

energy metabolism that is not readily explained by physical inactivity or psychiatric disorder. This adds to the growing body of evidence that the syndrome is heterogeneous.

We thank the Staines Myalgic Encephalomyelitis Self Help group and the Myalgic Encephalomyelitis Association for their support.

Funding: No additional funding.

Conflict of interest: None.

- David AS. Postviral fatigue syndrome and psychiatry. *Br Med Bull* 1991;47: 966-88.
- Lane RJM, Woodrow D, Archard L. Lactate responses to exercise in chronic fatigue syndrome. *J Neurol Neurosurg Psychiatry* 1994;57:662-3.
- Sharpe M, Archard L, Banatvala J, et al. Guidelines for research in chronic fatigue syndromes. *J R Soc Med* 1991;84:118-21.
- Nashef L, Lane RJM. Screening for mitochondrial cytopathy: the sub-anaerobic threshold exercise test. *J Neurol Neurosurg Psychiatry* 1989;52: 1090-4.
- Wing JK, Cooper JE, Sartorius N. *The measurement and classification of psychiatric symptoms*. New York: Cambridge University Press, 1974.

(Accepted 29 June 1995)

Incidence of HIV infection in homosexual men in London, 1988-94

E Miller, P A Waight, R S Tedder, S Sutherland, P P Mortimer, M S Shafi

PHLS Communicable Disease Surveillance Centre, London NW9 5EQ
E Miller, head of immunisation division
P A Waight, principal scientist

Department of Medical Microbiology, University College and Middlesex School of Medicine, Windeyer Building, London W1P 6DB
R S Tedder, head

Public Health Laboratory and Medical Microbiology, King's College School of Medicine and Dentistry, Dulwich Hospital, London SE22 8QF
S Sutherland, consultant medical virologist

Virus Reference Division, Central Public Health Laboratory, London NW9 5HT
P P Mortimer, director of hepatitis and retrovirus laboratory

Public Health Laboratory, Central Middlesex Hospital NHS Trust, Park Royal, London NW10 7NS
M S Shafi, director

Correspondence to: Dr Miller.

BMJ 1995;311:545

Measures of the incidence of HIV infection in different groups are essential for targeting and evaluating health education. Incidence measures obtained by the follow up of closed cohorts become biased over time as early infection in those at highest risk results in a subsequent downward trend in incidence.^{1,2} We describe changes in the age specific incidence of HIV infection in open cohorts of homosexual men continuously recruited from among patients attending genitourinary medicine clinics in London from 1988 to 1994.

Patients, methods, and results

Homosexual men negative for HIV antibody who had attended genitourinary medicine clinics in London from January 1988 to April 1994 and been voluntarily retested for HIV antibody were identified from computerised records held by four laboratories participating in a Public Health Laboratory Service collaborative survey.³ Person time denominators were obtained by summing the time between the first and last test giving negative results for those remaining antibody negative and the time between the first negative and first positive result for those who became positive for HIV antibody. Incidence estimates over time and between age groups were compared with the Poisson likelihood ratio test.

A total of 6753 homosexual men were identified as being negative for HIV antibody, of whom 1759 (26%) had one or more repeat tests during the study period. The proportion retested was similar in each age group and did not vary significantly over time. The overall mean time between the first and last test was 676 days. A total of 124 men became positive for HIV antibody, 84 (68%) of whom were aged under 30. The overall incidence was 3.8 per 100 person years (95% confidence interval 3.2 to 4.5). The rate was highest in men aged 20-24 (6.2 per 100 person years) and declined significantly with age to 1.6 in men aged 40 and over ($P < 0.001$).

Sixty nine of the 1418 men who had repeat tests within two consecutive calendar years became positive

for HIV antibody. Incidence remained at around 9 per 100 person years among the younger men (under 30), with no evidence of a downward trend over time ($P > 0.5$) (table). Incidence was significantly lower in older men ($P = 0.03$), averaging 3.3 per 100 person years; the decline over the period in this group was not significant ($P = 0.10$).

Comment

Our study illustrates the value of the open cohort method applied to data obtained from voluntary HIV antibody testing for monitoring incidence in groups at high behavioural risk.¹ The difference in incidence with age found in homosexual men is unlikely to result from bias in selection for retesting as the proportion with repeat samples was similar across and within age groups over time.

The continuing high incidence of HIV infection in young homosexual men in London is worrying. Behavioural studies that will identify the factors leading to unsafe sexual behaviour in this group are urgently needed. Although the high incidence measured in our study cohort probably does not apply to all homosexual men, the identification of a subgroup at high risk of infection is important because targeting interventions at this subgroup could have a substantial effect on reducing the rate of transmission overall. If candidate HIV vaccines become available, young homosexual men attending genitourinary medicine clinics in London could be a suitable population in which to measure efficacy.

We thank Joan Richmond, Peter Luton, Pat Holland, Bina Patel, and Pradip Pandaya for their help in data collection, and Paddy Farrington for his help with the statistical analysis.

Funding: None.

Conflict of interest: None.

- Heyward WL, Osmanov S, Saba J, Esparza J, Belsey E, Stoneburner R, et al. Preparation for Phase III HIV vaccine efficacy trials: methods for determination of HIV incidence. *AIDS* 1994;8:1285-91.
- Winkelstein W, Samuel M, Padian NS, Wiley JA, Lang W, Anderson RE, et al. The San Francisco men's health study: III. Reduction in human immunodeficiency virus transmission among homosexual/bisexual men 1982-86. *Am J Public Health* 1987;76:685-9.
- Waight PA, Rush AM, Miller E. Surveillance of HIV infection by voluntary testing in England. *Commun Dis Rep CDR Rev* 1992;2:R85-90.

(Accepted 12 June 1995)

Corrections

Delays in hospital admission and investigation in acute stroke

An authors' error occurred in the figure illustrating this short report by Neil E Anderson, Joanna B Broad, and Ruth Bonita (15 July, p 162). The median time to delay for intracerebral haemorrhage should be 14 hours, not seven as shown, and the median delay for cerebral ischaemia was as high as 66 hours (not 48 hours). The text gives the correct values.

Changing patterns of iron deficiency anaemia in the second year of life

An editorial error occurred in this short report by John A James and colleagues (22 July, p 230). In the table the risk of anaemia at 2 years of age in children who were anaemic at 14 months (fourth row) should have read 30% (13/43) [not 30% (30/43)].

Incidence of HIV infection in HIV negative homosexual men by age and over time

	Age <30			Age ≥30				
	No retested	Mean time between tests (days)	No becoming HIV positive	Incidence of HIV infection per 100 person years	No retested	Mean time between tests (days)	No becoming HIV positive	Incidence of HIV infection per 100 person years
Jan 1988-Dec 1989	131	259	7	7.5	236	303	10	5.1
Jan 1990-Dec 1991	254	295	20	9.7	262	318	8	3.5
Jan 1992-April 1994	247	313	19	8.9	288	336	5	1.9