different specialties, and I am sorry that as yet it has been studied so little. Here is something the defence societies could give us a lead in.

J E WOODYARD

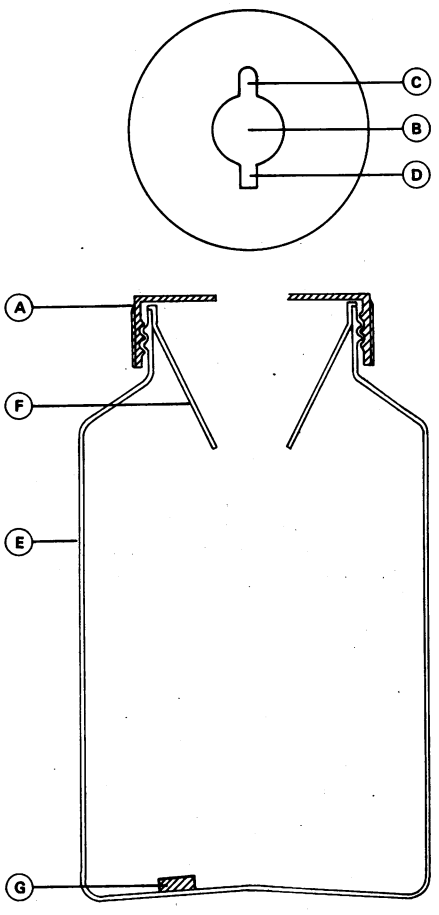
Stafford District General Hospital,
Stafford ST16 3SA

1 McKee RF, Scott EM. The value of routine pre-operative investigations. *Ann R Coll Surg Engl* 1987;69:160-2.
2 Currey HLF, Greenwood RM, Lloyd GG, Murray RS. A prospective study of low back pain. *Rheumatol Rehabil* 1979; 18:94-104.

Device to permit recapping of syringes without risk of infection

SIR,—Like Dr R G Bessent and colleagues (1 August, p 307), we have invented a device (Securoject) to avoid recapping needles by hand or performing other dangerous manipulations that might lead to needlestick injuries.

The device consists of a puncture proof container (figure), the lid of which (A) has an orifice (B) with two slits (C, D). Slit C is of such a size that it will firmly hold the part between the needle and the syringe. A simple sideways or downward movement detaches the needle from the syringe. Slit D is designed to hold the square part of Vacutainer type needles; the needle may be unscrewed from the holder and then falls into the puncture resistant container (E) through a funnel (F), which prevents the needles from falling out. An effervescent chloral tablet (G) may be diluted with tap water so that perfect antisepsis is obtained. The whole device is made of polyethylene, and once full of needles it may be crushed and incinerated. It is light and may be placed on the nurses' trolley, the distance between the patient and the final container is minimal, and recapping is avoided. This device would considerably reduce the risk of needlestick injuries to health care workers.



Device to prevent recapping of needles by hand seen from above and in cross section.

A FISCH
T PRAZUCK
C LAFAIX

Departement de Santé Publique,
Université de Paris XII,
94010 Créteil Cédex,
France

P LAPLANTE

Astrium Sarl,
94400 Vitry sur Seine,
France

1 McCray E. Occupational risk of the acquired immune deficiency syndrome among health care workers. *N Engl J Med* 1986;314:1127-32.
2 Bittner MJ. Don't recap needles even on television. *JAMA* 1986;255:2289-90.

SIR,—In his article on control of infection policies in relation to the human immunodeficiency virus (4 July, p 33) Dr D Jeffries perpetuates the dogma that needles are best left unsheathed to avoid resheathing/recapping injuries. Unfortunately, such an approach replaces one dangerous activity with another and fails to succeed in reducing needlestick injuries. The Advisory Committee on Dangerous Pathogens in its revised guidelines of June 1986 recognises that means exist to resheath needles safely and in "Precautions for invasive procedures" (including specimen taking) states, "As approximately 40 per cent of self-inoculation accidents occur while resheathing needles, this must not be done unless there is a safe means available."[1]

We have now had over two years' experience in using a simple, safe, plastic resheathing device—the needle guard, designed to allow safe resheathing of used needles[2]—and wish to report the results of a 31 month study of needlestick accidents in a large private pathology laboratory carrying out over 1000 venepunctures daily. In this prospective analysis venepuncturists (23 staff: 177 100 venepunctures), relying on the guidelines of the Centers for Disease Control[3] for handling used needles, were shown to incur a needlestick accident for every 3175 to 4216 needle handling procedures (venepunctures using an evacuated tube system). Those using the needle guard (47 staff: 361 900 venepunctures), however, were shown to incur a needlestick accident only once in every 24 126 venepunctures performed ($p<0{\cdot}001$, Student's t test). This represents an 82% reduction in the rate of needlestick injury. No recapping injuries were seen in those using the needle guard, but nine recapping injuries (26% of all needlestick injuries) occurred in those not using the guard. Injuries occurring on disposal of naked needles were common among those not using the guard, and "downstream" injuries (away from the bedside) resulted from uncovered needles. Needles safely resheathed were shown no longer to be hazardous.

We must question the effectiveness and rationality of official non-recapping policies and request that proof of efficacy of non-recapping be published so that medical workers can make an informed decision as to how best to protect themselves from the risks associated with used needles.

PAUL N GOLDWATER

Adelaide Children's Hospital,
North Adelaide,
South Australia 5006

1 Advisory Committee on Dangerous Pathogens. *LAT/HTLV-III the causative agent of AIDS and related conditions—revised guidelines*. London: Department of Health and Social Security, 1986:6.
2 Nixon AD, Law R, Officer JA, *et al*. Simple device to prevent accidental needle-prick injuries. *Lancet* 1986;i:888-9.
3 Centers for Disease Control. Recommendations for preventing transmission of infection with human T-lymphotropic virus type III/lymphadenopathy associated virus in the workplace. *MMWR* 1985;34:691-5.

ABC of AIDS: Treatment of infections and antiviral agents

SIR,—We agree with Dr I V D Weller (18 July, p 200) that in patients with the acquired immune deficiency syndrome (AIDS) who have cerebral toxoplasmosis the combination of pyrimethamine with a sulphonamide is the treatment of choice, but we would also emphasise the therapeutic value of co-trimoxazole. Though this drug has proved to be effective against *Toxoplasma gondii* both in vitro and in vivo,[1] it is not often considered to be a suitable alternative treatment. In patients who develop intolerance to pyrimethamine plus sulphonamide side effects are generally due to sulphonamide, which is also present in co-trimoxazole.

Nevertheless, co-trimoxazole offers certain advantages, so that in some conditions it could be proposed as a first line treatment of toxoplasmosis of the central nervous system. When haematological toxicity of pyrimethamine becomes dangerous, as happens quite often in patients with AIDS, particularly during concurrent zidovudine treatment, co-trimoxazole is a safer choice. Moreover, intravenous preparations of pyrimethamine are available only in a fixed combination with a long acting sulphonamide. In unconscious patients the use of intravenous co-trimoxazole is certainly more rational than the administration of the fixed combinations.

We have so far treated with co-trimoxazole (at the dosage recommended for *Pneumocystis carinii* pneumonia) five patients with AIDS suffering from cerebral toxoplasmosis in whom the use of pyrimethamine plus sulphonamide was problematic. Computed tomography showed that the lesions had completely resolved in all the patients after three weeks of treatment. There were no signs of toxicity. As other alternative regimens (such as pyrimethamine plus clindamycin and pyrimethamine plus spiramycin) have been shown to be ineffective[2] we think that treatment with co-trimoxazole should be tried in patients with AIDS who cannot tolerate the administration of pyrimethamine plus sulphonamide.

ROBERTO ESPOSITO
ADRIANO LAZZARIN
GIOVANNA ORLANDO
MASSIMO GALLI
CATERINA UBERTI FOPPA

Clinic of Infectious Diseases,
University of Milano,
Ospedale L Sacco,
20157 Milan,
Italy

1 Grossman PL, Remington JS. The effect of trimethoprim and sulfamethoxazole on Toxoplasma gondii in vitro and in vivo. *Am J Trop Med Hyg* 1979;28:445-55.
2 Wanke C, Tuazon CV, Kovacs A, *et al*. Toxoplasma encephalitis in patients with acquired immune deficiency syndrome: diagnosis and response to therapy. *Am J Trop Med Hyg* 1987;36:509-16.

SIR,—While clinical trials may show the benefit of certain drugs in treating the acquired immune deficiency syndrome (AIDS), as discussed by Dr Ian V D Weller (18 July, p 200), the resource implications to the health service must be addressed.

The launch and availability of zidovudine for treating patients with AIDS was widely publicised in May this year. Few health regions in England, however, have been given additional funding specifically for this drug. In the North East Thames region the whole allocation was given to one health district with the greatest number of patients with AIDS. Other health districts in the region have been asked to allocate funding for zidovudine from their existing budgets. The