their infection outside the UK (16 of 156).
- The number of non-IDU heterosexuals who probably acquired their HIV outside the UK decreased by 10% since 2004. Just over two-thirds of non-IDU heterosexual cases probably acquired their infection outside the UK, predominantly in African countries (122 of 184).
- The number of non-IDU heterosexual cases thought to have acquired their infection within the UK remained low; 25 were identified in 2005.

HIV Testing: 2005

- Outwith routine HIV screening programmes (e.g. blood donor, antenatal), the numbers of persons having an HIV test in Greater Glasgow, Lothian, Tayside and Grampian, increased by 15% between 2004 and 2005. Most (81%) were tested in the GUM clinic setting.
- Between 2002 and 2005, a 162% increase in the numbers of persons undergoing an HIV test in a GUM clinic was observed. The increase in HIV testing in GUM clinics stems from Scottish Executive policy recommending that all attendees suspected of having an STI be offered and recommended an HIV test.
- Universal antenatal HIV testing was implemented in 2003 and has been effective in reducing the numbers of HIV infected pregnant women who remain undiagnosed during their pregnancy.
- Increased HIV testing is considered to be the principal explanation for the increase in the number of newly identified cases of HIV in 2005.
MSM: evidence for HIV transmission, 2005

◊ The prevalence of HIV in MSM undergoing a named (or attributable) HIV test remained stable at around 4%.
◊ Among those having a named HIV test, 8 definite HIV seroconversions (a negative test result followed by a positive one within a calendar year) occurred in 2005. This figure compares with 15 in 2004 and an annual average of four during 2001-2003.
◊ Preliminary investigations of the incidence of infection among MSM undergoing repeat named HIV testing, indicate that incidence was stable at around 1% during 1990-2003 and then increased to approximately 4% in 2004. This is consistent with the increase in the incidence of syphilis among MSM in recent years.

Heterosexual men and women (non-injecting drug user): evidence for HIV transmission, 2005

◊ Among men and women who had not had any high risk exposure outside the UK and who had an attributable HIV test, prevalence was approximately 0.1% (1 in 1000 tested). This is similar to the prevalence recorded in 2004.
◊ Among men and women who had had high risk exposure in (and probably originated from) African countries and who had had an attributable HIV test in 2005, prevalence was 6.5% and 10% among men and women respectively.
◊ Among women who were born in the UK and who gave birth in 2005, the prevalence of HIV was 0.04% (4 in 10 000 tested).
◊ These above findings suggest that the incidence of HIV among heterosexual men and women in Scotland is low and not increasing.

Injecting Drug Users: evidence for HIV transmission, 2005

◊ Among those who had an attributable HIV test in 2004, prevalence was 0.9% (1 in 110). This rate is higher than those observed in the previous three years.
◊ Nearly all were either older IDUs who probably acquired their infection in Scotland in the 1980’s or individuals who had been previously diagnosed in England or abroad.
◊ HIV transmission among IDUs in Scotland remains uncommon.
Chapter 3

Sexually transmitted infection including HIV in population sub-groups

Men who have sex with men (MSM)

Background and recent trends

◊ In 2005, among MSM in Scotland, there were:
  › 156 new cases of HIV – the highest annual number ever. Although these cases were new to Scotland, some had been diagnosed previously elsewhere in the UK and abroad.
  › 174 cases of infectious syphilis: a similar number to that observed in 2004
  › increases in diagnoses of gonorrhoea, genital herpes and syphilis, and decreases in diagnoses of genital chlamydia and genital warts.

Acute STIs 2005: rectal infections

◊ Rectal chlamydia infection accounted for over half of all 357 chlamydia diagnoses in MSM.
◊ Almost one quarter of MSM (73 of 313) with gonorrhoea had a rectal infection. This proportion is similar to that observed in 2004.
◊ Although the overall numbers of cases of rectal gonorrhoea diagnoses has increased over the ten year period, 1996-2005, the proportion of all infections in MSM that were rectal infection has not increased significantly during this time.
Acute STIs 2005: co-infections

- During 2005, 14% of MSM (44 of 313) with gonorrhoea had concurrent chlamydia infection; the corresponding rate for heterosexual men was 32% (108 of 336). Fewer MSM with gonorrhoea were coinfected with chlamydia than in 2004 (22%).
- 17.5% of syphilis cases in MSM had HIV infection.
- 11.3% of MSM with acute STIs were co-infected with HIV. In 2004, the corresponding figure was 7.5%. A rise in HIV infected MSM with acute STIs is unlikely to be due to better service provision alone as most were symptomatic; this suggests a decline in the sexual health of MSM living with HIV.
- There was a notable rise in gonorrhoea cases in HIV infected MSM (38 in 2005 compared to 3 in 2004).

Table 3.1: Acute STIs in MSM attending GUM clinics, 2005

<table>
<thead>
<tr>
<th>Infection</th>
<th>Number</th>
<th>Number in HIV-infected MSM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious syphilis</td>
<td>154</td>
<td>27 (17.5)</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>313</td>
<td>38 (12.1)</td>
</tr>
<tr>
<td><strong>Of which rectal</strong></td>
<td>73</td>
<td>11 (15.1)</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>357</td>
<td>50 (14.0)</td>
</tr>
<tr>
<td><strong>Of which rectal</strong></td>
<td>187</td>
<td>30 (16.0)</td>
</tr>
<tr>
<td>Genital warts (first episode)</td>
<td>232</td>
<td>19 (8.2)</td>
</tr>
<tr>
<td>Genital herpes (first episode)</td>
<td>65</td>
<td>15 (23.1)</td>
</tr>
<tr>
<td>HIV infection (newly diagnosed)</td>
<td>75</td>
<td>N/A</td>
</tr>
<tr>
<td>Other*</td>
<td>295</td>
<td>20 (6.8)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1491</td>
<td>169 (11.3)</td>
</tr>
</tbody>
</table>

N/A not applicable
*Other includes: Non-specific, non-chlamydial, (upper and lower) genital tract infection, non-specific proctitis, Trichomoniasis, chancre, lymphogranuloma venereum, granuloma inguinale, genital scabies, pubic lice, molluscum contagiosum, hepatitis A, acute and chronic hepatitis B.

Data source: STISS

HIV: 2005

- Between 2004 and 2005, HIV testing in MSM in Scotland increased by 13% (from 2580 to 2920).
- Among MSM having an STI screen in GUM clinics, the uptake of HIV testing in different NHS Boards ranged from 62% to 85%. This is much improved from 2004 when in one NHS Board, 18% of MSM were tested.
- Uptake of HIV testing is increasing: 93% of MSM attending with an STI risk in 2005 were offered a test and 83% accepted.
- In Glasgow, during 2005, of 18 MSM whose HIV status was unknown at the time of their GUM clinic visit, 5 were still undiagnosed after that visit.
Geographical issues: access to services, 2005

- Data from the GUM clinic setting show wide geographic variation in uptake of STI screening among MSM. This reflects service provision, for example the availability of specific services for gay men.

- The proportion of STI screens in men, performed on MSM, ranges from 2.1% in Ayrshire and Arran NHS Board GUM clinics to 17% and 21% in Greater Glasgow and Lothian NHS Board GUM clinics, respectively. These observations are similar to those in 2004. In some areas more than 75% of sexual health screens for MSM are provided outwith the NHS Board area of residence.

- In spite of this, more MSM than ever are having STI screens: a 42% increase between 2004 (2332) and 2005 (3326). STI screens in Lothian increased by 30% following the opening of a specific gay men’s service, and elsewhere in Scotland increased numbers of screens were observed in many other locations.

- The majority of STI screening is performed in Greater Glasgow and Lothian NHS Boards.
Prevention

Certain indicators of high risk sexual behaviour among MSM are of considerable concern.

- Repeat cross-sectional surveys of MSM in Glasgow and Edinburgh indicated an increase in unprotected anal intercourse with casual partners, during the previous 12 months, from 11% in both 1996 and 1999 to 19% in 2002. In 2005, reported levels remained the same as those in 2002 (Lisa Williamson, personal communication).

- The proportion of men offered a test on attending the GUM clinic is rising, and the uptake of testing in those offered a test has also improved. However, 36.4% of men in Edinburgh and 48.1% of men in Glasgow surveyed in the 2005 MRC Gay Men’s Sexual Health Survey were unaware of their HIV infection. Over half of these men reported that their most recent test was negative. This suggests that increasing the rates of testing within GUM clinics will not address the problem and innovative approaches to testing are required.

Key prevention initiatives during 2005 included:

- A syphilis awareness campaign in Edinburgh using leaflets, postcards and posters.
- The introduction of a sexual health clinic for MSM one evening per week at the GUM service in Edinburgh.
- A sexual health outreach clinic for MSM run in conjunction with the Research Outreach and Advice for Men (ROAM) team, offering a weekly service to men in Edinburgh who do not access mainstream services.
- The EQUAL social marketing campaign, a joint project between NHS Greater Glasgow, NHS Ayrshire and Arran and NHS Lanarkshire, with phased objectives relating to stigma and HIV testing.
- Outreach (health promotion) work including the use of the internet chat rooms by Promoting Health and Challenging Exclusion (PHACE) Scotland, and coordinated volunteer outreach by Gay Men’s Health in Edinburgh.

Conclusions

- MSM continue to acquire acute STIs and HIV in spite of innovative awareness raising campaigns.
- Numbers of MSM HIV tested and diagnosed, principally in the GUM clinic setting, are rising.
- Survey data indicates that despite significant rises in testing rates, over a third of HIV positive men are unaware of their HIV positive status and half of this group perceive themselves to be HIV negative.
Young People

Background

Young people refers to those aged less than 25.

- Scottish data from the National Survey of Sexual Attitudes and Lifestyles (NATSAL) survey (2000)\(^2\) indicates:
  - The average age of first sexual intercourse for both men and women is 16.
  - 9% of young men and 13% of young women, respectively, had had an STI at some time.
  - Young people consider their personal risk of HIV infection to be low.
- Young women, aged less than 25, are a target group for opportunistic chlamydia screening; at this age they are biologically more susceptible to infection.
- Diagnoses of STIs, in particular genital chlamydia and genital warts among young men and women, in the GUM clinic setting, have increased during the previous five years.

![Figure 3.7: Diagnoses of acute sexually transmitted infections in women aged less than 25, made in the GUM clinic setting, 1996-2005.](image)

![Figure 3.8: Diagnoses of acute sexually transmitted infections in men aged less than 25, made in the GUM clinic setting, 1996-2005.](image)
Who was affected; 2005?

◊ More than two thirds (73%) of chlamydia diagnoses were in those aged less than 25.
◊ Although more chlamydia diagnoses are made in women, the greatest increases in recent years were observed in men aged less than 19: a five fold increase noted since 2000.
◊ Two thirds of the diagnoses of genital warts in women and one half of those in men were aged less than 25.
◊ Half of the diagnoses of genital herpes in women and one third of those in men were aged less than 25.
◊ Two thirds of women, compared to one third of men, infected with gonorrhoea were aged less than 25.

Geographical issues: genital chlamydia

◊ During 2005, the highest rates of genital chlamydia diagnoses, made in all settings in women aged less than 25, were observed in Tayside, Dumfries & Galloway, Lothian and Highland NHS Boards; this is likely to reflect higher levels of opportunistic screening, as stated in the SIGN guidelines for the management of chlamydia infection, among young populations in these areas.
◊ In men aged less than 25, the highest rates of genital chlamydia diagnoses in all settings were observed in Tayside and Lothian NHS Boards.
Access to services: 2005

- Young women and young men aged less than 25 accounted for 40% and 27%, respectively, of the total workload in GUM clinics.
- Acute STIs were diagnosed in 45% of young people having an STI screen at a GUM clinic.
- The highest rates of acute STI diagnoses in both men and women aged less than 25 were observed among residents of Tayside and Fife NHS Boards. This finding is similar to that in 2004.
- These 2005 rates indicate an increase in acute STI diagnoses, in the under 25 age group, across almost all NHS Boards.

Prevention

- A large number of prevention initiatives are in operation both at an NHS Board and national level. A few examples of these are:
  - Caledonia Youth, in operation for more than 30 years, supports local organisations in promoting the sexual health and wellbeing of young people, particularly teenagers and the under 25s. (http://www.caledoniayouth.org/)
  - Healthy Respect, a Scottish Executive funded National Health Demonstration Project focusing on young people’s sexual health, works in partnership with local organisations in Lothian to provide sexual health education, information and services for young people aged 18 and under. (http://www.healthy-respect.com/)
  - The ‘C2U’ scheme provides a confidential drop-in clinic for young people, particularly those aged under 20, in Dumfries and Galloway NHS Board. (http://www.c4urself.org.uk/)
  - Glasgow’s Sandyford Initiative runs a drop-in service targeted at under 18s; the service, originally at one site (The Place, http://www.sandyford.org/), is being rolled out to other locations around the city.

Conclusions

- Some indicators suggest that young women are encountering STIs earlier in their sexual career than young men; this may reflect the difference in the relative ages of their partners.
- An increase in chlamydia screening opportunities, especially for young men, coupled with partner notification are major challenges in addressing the current burden of chlamydia infection.
Ethnic Group

Background

◊ “Ethnic group” relates to a combination of factors including skin colour and physical features, family origin, language and religion. It is mainly a social construction and its significance is determined to a large extent by society and self ascription. Ideally, users of health services should be asked to provide details of their own perceived ethnicity.

◊ There is a statutory, legal requirement, for public authorities to collect data on ethnic group under the Race Relations (Amendment) Act 2000 in the interests of eliminating racial discrimination and promoting equality of opportunity and good race relations.

◊ Ethnicity is particularly relevant to STIs as different ethnic groups may tend to have markedly different sexual behaviours.

◊ Although the 2001 Census recorded that only 2% of the total Scottish population were from a (non-White) minority ethnic group, the proportion in the more sexually active age groups (16-44) is 2.6%.

GUM clinics

◊ The STISS system requires all patients to have a self-assigned ethnicity recorded if possible

◊ 89% of attendees are either “White Scottish” or “White – Other British”

◊ There is considerable geographical variation in the proportion of people from ethnic minorities who attend for STI.

◊ The Sandyford Hub clinic opened in 2006 in an area of Glasgow with a high prevalence of Indian, Pakistani and Black African people. There is some evidence that it has been successful in encouraging attendance from these ethnic minority groups.

### Table 3.3: Ethnic group as a percentage of all new episodes.

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>White - Scottish</td>
<td>82.98</td>
<td>82.08</td>
</tr>
<tr>
<td>White - Other British</td>
<td>7.08</td>
<td>5.54</td>
</tr>
<tr>
<td>White - Irish</td>
<td>1.29</td>
<td>0.93</td>
</tr>
<tr>
<td>White - Other</td>
<td>2.92</td>
<td>3.61</td>
</tr>
<tr>
<td>Mixed</td>
<td>0.40</td>
<td>0.43</td>
</tr>
<tr>
<td>Indian</td>
<td>0.41</td>
<td>0.20</td>
</tr>
<tr>
<td>Pakistani</td>
<td>0.50</td>
<td>0.25</td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>0.10</td>
<td>0.04</td>
</tr>
<tr>
<td>Chinese</td>
<td>0.39</td>
<td>0.39</td>
</tr>
<tr>
<td>Other Asian</td>
<td>0.30</td>
<td>0.35</td>
</tr>
<tr>
<td>Black - Caribbean</td>
<td>0.17</td>
<td>0.12</td>
</tr>
<tr>
<td>Black - African</td>
<td>0.82</td>
<td>0.83</td>
</tr>
<tr>
<td>Black - Other</td>
<td>0.28</td>
<td>0.18</td>
</tr>
<tr>
<td>Other Ethnic Background</td>
<td>0.44</td>
<td>0.36</td>
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<td>Not Disclosed</td>
<td>0.72</td>
<td>1.36</td>
</tr>
<tr>
<td>Not Provided</td>
<td>1.19</td>
<td>3.33</td>
</tr>
</tbody>
</table>

Data source: STISS

### Figure 3.13: Proportion of GUM attendees of non-white ethnicity by NHS Board of treatment, 2005.
HIV and pregnancy

◊ Some relevant information is available from the unlinked anonymous HIV testing scheme which uses the infant blood spot test to determine the presence of maternal-derived HIV antibodies. The self-reported ethnicity of the mother is not yet available, but the region of birth of the mother is recorded in terms of UK or non-UK.

◊ For the 2005 data, nine of 19 HIV positive mothers were born outside the UK. This compares with 13 of 26 in 2004, (no information was available for two women).

Sexual behaviour and attitudes

◊ Some data on sexual behaviour and attitudes is collected by ethnic group in the UK National Survey of Sexual Attitudes and Lifestyles (NATSAL). Unfortunately, the number of people from an ethnic minority within the Scottish subgroup is too small to allow any meaningful interpretation.

◊ A review group, set up by the Sexual Health and Wellbeing Learning Network, has been addressing the issues of how to improve access to services and how to provide young people from Black and Minority Ethnic (BME) communities with the skills to negotiate mutually respectful relationships. This work includes a consultation with young people from BME communities, a systematic review, and a series of promising practice case studies of work around the sexual health of BME young people. This work is almost complete and will address implications for policy, practice and research. Further information can be found at: http://www.healthscotland.com/topics/health/sexual-health/index.aspx.
Examples of health promotion material to raise awareness of sexually transmitted infections, including HIV.

We gratefully acknowledge permission to use these materials in this report.
Conclusions

◊ The rise in the number of diagnoses of STIs continues
  › Some of this rise relates to efforts to find otherwise undiagnosed cases. For example, by encouraging wider uptake of chlamydia testing and by the policy of offering an HIV test to all GUM clinic attendees suspected of having an STI. This does suggest, however, that there is a pool of otherwise undiagnosed cases of such infections.
  › Much of the increase probably results from a genuine underlying increase in incidence of STIs. For example, “non-headline” conditions such as genital herpes and genital warts are showing a continued rise in numbers of diagnoses.
  › There are some specific conditions which are particular problems for men who have sex with men (MSM). These include syphilis, gonorrhoea and HIV. The incidence of co-infection with more than one STI is also relatively high for MSM.
  › Although there are concerns about the long term sequelae of infections such as chlamydia, the evidence from hospital data relating to pelvic inflammatory disease and ectopic pregnancies suggests that these conditions are not an increasing problem at present.
  › Young people are particularly affected by STIs and particular emphasis should be placed on targeting this group.

◊ GUM clinic workload is rising
  › This relates not only to the rise in diagnoses of STIs, but also to an increase in screening of the “worried well”.
  › There is considerable variation in activity between NHS Boards.
  › Some of the work which was previously undertaken in GUM clinics is increasingly moving to other settings. An example is the rise in the number of persons treated for genital warts within primary care.

◊ Changes in policy are important
  › The profile of sexual health has risen as a result of the sexual health strategy “Respect and Responsibility”.
  › The adoption of key clinical indicators, the work on data definitions, and the development of a national sexual health clinic management system (NaSH) are to be welcomed.

◊ The next steps
  › It is important for NHS Boards to continue to develop services in line with the recommendations and funding stemming from the sexual health strategy “Respect and Responsibility”.

Chapter 4

[270x813]Moving Forward - Sexually Transmitted Infections, including HIV, in Scotland 2005

[552x25]29
Appendix

Sexually transmitted infections (STIs), including HIV, are diagnosed in a variety of healthcare settings in Scotland. These include:

- Genitourinary Medicine (GUM) clinics
- Community Family Planning & Reproductive Healthcare clinics
- Integrated sexual health clinics
- Specialised outreach sexual health clinics (e.g. for young people or gay men)
- Specialised outreach testing programmes (e.g. postal chlamydia testing)
- General Practice
- Hospital outpatient clinics (e.g. gynaecology, coloproctology, urology)
- Hospital admission units (e.g. pelvic infection)
- Infectious disease units (e.g. HIV infection)

Data on diagnoses of STIs are gathered from many of these settings and provide the basis for the surveillance of sexually transmitted infection in Scotland.

Surveillance data and sources

Three main sources provide information on STI diagnoses:

- Data on positive diagnoses of selected STIs, including HIV, are reported from all microbiological laboratories throughout Scotland. These include:
  - Data on age, gender, and NHS Board of diagnosis/treatment;
  - Data that reflect testing performed at genitourinary medicine (GUM) and Infectious Disease clinics and other locations where sexual health services are available or when there is a clinical need to test e.g. family planning, antenatal clinics, primary care, and in the hospital setting.

- Data concerning all episodes of care within Scotland’s GUM clinics are reported using the Sexually Transmitted Infection Surveillance System (STISS), the updated web-based version of ISD(D)5, implemented during 2004. These include:
  - Data on age, gender, sexual orientation, NHS Board of diagnosis/treatment, NHS Board of residence, and diagnostic, screening and treatment information.

- Data on STI consultations with a general practitioner are recorded by the Practice Team Information (PTI, formerly referred to as Continuous Morbidity Recording) system. Approximately 60 practices participate in the PTI scheme and these are broadly representative of the population of Scotland in terms of age, gender, deprivation and urban/rural mix. The reason for the consultation is recorded and then coded using a Read code. A limited amount of data is available for analysis. These include:
  - Data on age, gender and NHS Board of residence.

In addition, there are a number of infection-specific systems:

- Detailed information to describe HIV infection in Scotland is available from a number of HIV-specific surveillance systems. These include:
  - Laboratory reports of all voluntary attributable HIV tests, i.e. data from both positive and negative tests.\(^{13}\)
  - Immunological and antiretroviral therapy data on all HIV infected persons in specialist care.
  - Unlinked Anonymous HIV Test Programme, a UK-wide programme which monitors the prevalence of HIV among GUM clinic attendees and pregnant women.
  - New diagnoses of AIDS cases reported by clinicians.
  - Numbers of HIV-associated deaths reported by the General Register Office for Scotland.\(^{14}\) (GROS)
The National Enhanced Surveillance of Infectious Syphilis in Scotland (NESISS) was established in 2002. All laboratory confirmed diagnoses of infectious syphilis are notified to HPS and demographic, sexual and social risk information is collected from the diagnosing clinician. Gonococcal Antibiotic Surveillance in Scotland (GASS) is monitored by the Scottish Neisseria gonorrhoeae Reference Laboratory (SNGRL) and data on the prevalence, pattern and trends of antibiotic resistance are available. Demographic and behavioural data are available from a subset of gonorrhoea diagnoses from extended surveillance undertaken by SNGRL.

Surveillance systems utility

The surveillance systems complement each other but also offer different types of information to describe not only the epidemiology of infections but also the workload undertaken by those involved in the care and management of patients. The surveillance systems are useful epidemiological tools to inform, plan and target prevention and health promotion strategies. Some of the benefits of STISS include; The facility for recording both clinically and laboratory diagnosed STIs. The facility for recording more than one diagnosis in a single patient, i.e. those with co-infection. The laboratory reporting system covers diagnoses made in all, as opposed to just GUM clinic-based, healthcare settings.

In this report trend data and analysis of STIs (including HIV) in Scotland in 2005 are presented. More detailed tables of GUM data are available on the ISD and HPS websites.

<table>
<thead>
<tr>
<th>Data Collected</th>
<th>Laboratory Reporting System</th>
<th>GUM ClinicsSTISS</th>
<th>General Practice PTI</th>
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</thead>
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<td>✓</td>
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</tr>
<tr>
<td>Gender</td>
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<td>✓</td>
</tr>
<tr>
<td>NHS Board of diagnosis/ treatment</td>
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<td>✓</td>
</tr>
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<td>NHS Board of residence</td>
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<td>Other acute and non-acute STIs*</td>
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*Other includes: Non-specific, non-chlamydial, (upper and lower) genital tract infection, non-specific proctitis, trichomoniasis, chancroid, lymphogranuloma venereum, granuloma inguinale, genital scabies, pubic lice, molluscum contagiosum, hepatitis A, acute and chronic hepatitis B.
References


Abbreviations

ART – Antiretroviral therapy
BASHH – British Association of Sexual Health and HIV
GP – general practitioner
GROS – General Register Office for Scotland
GUM - Genitourinary Medicine
HIV – Human Immunodeficiency Virus
HPA – Health Protection Agency
HPS – Health Protection Scotland
HPV – Human papilloma virus
HSV – Herpes simplex virus
IDU – Injecting drug use(r)
ISD – Information Services Division
ISD(D)S – GUM data collection form (now STISS)
LGV – Lymphogranuloma venereum
MIC - Minimum inhibitory concentration
MSM - Men who have sex with men
N - Number

NAATs – Nucleic acid amplification tests
NATSAL – National Survey of Sexual Attitudes and Lifestyles
NESISS – National Enhanced Surveillance of Infectious Syphilis in Scotland
NHS – National Health Service
NHSAC – National Sexual Health Advisory Committee
NSS – National Services Scotland
PHACE - Promoting Health and Challenging Exclusion
PTI – Practice Team Information
SIGN – Scottish Intercollegiate Guidelines Network
SNGRL – Scottish Neisseria gonorrhoeae Reference Laboratory
STI – Sexually Transmitted Infection
STISS – Sexually Transmitted Infection Surveillance System
UK - United Kingdom
Membership of STI Epidemiology Advisory Group

Jackie Caldwell – Scottish Executive Health Department
Jim Chalmers* – Information Services Division (Chair)
Glenn Codere – Health Protection Scotland
David Goldberg* – Health Protection Scotland
Anja Guttinger – Family Planning Physician
Nicholas Kennedy – Infectious Diseases Physician
Anne Leigh-Brown* – Information Services Division
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Kirsty Roy* – Health Protection Scotland
Etta Shanks* – Information Services Division
Louise Shaw – Health Protection Scotland
Bishan Thakker – Microbiologist
Carolyn Thompson – GUM Physician
Lesley Wallace* – Health Protection Scotland
Andy Winter* – GUM Physician
Hugh Young – Microbiologist
(* - denotes member of editorial team for this report)

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