priority is to re-establish circulation. Achievement of that objective will often render respiratory attention unnecessary.

The best chance of defibrillating the heart and restoring cardiac output is within the first minute. Two or three praecordial thumps are well worth a try while the defibrillator is being prepared (or if none is available), but the potentially life (and brain) saving direct current shock should not be otherwise delayed, particularly by slavish adherence to the simplistic ABC routine. In practice the priorities are usually self evident and their management not mutually exclusive.

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behaviour.

Epidemic of AIDS related virus infection among intravenous drug abusers

SIR,—Our experience in south London does not match that of Dr J S Robertson and others in Edinburgh (22 February, p 527), nor does it match the unofficial reports that we have received from other parts of Britain.

We tested three populations of intravenous drug abusers for the presence of human lymphotropic virus type III (HTLV-III): 48 were participants in a drug rehabilitation programme, 60 attended a drug dependency unit, and 38 attended a rehabilitation programme at the Bethlem Royal Hospital. Of the total of 146 tested to date, only one has proved to be HTLV-III antibody positive; this individual lives in north London. This compares with 51% of the Edinburgh sample of intravenous drug users being antibody positive. It is remarkably low even when compared with unofficial reports from different parts of Britain and from north of the Thames. We have questioned over a third of those tested (48) about their drug abuse habits, particularly the extent to which they shared needles, to try to explain this discrepancy.

Of the 48 questioned, 45 were intravenous drug abusers, 35 were men, and 13 were women. They were aged 20 to 41 (mean 27 years 6 months in men and 28 years in women).

Of the 45 who had injected drugs, only four had never shared a needle, 25 shared needles fewer than half the times they had used intravenous drugs, 12 shared needles more than half the time, and 4 always shared needles. When needles were shared with others the number of users sharing ranged between 1 and over 30. While the upper end of this range goes some way to matching the 'social" sharing of needles and equipment in the shooting galleries of Edinburgh, other factors such as the availability of clean syringes, the more frequent sterilising of used equipment, and health education campaigns concerning the spread of hepatitis B might explain the large difference in the prevalence of HTLV-III in the two populations. They do not explain, however, the differences that seem to have occurred even within London.

The table shows when the members of the sample had last used an injected drug and had last

Last use of injected drug and needle sharing

Time	Last use of injected drug (n=45)	Last shared needle (No (%))
< 3 months	17 (38)	14 (34)
\geq 3 months but $<$ 6	6(13)	4(10)
\geq 6 months but $<$ 1 year	15 (33)	15 (37)
1-2 years ago	6(13)	7 (17)
8-9 years ago	1 (2)	1 (2)

shared a needle with other users. Some of those tested might still be in the process of seroconverting, and testing will continue. However, it is apparent that overall some 50% should by now have formed antibodies to the virus if they had been exposed to it. We can find no evidence that the drugs abused per se can predispose individuals to an increased risk of infection.

In the light of these findings, we are undertaking a more detailed study of the drug abuse habits of our populations to discover whether other factors in the way they abuse drugs might somehow be protecting them. We are taking the same opportunity to see whether sexual behaviour is a factor and how awareness of HTLV-III is modifying either their drug taking habits or their sexual behaviour.

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HTLV-III: Should testing ever be routine?

SIR.—Dr David Miller and others (5 April, p 941) contend, without giving supporting evidence, that personal knowledge of antibody status seems to be a less important motivator of behavioural change than sustained and consistent counselling from various sources in the hospital and community. In the gay population of London, for whom there is a one in three chance of those attending sexually transmitted disease clinics being HTLV-III seropositive, it makes sense routinely to advocate safe sex practices, for which there will also be considerable support from peer pressure within the gay community. Yet it is doubtful that widespread knowledge of the need for safe sex alone will permit the control of HTLV-III, especially in areas outside London where there is currently a low prevalence of seropositivity.

During the 1960s, when there were stricter public attitudes to sexual behaviour than now, even the availability of cheap effective treatment failed to prevent the incidence of gonorrhoea from rising sharply. It was only when the role of the asymptomatic carrier in transmitting the disease was recognised that better control was effected after their detection by screening and contact tracing. Likewise, focusing control efforts on the detection of the asymptomatic HTLV-III carrier may be of crucial importance in controlling the spread of HTLV-III. Although this infection differs from gonorrhoea in that no cure currently exists, much can be done to reduce the transmission risk from carriers. Detection of the infected person must be followed by a long lasting doctorpatient relationship in which the shared objective is the maintenance of that individual's physical, social, and emotional wellbeing. This will facilitate the lifestyle changes required to reduce the risks of the disease's progression and transmission. Maintenance of strict confidentiality, as with other sexually transmitted diseases, will help to protect the patient against the prejudices and irrational fears which are a major cornerstone of the antitesting argument.

The alternative is that those individuals at risk who refuse consent to HTLV-III testing must modify their behaviour as if they had been found to be seropositive and their doctors must perform the same medical and counselling follow up. In the real world, with its restricted resources, it is inconceiv-

able that effective counselling can be sustained in all members of at risk groups. My experience, like that of Thomas Richards (p 943), is that "those who change their behaviour most are those who are tested, found to be positive, and properly counselled." Thus in many provincial cities the detection and care of the asymptomatic carrier will remain potentially the most effective means of controlling the spread of HTLV-III and its resultant health care costs.

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Risk of AIDS to health care workers

SIR,—As an occupational physician to a district treating patients with the acquired immune deficiency syndrome (AIDS), I am writing about some staff anxieties that were not covered in Professor A M Geddes's leading article (15 March, p 711).

No government has yet decided whether health care workers infected asymptomatically with human T cell lymphotropic virus type III (HTLV-III) may carry out invasive procedures safely. In the United States the Communicable Disease Center has said that "Formulation of specific recommendations for health care workers who perform invasive procedures is in progress,"1 but the Association of State and Territorial Health Officials Foundation has stated that "If an individual is employed in medical, dental, or other health care occupations, the precautions successfully used to limit the spread of hepatitis B should be taken. (The primary action to be taken is to use gloves and extreme caution during any invasive procedure.)"2 In Britain the Department of Health and Social Security has issued no guidelines; when it does infected staff may be told that they pose unacceptable risks to patients. Professor Geddes did not discuss the probability of infected staff being regarded as a health risk, let alone evidence that staff could possibly infect patients.

This possibility adds greatly to the anxieties of staff asked to treat carriers of HTLV-III. If they become infected they know the risk of developing AIDS and of transmitting it to their spouses and any children they might have, assuming they ignored advice to forego reproduction. Even if they remain fit to work, however, this could be ruled unsafe, effectively meaning redundancy from the National Health Service.

Despite the infected nurse mentioned by Professor Geddes the DHSS has not even prescribed AIDS as an industrial disease, giving extra state benefits. These benefits would not, however, cover increased earnings on promotion, private practice fees, or the asymptomatic infected surgeon banned from operating. I therefore sympathise with the junior doctor who, after a needle stick injury from a patient with AIDS, burst into tears, said his career could well be ended if he seroconverted, and refused to report his injury or enter the national prospective survey of such incidents.

Recently, an industrial tribunal emphasised the need for employers to meet genuine areas of concern about health among their staff. Evidence that risks are small, or, even worse, insufficient evidence as here, does not mean anxieties reasonably arising from national publicity can be ignored. Surely the episode above underlines the urgency for the DHSS to be seen to protect staff against the occupational risks of AIDS; this will encourage staff to adopt liberal attitudes about treating infected patients. A caring employer would (1) indemnify any of his work force acquiring HTLV-III infection occupationally from any loss of earnings (as already claimed by Dublin doctors');