cheques. If one were placed at the front of every cheque book issued to passengers going to malaria-endemic areas the user would be constantly reminded of the disease. I am told the banks are indifferent to this idea. Maybe some future intimate contact between *Plasmodium falciparum* and a high-ranking banker might get them to change their minds. The sheet is also issued to agents and should be attached to every ticket involving an endemic area.

If everyone concerned with travel would get together, health risks for travellers could be greatly reduced. Doctors are now much more on the look-out for imported disease, especially malaria. Aircraft operators are helping. Why not the travel agents? Is it basically a commercial matter? One agent told me that he thought emphasis on health risks would frighten people away. I believe a frightened passenger is better than a dead one.

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¹ Maegraith, B G, *Lancet*, 1963, 1, 401.

² *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 1970, 64, 199.

³ Graves Medical Audiovisual Library, 1977, Tape 77.94.

⁴ World Health Organisation, *Weekly Epidemiological Record*, Geneva, WHO.

⁵ *ABC Guide to International Travel*. Dunstable, Beds. ABC Travel Guides Ltd. (issued quarterly).

⁶ Hall, A P, *British Medical Journal*, 1978, 2, 877.

⁷ Turner, A C, *The Traveller's Health Guide*, London, Tom Stacey Ltd, 1971.

Withdrawal of pheneturide

SIR,—The antiepileptic drug pheneturide (Benuride) is being withdrawn from sale and supply in the UK. In our opinion this is a serious loss to the neurologists' armoury, since we have found it to be a useful drug in certain cases of refractory epilepsy.

We have selected 20 patients who are going to be carefully followed during their period of restabilisation on alternative medication, but would like to study a larger group. We should therefore urgently like to hear from any physician who is similarly constrained to withdraw a patient from pheneturide, particularly with reference to the efficacy of the treatment substituted for it.

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Whooping cough after stopping pertussis immunisation

SIR,—Was the pattern of whooping cough in Dr Robert Ditchburn's Shetland practice (16 June, p 1601; 21 July, p 207), with its high proportion of older children, "unusual"? In late August 1977 there was a sharp increase in whooping cough notifications in a Sheffield housing estate. Thirty-nine cases were reported in just over three months, more than half the total for the whole city. The first case was a baby of 4 months. During the next three weeks there were 22 further cases, 20 in children between 5 and 9 years and 13 of them girls.

The 16 cases in the remaining two months consisted of eight between 1 and 4 years, three schoolchildren, one adult, three with age not stated but probably adults, and one baby of 11 months. There were thus two phases, the first involving school children, mainly girls, who must have been infected during the summer holidays and the second involving pre-school children and adults.

This kind of outbreak suggests that, depending on epidemiological circumstances, there is more than one common mode of whooping cough spread, including child-child transmissions within and between different age ranks and child-adult and adult-child transmissions. The one supposedly important mode which is almost entirely missing is the infection of babies by older siblings. In Sheffield in 1977-8, of 24 notifications in babies under one year, 17 were the only cases in the household and five were either the first case or one of several appearing at the same time. Not infrequently a case in a baby was the first notification in a previously unaffected part of the city. How important is the infection of babies by asymptomatic or misdiagnosed adults? Linnemann's paper¹ describing this aspect of whooping cough control in a children's hospital is worth attention.

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¹ Linnemann, C C, *et al*, *Lancet*, 1975, 2, 540.

Value of cytology for detecting endometrial abnormalities

SIR,—I regret that Dr Dulcie Coleman and her colleagues have criticised the conclusions in our paper "Value of cytology for detecting endometrial abnormalities in climacteric women receiving hormone replacement therapy" (31 March, p 846) and find the study ill designed.

By reviewing blind the cytological and histological endometrial samples from 110 postmenopausal women receiving hormone replacement therapy we could not confirm the claim of Hutton *et al*¹ that such sampling might be useful in monitoring these patients. This hopeful hypothesis had been made without reference in their study to any such patient receiving oestrogen therapy. In contrast, in our large series cytology was not only unable to distinguish proliferative and secretory endometrium but missed all three cases of hyperplasia and two out of three cases of carcinoma—although it is true that one cytologist reported "Suspicious—repeat" in the other case of carcinoma.

We are forced to conclude that, whatever the use of the Isaacs cell sampler may be in general gynaecology, it does not appear to have a place in monitoring the subtle endometrial changes which take place with oestrogen-progestogen therapy—nor can it be used to assess the reversal of hyperplasia by progestogen. Indeed, such differentiation is difficult enough by histology.

It is churlish of Dr Coleman and her colleagues to impugn the ability of senior cytologists at King's College Hospital and the Women's Hospital, Birmingham. The St Mary's team may believe that they have a unique ability to interpret endometrial cytology in postmenopausal women, but until they

publish their own results on appropriate patients or are supported by the findings of other experienced cytologists their claim must remain as flimsy as the Emperor's new clothes.

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¹ Hutton, J D, *et al*, *British Medical Journal*, 1978, 1, 947.

Measles and vaccine protection

SIR,—Dr G A Jackson's letter (4 August, p 332) raises doubts about the effectiveness of measles vaccination which at first sight question the value of the whole programme. However, he is probably right to make no general conclusion of this sort. Apart from the smallness of the numbers involved, if the protection afforded by inoculation was 90%, and the percentage of susceptibles in the unvaccinated population 50%, the proportion of vaccinated subjects expected in the sample would be 15%; the proportion of children notified in the sample who were reported as having been vaccinated was 30%. This difference is not significant.

However, though we do not know further details of the study there are several obvious occasions when bias may have crept in. On the assumption that about half of the number of cases of measles are notified, doctors would be more likely to remember and notify those whose parents had protested at the diagnosis because their children had been vaccinated. But a much larger error may have resulted from the unreliability of parents' memory; unless particular precautions were taken—for instance, by checking reports of vaccination against records held at the authority—parents are likely to be overoptimistic in replying in the questionnaire and unlikely to separate measles vaccination from other procedures.

The results of Dr Jackson's further studies may elucidate these and other uncertainties. Without more substantial evidence to the contrary, it is wise to accept Dr Clarke's advice (13 August 1977, p 455) that measles vaccine, before reconstitution, withstands journeys through the post without loss of potency, and Dr Christine Miller's (11 June 1977, p 1532) that the protection given in the trial arranged through the Medical Research Council was of the order of 90%.

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Disinfection with glutaraldehyde

SIR,—In the debate about the use of glutaraldehyde disinfecting solutions in British hospitals (14 April, p 1019, and 26 May, p 1425) it was mentioned that the expiry of the original patent from Ethicon covering the alkaline glutaraldehyde Cidex opened the door to many other imitations, which of course were only duplicates or veiled copies of the Cidex formula. This is indeed true for alkaline-buffered solutions but not for the non-ionic potentiated acid glutaraldehyde formulas, which were discovered in the USA around 1969-71.

The role of pH in the sporicidal mechanisms of dialdehydes was first suggested by Last