

- McNabb PC. A surgeon with AIDS: lack of evidence of transmission to patients. *JAMA* 1990;264:467-70.
- 4 DeBry RW, Abele LG, Weiss SH. Dental HIV transmission? *Nature* 1993;361:691.
- 5 Kabukobak JJ, Young P. Midwifery and body fluid contamination. *BMJ* 1992;305:226.
- 6 Joint Working Party of the Hospital Infection Society and the Surgical Infection Study Group. Risks to surgeons and patients from HIV and hepatitis: guidelines on precautions and management of exposure to blood or body fluids. *BMJ* 1992;305:1337-43.
- 7 Henderson DK, Fahey BJ, Willy M, Schmitt JM, Carey K, Koziol DE, et al. Risk for occupational transmission of human immunodeficiency virus type-1 (HIV-1) associated with clinical exposures. *Ann of Intern Med* 1990;113:740-6.

Health workers need protection

EDITOR,—The speed with which the Department of Health has produced two new guidelines is to be commended.^{1,2} While both documents are strong on the obligations of the infected health care worker they place much less emphasis on the obligations of the department to protect health care workers in the first place. This is in keeping with the consistent failure of the NHS Management Executive to comply with its statutory obligations, publish its health and safety policy, and provide explicit guidelines on how it expects, and will resource, trusts and provider units to provide a safe and healthy working environment.

The Health and Safety at Work Act 1974, the Control of Substances Hazardous to Health Regulations 1988, and the Management of Health and Safety at Work Regulations 1992 require employers to perform a competent assessment of risks to staff, to institute control measures, to inform and train staff, and to monitor and review procedures regularly. The lack of compliance with basic health and safety obligations has been an issue at successive BMA annual representative meetings and has led the BMA to make repeated and largely unheeded calls to the Department of Health to rectify this situation.

When considering HIV, the assessment of risks to staff must be regarded as important as the concerns about patients set out in the two guidelines. By October 1992, 147 health care workers worldwide were reported to have acquired HIV through occupational transmission and the estimated transmission rate was 13 in 4129 exposures (0.31%, 95% confidence interval 0.14% to 0.49%).³ An earlier risk assessment estimated the cumulative risk to surgeons over 30 years as being one in 800.⁴ In industry an increased risk of 1:10 000 is the threshold for urgent action. On the other hand only five people, all patients of one infected Florida dentist, have been reported as contracting HIV through clinical contact.⁵

There can be no doubt that the NHS is a dangerous industry, even more so than the nuclear, chemical, or manufacturing industries. What is now required is a significant effort to improve the health and safety of all health care workers by establishing clear and unequivocal policies and safe systems of work, by providing adequate information and training, and by providing a consistent and high quality occupational health and safety service, which should be consultant led and available to all.

Few health care workers have ever had formal health and safety training and many have a cavalier attitude to their own health. In this situation it can be argued, on the basis of the need to perform an adequate risk assessment, that patients about to undergo invasive procedures where there is appreciable occupational risk to staff should be invited to undergo HIV testing voluntarily. This would encourage staff to adopt safe working practices in high risk cases.

Perhaps now that this situation has been explained, the Department of Health will show its concern for staff and produce, equally rapidly, guidance to NHS managers on how they must meet their statutory obligations and start to reduce

the horrendous risks to which many health care workers are exposed.

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- 1 Department of Health. *AIDS-HIV infected health care workers: guidance on the management of infected health care workers*. London: Department of Health, 1993.
- 2 United Kingdom Health Departments. *AIDS-HIV infected health care workers: practical guidance on notifying patients*. London: UK Health Departments, 1993.
- 3 Porter K, Heptonstall J, Gill N. *Occupational transmission of HIV. Summary of published reports—October 1992*. London: PHLS AIDS Centre, 1992.
- 4 Leentvaar-Kuijpers A, Dekker M, Continho RA, Dekker EE, Keenan JN, Ansink-Schipper MC. Needlestick injuries, surgeons, and HIV risks. *Lancet* 1990;335:546-7.
- 5 Liesielski C, Marianos D, Ou CY, Dumbaugh R, Witte R, Berkelman R, et al. Transmission of human immunodeficiency virus in a dental practice. *Ann Intern Med* 1992;116:798-805.

Cost of compulsory HIV testing

EDITOR,—A Graham Bird and Sheila M Gore's editorial shows doubts about the potential effectiveness of the revised guidelines recently issued on the management of HIV infection among health care workers.¹ If the guidelines do not reduce public or professional anxiety there might be renewed pressure on the Department of Health to consider routine testing for HIV in health care workers in Britain. We have quantified the likely costs of such a programme.

The average cost of testing a health care worker for HIV has been estimated at £120.² This includes the use of an enzyme linked immunoassay (ELISA) for HIV four times a year, counselling before and after testing, and hospital outpatient overheads. The total cost to the NHS depends on the scope of the testing programme. One option would be to annually test all hospital doctors and clinical staff in the United Kingdom. The cost of this programme to the NHS would be about £7.6 million in 1993 rising to £8.0 million in 1995 (assuming a 3% annual growth rate in numbers of staff).

A larger testing programme would include all general dental practitioners, and hospital dentists, hospital midwives, and nurses. The total costs of this larger programme would be about £65.2 million in 1993 rising to £65.7 million in 1995 (assuming staff growth rates of 1% for dentists and stable numbers for midwives and nurses). Alternatively, a smaller programme might involve routine testing of hospital doctors or clinical staff working within specialties in which invasive surgery is practised. This programme would cost around £1.7 million in 1993 and £1.8 million in 1995 (assuming a 3% growth rate in staff). The table gives a breakdown of the costs for each option.

Given the high cost and unproved benefits^{3,5} the United Kingdom health departments are right to resist the ill informed pleas for the introduction of HIV testing of health care workers. In addition, the revised HIV guidelines are unlikely to reduce public fear about the transmission of HIV to patients by infected health care workers. We believe that evaluation of the costs and benefits of alternative methods of reducing anxiety, such as increased efforts to educate the public, the media, and health professionals of the risks of HIV

Estimated costs of HIV screening strategies for NHS health care workers in the United Kingdom (1993 prices)

| NHS staff screening options | Estimated No of health care workers in 1993 | Total cost in 1993 (£m) | Total cost in 1995 (£m) |
|--|---|-------------------------|-------------------------|
| Hospital doctors/clinical staff | 62 900 | 7.55 | 8.01 |
| General dental practitioners/hospital dentists | 21 200 | 2.55 | 2.60 |
| Hospital nurses | 482 300 | 51.7 | 51.7 |
| Midwives | 28 300 | 3.40 | 3.40 |
| All hospital doctors, nurses, midwives, and dentists | 594 700 | 65.2 | 65.7 |
| Hospital doctors/clinical staff in key specialties* | 14 300 | 1.72 | 1.83 |

*Obstetrics and gynaecology; accident and emergency; blood transfusions; cardiothoracic surgery; general surgery; ear, nose, and throat; neurosurgery; ophthalmology; paediatric surgery; traumatic and orthopaedic surgery; urology; and plastic surgery.

infection from different routes, is urgently required.

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- 1 Bird AG, Gore SM. Revised guidelines for HIV infected health care workers. *BMJ* 1993;306:1013-4. (17 April.)
- 2 Rogers AS, Froggatt JW, Townsend T, Gordon T, Leigh Brown A, Holmes EC, et al. Investigation of potential HIV transmission to the patients of an HIV infected surgeon. *JAMA* 1993;269:1795-801.
- 3 Dickinson GM, Morhart RE, Klimas NG, Bandea CI, Laracuent JM, Bisno A. Absence of HIV transmission from an infected dentist to his patients: an epidemiologic and DNA sequence analysis. *JAMA* 1993;269:1802-6.
- 4 Von Reyn CF, Gilbert TT, Shaw FE, Parsonnet KC, Abramson JE, Smith G. Absence of HIV transmission from an infected orthopedic surgeon. *JAMA* 1993;269:1807-11.

Sensible approach restores confidence

EDITOR,—The long overdue revised guidelines for HIV infected health care workers¹ from the Department of Health will allay the public's suspicion that health authorities are trying to cover up cases of doctors with AIDS.

A Graham Bird and Sheila M Gore's suggestion for collection of more data on the risks of various invasive procedures may be ideal but it is unrealistic since the costs are high and the potential benefits small.² The prevalence of HIV infected doctors carrying out invasive procedures is thought to be extremely low. Analysis suggests that health care workers are potentially more at risk of infection from patients, and this is a real risk as the prevalence of HIV infection in certain categories of patients has continued to increase. AIDS imposes on us the difficult task of asking our colleagues to carry out procedures that are a risk to them but not to us. As the HIV prevalence increases, occupational transmission will inevitably occur. We are against required mandatory testing of health care workers and patients, but would welcome voluntary testing and subsequent voluntary action by individuals. The guidelines are sensible and health authorities should implement the guidelines and ensure compliance. Such compliance should be monitored and evaluated in future.

A sensible, pragmatic, honest, and humanising approach on issues connected with HIV and AIDS will, we hope, restore public confidence about HIV transmission in health care. Patients or health care workers found to be positive for HIV should not be discriminated against and their confidentiality and privacy should be respected, even after death.

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- 1 Department of Health. *AIDS-HIV infected health care workers: guidance on the management of infected health care workers*. London: Department of Health, 1993.
- 2 Bird AG, Gore SM. Revised guidelines for HIV infected health care workers. *BMJ* 1993;306:1013-4. (17 April.)