

epidemiological studies are being done on viral DNA and matching of all patients seen by the surgeon since 1979 with the NSW HIV and AIDS registers is in progress. The review of all persons with HIV reported to the NSW Health Department for whom conventional risk factors have not been identified is being strengthened.

This communication emphasises two important points. First, all persons involved in procedures involving contact with blood and body fluids should adhere at all times to infection control guidelines.^{3,4} Second, all persons diagnosed with HIV infection with unknown or uncertain conventional risk factors should be carefully evaluated.

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HIV testing and blood recipients

SIR—Fear of receiving HIV-contaminated blood is experienced worldwide, including most recently by those receiving blood products from Germany (see *Lancet* Nov 13, p 1228). News of tainted blood invariably sets off a wave of concern among all people who have had blood transfusions or have been in hospital. However, only a few should have reason for concern unless there was a complete breakdown in the blood HIV-testing procedure. Unfortunately, since the source of blood is not routinely entered in patients' records, it becomes difficult for health officials to trace those who might have become infected. One way to address this fear is to offer HIV antibody testing to all persons who have received blood during the period of risk. As has been discovered in Germany, however, this period can extend to a decade. Adding in sexual partners, the number of persons who potentially are at risk of infection might be very great. The only way individuals can know if they are infected is to obtain an HIV test. Without widespread HIV testing, the source of tainted blood is unlikely to be detected or further transmission prevented among sexual partners of infected transfusion recipients.

A non-invasive saliva test for HIV antibodies would be ideal for widespread testing.^{1,2} In published studies, sensitivity of such assays is 98-100%, and specificity is even higher, at 99.5-100%. Because it is non-invasive and rarely contains virus, saliva is a safer medium than blood for those collecting specimens, and it can be kept at room temperature for several weeks. Hence, specimens could be obtained in the home and posted to laboratories for analysis.³

We envisage that an inexpensive widespread HIV-testing

programme would be welcomed by health officials. Participants would first be screened with a saliva-based HIV antibody test. The collection device could be provided directly to all transfusion recipients, or be generally distributed or sold through pharmacies. A unique number only would link the identity of the saliva specimen to the person. After 1-2 weeks, individuals would telephone the laboratory for a recorded message about the test result. In HIV-positive tests, the message would remind the caller that the saliva assay is only a screening test, and that confirmatory blood testing should be done. In HIV-negative tests, the message would also say that there is still a very small chance of a false negative result.

As a highly sensitive and specific screening procedure, saliva testing would not undermine a blood-testing programme: it would, rather, help to identify HIV-infected persons, who could then be offered counselling and medical assistance. Testing and counselling centres could focus more time and effort on those infected with HIV. Once confirmed HIV status is known to the health professionals, government epidemiologists could assemble cases (ie, infected with HIV) and controls (ie, HIV negative) for a confidential but detailed case-control investigation. Thus, the source of contaminated blood would be identified and corrective measures taken to prevent future occurrences. There are legal and ethical restrictions on HIV testing that would first need to be resolved, but we agree with Dr S Joseph, former Commissioner of Health for New York City,⁴ who stated that our first duty as a society is to protect uninfected persons from HIV and not to safeguard the identity of HIV infected individuals.

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SIR—The reports from Germany of HIV contaminated blood products are of great concern and underscore the need for regulation of the biopharmaceutical industry. Discussions have centred on the possibility that AIDS is being spread from tainted blood products shipped from one German company to France, Austria, Italy, Switzerland, and Greece. However, policymakers in western Europe should not overlook the fact that some blood for manufacturing blood products is being imported from countries of eastern Europe where blood for transfusion is in dangerously short supply. In Romania, for example, maternal mortality due to haemorrhage is over eleven times that of the UK.¹ Most maternal deaths due to blood loss are preventable, but Romanian obstetricians have inordinate difficulty in obtaining adequate supplies of blood for management of shock. Romania is by no means unique—many countries of eastern Europe and the newly independent states are having similar difficulties.

German health minister Horst Seehofer's call for testing patients who had received blood products in recent years is merely a damage-control measure. To prevent such occurrences, the EC should adopt strict quality control standards for blood products, as well as ethical trade regulations. As we condemn the buying and selling of organs for transplant so should we try to stop international commercial trade in blood (also a living tissue) when this practice exploits