

3.4

Scotland

Key Points

- In 2004, record numbers of HIV diagnoses were reported to Health Protection Scotland; the increase in HIV diagnoses is due, largely, to increased testing among antenatal and GUM clinic attendees.
- The numbers of persons under CD4 monitoring and on antiretroviral therapy in Scotland is predicted to increase by almost 50% by 2008.
- Genital chlamydia infection was the most commonly diagnosed bacterial STI and those aged under 25 are at highest risk of acquiring infection.
- A dramatic increase in the number of cases of infectious syphilis cases among MSM was recorded in 2004.

Diagnosed HIV infection

Trends in HIV diagnoses

In 2004, 364 diagnoses of HIV were reported to Health Protection Scotland (7/100 000). The 2004 total exceeds the previous highest annual number of diagnosis on record (348 in 1986), and compares to annual totals of 154 in 2000 and 175 in 1995. The total number of diagnosed HIV-infected individuals in Scotland at the end of 2004 was 4219 (83/100 000), of whom 3104 (74%) were men and 1115 (26%) women; at least 1402 (33%) are known to have died. More MSM (127) and heterosexuals (193) were diagnosed in 2004 than in any previous year. In contrast, the number of diagnoses among IDUs remained low (14).

The increase in HIV diagnoses in recent years is due, largely, to increased HIV testing among antenatal and GUM clinic attendees. This trend stemmed from the introduction of two new policies in HIV testing, these recommended the routine offer of an HIV test to all attendees of antenatal clinics⁴³ and all individuals who attend GUM clinics and are suspected of having an STI⁴⁴.

Universal antenatal testing: undiagnosed HIV infection among pregnant women

All women giving birth in Scotland in 2004 were offered, and recommended, an HIV test. In 2004, the HIV status of 53 828 women in Scotland was determined through the unlinked anonymous HIV testing of dried blood spots from neonates. Of these, 28 were HIV antibody positive; this figure compares with 17 and 25 in 2003 and 2000, respectively. Of the 28 infected women, 15 were diagnosed before pregnancy. The proportion of previously undiagnosed HIV infected pregnant women not diagnosed during pregnancy was 23% (three of 13); this figure compares with 50% (six of 12) in 2003 and 62% (eight of 13) in 2000. These findings suggest that universal antenatal testing has been successfully implemented throughout the country.

Voluntary confidential HIV testing: trends in prevalence and numbers of persons tested

In 2004, 32 307 persons had at least one named HIV test and 326 (1.0%) were antibody positive; this compares with 17 149 and 153 (0.9%), respectively, in 2000.

Between 2003 and 2004, a 40% rise in the number of people undergoing HIV testing was observed; this is largest annual increase recorded since national HIV test surveillance began in 1989.

In 2004, 23 575 non-IDU heterosexuals underwent attributable HIV testing and 0.6% were antibody positive; the corresponding figures for 2000 were 8605 and 0.7%, respectively (Figure 3.19). While the numbers of male and female non-IDU heterosexuals tested were almost identical, prevalence among women (0.7%) was slightly higher than that among men (0.5%). This difference reflects the higher prevalences of HIV among women (14% and 6.4%) when compared to those among men (9.1% and 1.2%), who indicated sexual exposure in sub-Saharan African and Far Eastern countries, respectively.

Among tested non-IDU heterosexuals who were probably infected in the UK, prevalence is low and decreasing; the decline in prevalence among this population may be due, partly, to the recent increase in the numbers of lower-risk non-IDU heterosexuals being tested in GUM clinic settings.

In 2004, 2582 MSM had an attributable HIV test and, of these, 109 (4.2%) were antibody positive; the corresponding prevalence for 2000 was 3.5% (47/1327) (Figure 3.19). Fifteen definite HIV seroconversions (a negative test result followed by a positive one within a calendar year) among MSM occurred in 2004; this figure

compares with an annual average of four during both 1996-2000 and 2001-2003. More MSM are undergoing repeat HIV testing than ever before, and while this increase in detection may be due to increased testing, it is likely that new transmission of HIV is making a considerable contribution to the maintenance of, and indeed slight rise in, HIV among MSM.

Ongoing care and management of HIV diagnosed individuals

As in previous years, the number of people developing AIDS or dying from HIV-related disease remained low; as a consequence of this, and the continuing increase in HIV diagnoses, the numbers of HIV-infected individuals in specialist care and receiving anti-retroviral therapy (ARV) in Scotland continued to rise (Figure 3.20); between 2000 and 2003 the numbers increased by 21% from 1306 (26/100 000) to 1652 (33/100 000) and 38% from 850 (17/100 000) to 1172 (23/100 000), respectively. There is no evidence to indicate access to care and treatment in Scotland is restricted by exposure category, country of origin or geographical area of residence.

For all Scotland, it is predicted that the numbers of persons under CD4 monitoring and on ARV will increase by 44% from 1926 (38/100 000) to 2771 (55/100 000) and 46% from 1367 (27/100 000) to 1991 (39/100 000) respectively, between 2004 and 2008⁴⁵.

Figure 3.19: Number of individuals¹ and MSM having a VCT HIV test by referral source² and HIV prevalence, Scotland: 1995-2004

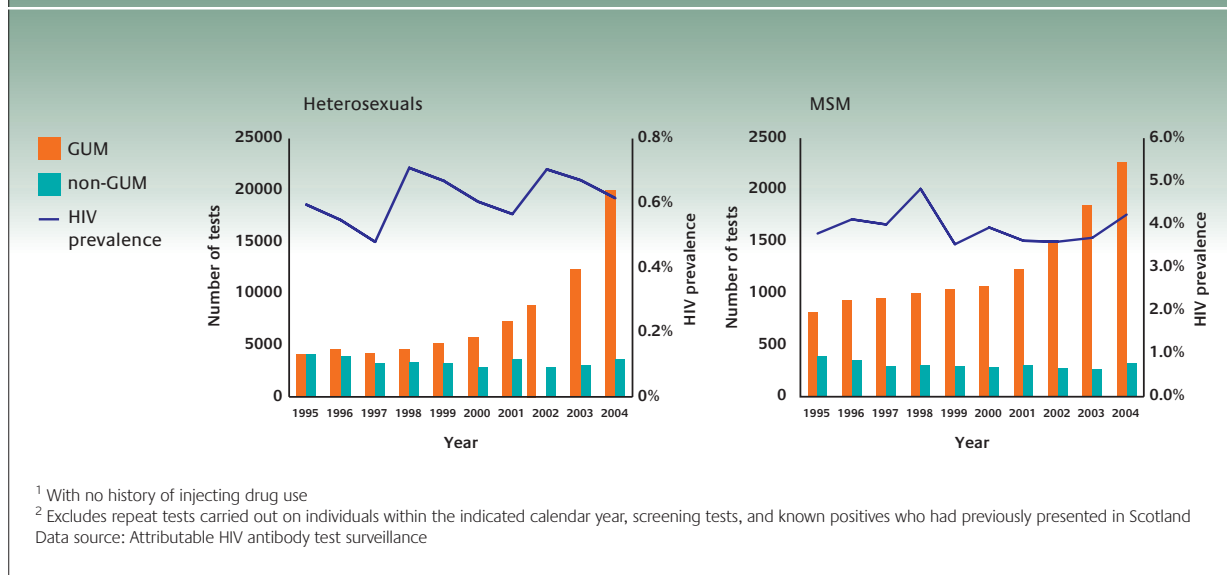
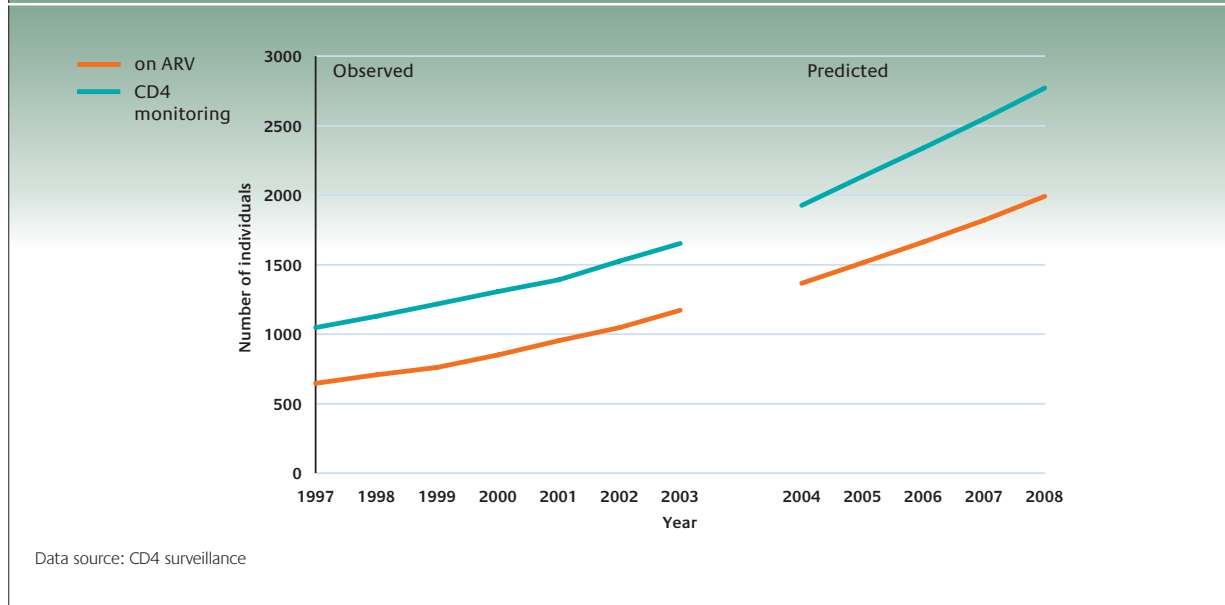


Figure 3.20: Observed and predicted number of people under CD4 monitoring or on anti-retroviral therapy (ARV), Scotland: 1997-2008



HIV drugs resistance testing in Scotland has been undertaken on request since April 2003. In the first 21 months of the service, 598 samples were tested; in 61% of cases, a rising viral load was the stated clinical indication for testing. Overall evidence of resistance was found in 66% of samples⁴⁶. As of 2005, resistance testing of all newly diagnosed cases will be undertaken; all Scottish results are submitted to the UK HIV Drugs Resistance Database based at the Medical Research Council Clinical Trials Unit.

Sexually Transmitted Infections

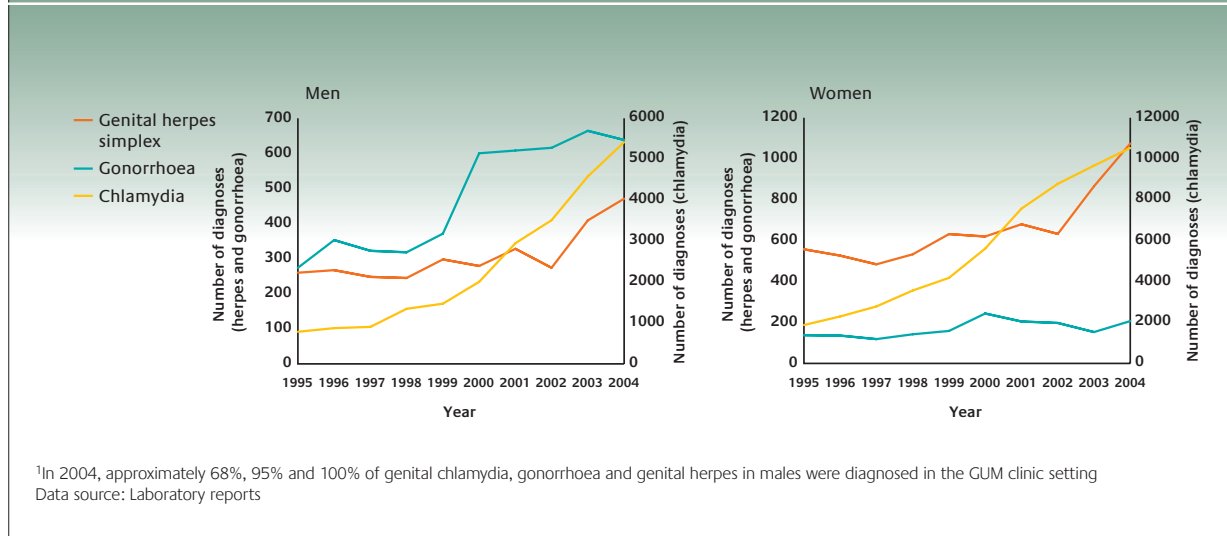
In Scotland, diagnoses of the major acute STIs, genital chlamydia infection, gonorrhoea, genital HSV, genital warts and syphilis, continued to increase during 2004. Data sources include both diagnoses made in the GUM clinic setting via the Sexually Transmitted Infection Surveillance System (STISS^h) and all positive laboratory diagnoses^{47,48}. A detailed description of NHS board level data can be found in the Scotland STI and HIV report; Setting the Scene^{49,50}.

^hPreviously known as ISD(D)5

In summary, and of note, during 2004:

- Genital chlamydia remained the most commonly diagnosed bacterial STI in GUM clinics; the majority of chlamydia diagnoses among women are made in other clinical settings (Figure 3.21).
- The majority (2:1 ratio) of both genital chlamydia and genital herpes diagnoses were made in women; gonorrhoea and syphilis diagnoses, however, predominated in men, the latter in MSM.
- Those aged <25 years bore the burden of genital chlamydia, genital herpes infections and genital warts; this was most noticeable in the 20-24 year age group for both men and women⁴⁵.
- In 2004, 19% of gonococcal isolates were ciprofloxacin resistant; this compares with 15% in 2003.
- Between 2003 and 2004, a 212% increase in syphilis cases (52 to 162) among MSM was observed.
- The first cases of lymphogranuloma venereum (LGV) in almost 20 years were diagnosed among MSM.

Figure 3.21: Number of laboratory reports¹ of genital chlamydia, gonorrhoea and genital herpes simplex infection in men and women, Scotland: 1995-2004



Genital chlamydial infection in heterosexuals

Since 1995, a year on year increase in diagnoses of genital chlamydia infection has been observed; this remains the most commonly diagnosed bacterial STI in Scottish GUM clinics²² (Figure 3.22).

The majority of chlamydia screening tests on men were performed in the GUM clinic setting; conversely, as a

consequence of greater screening opportunities, more screening tests on women were undertaken outside GUM clinics. This probably accounts for the observation that two thirds of all chlamydia diagnoses are made in women. The highest prevalence of genital chlamydia is observed in men and women aged under 25. Analysis of data from a postal testing kit initiative, (Healthy Respect)^{51,52}, indicated a peak prevalence of 13% among those aged 16-19 between 2001 and 2004 (Table 3.1).

Figure 3.22: Number of laboratory and GUM diagnoses of genital chlamydia by sex, Scotland: 1995-2004

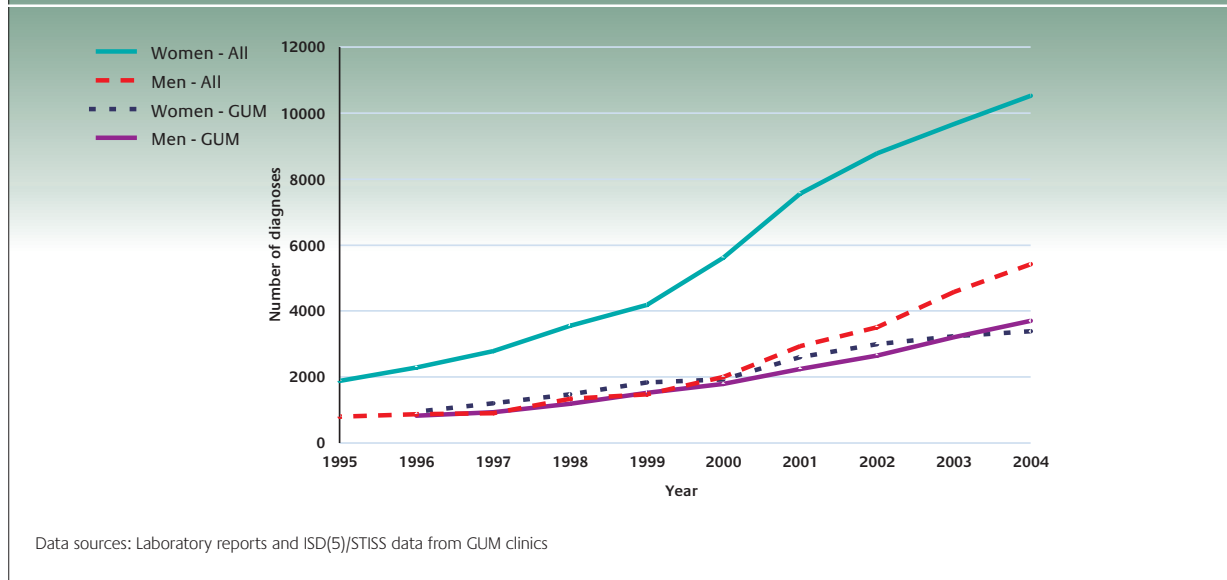


Table 3.1: Prevalence of genital chlamydia in men and women by age group, Scotland : 2001-2004

Year	Population	Number tested (% positive)	
Random sample of women attending family planning clinics in three cities ⁵³			
2000 - 2001	aged <20	730 (9.7%)	
	aged 20-24	835 (6.9%)	
	aged 25-29	735 (2.6%)	
	aged ≥30	729 (1.5%)	
Antenatal, family planning and gynaecology clinics in three cities ⁵⁴			
2001 - 2002	aged <20	438 (12%)	
	aged 20-24	773 (7.2%)	
	aged 25-29	758 (2.2%)	
	aged ≥30	843 (2.1%)	
Healthy Respect; postal testing kits ⁵⁵			
2001 - 2004	Men	aged 16-19	229 (14%)
		aged 20-25	396 (13%)
		aged >25	221 (4.5%)
	Women	aged 16-19	919 (13%)
		aged 20-25	1090 (9.1%)
		aged >25	505 (3.4%)
Male Military Recruits ⁵⁶			
2001 - 2002	all ages	798 (9.8%)	

Since the publication of screening recommendations in 2000⁴⁷, studies monitoring testing activity have shown that whilst the numbers undergoing a chlamydia test have increased, the prevalence of infection, particularly in women, the target group for screening, has remained constant. This observation suggests a relatively stable incidence of infection⁴⁸ (Table 3.2). Thus, the increase in diagnoses in recent years is considered to be due, mostly, to increased screening.

Table 3.2: Trends in testing and prevalence of genital chlamydia in men and women attending health care/NHS services, Scotland: 2001-2004

Year and population		Number tested (% aged <25)	Prevalence
Women (all ages) in Greater Glasgow NHS Board ⁵⁷			
2001		32 682 (35%)	7.0%
2002		36 193 (38%)	6.8%
2003		38 740 (41%)	7.4%
2004 (Jan-June)		20 290 (45%)	8.3%
Men and women (all ages) in Highland NHS Board ⁵⁸			
2000/01	Men	8231	8.8%
	Women		5.6%
2001/02	Men	1448	10%
	Women	6794	6.2%
2002/03	Men	1683	15%
	Women	6752	6.3%



The Scottish Intercollegiate Guidelines Network (SIGN), does not recommend the opportunistic testing of men outside the GUM clinic setting⁴⁷; this may partly explain, the finding, in some studies, that the prevalence of chlamydia is higher in men as a consequence of them tending to be tested only if they present with symptoms⁵⁸. Improvements in screening opportunities, especially for men, coupled with partner notification and ongoing health promotion and safe sex messages are required to address the burden of current chlamydia infection.

Infection among MSM

Certain indicators of high risk sexual behaviour among MSM are of considerable concern. While the number of episodes of rectal gonorrhoea decreased between 2003 and 2004, a 212% increase (52 to 162) in the number of syphilis diagnoses among this group was observed during the same period^{22,59} (Figure 3.23). Further, gay bar surveys of MSM indicated that the frequency of unprotected anal intercourse with casual or multiple partners increased from 11% in both 1996 and 1999 to 19% in 2002⁵⁸.

The frequent occurrence of syphilis and HIV co-infection is of considerable concern; 27% (33/119) of syphilis diagnoses in 2004 had HIV infection⁵⁹. This highlights the need to ensure that MSM who attend GUM clinics are

offered and recommended an HIV test⁴⁴. Several initiatives to raise awareness among this population group, including ones to provide rapid syphilis testing services in community settings, have been implemented.

Respect and Responsibility - Strategy and Action Plan for Improving Sexual Health

Scotland's first national strategy for sexual health was published, by the Scottish Executive, in January 2005⁴⁴. A National Sexual Health Advisory Committee has been established to advise on policy and monitor and support the implementation of Respect and Responsibility. Key recommendations include:

- to provide integrated sexual health services in all NHS Board regions and ensure equity of access;
- to offer and recommend (as routine) an HIV test, to all GUM clinic attendees, not known to be HIV-infected, who attend with a new STI;
- to prevent STIs by encouraging early diagnosis and treatment, especially in those aged under 25;
- to develop clinical service targets to address the increase in STIs;
- to develop a national data collection framework across all service providers.

Figure 3.23: Infectious syphilis among men who have sex with men and rectal gonorrhoea in all men, Scotland: 1995–2004

