The frequency of subclinical infection is at this stage difficult to project. Testing of "normal" sera with a rather arbitrary haemagglutinating antigen² may unearth antibody but, if there can be antigen sharing among Gram-negative organisms its specificity may also be in doubt. In the end there has to be some relation to the clinical disease. Another survey³ of over 2000 persons from various population groups in the Nottingham area, which has experienced the disease, showed antibody as measured by specific fluorescence in only 31 (1.5%).

Rapid identification of legionella from patient material is very necessary. Bacteriological methods of culture have been described⁴ and further selective media are under study.

A D MACRAE

Public Health Laboratory,
University Hospital,
Nottingham NG7 2UH

¹ Grady, G F, and Gilfillan, R F, *Annals of Internal Medicine*, 1979, **90**, 607.

² Edson, D C, et al, *Annals of Internal Medicine*, 1979, **90**, 691.

³ Macrae, A D, Appleton, P N, and Laverick, A, *Annals of Internal Medicine*, 1979, **90**, 580.

⁴ Greaves, P G, Sharp, G, and Macrae, A D, *Lancet*, 1979, **1**, 551.

Drugs for pain

SIR,—Dr L Lasagna (4 August, p 333) expressed some views about morphine which overlook the extensive British literature and experience with this drug.

For severe cancer pain—the commonest reason for using morphine in this country—we treated 250 patients with morphine last year. One hundred and eighty of them never needed more than 40 mg four hourly by mouth. To give a drug which is so potent by mouth parenterally would cause patients much unnecessary discomfort. Indeed, of the last 400 patients to die in our care, only 160 ever needed any injection of any kind. The majority were able to take oral medication to within four hours of their death. Properly used, morphine does not cloud the consciousness of these patients.

As Dr Lasagna indicates, the cook-book "Brompton cocktail" approach to the care of such patients is also outdated.

RICHARD LAMERTON

The Macmillan Service,
St Joseph's Hospice,
London E8 4SA

Care of children in general practice

SIR,—Dr Stuart Carne, in his article on "Care of children in general practice," (21 July, p 190), appears to have failed to understand the principles of developmental assessment of infants and small children.

Assessment must be done at definite intervals; if the child is well and therefore does not visit his general practitioner, congenital defects such as deafness and squints, speech defects and motor retardation may be missed until well after the optimum time for treatment. A visit for otitis media is most inopportune for testing hearing. Examination of hips for congenital instability needs to be done at intervals, such as 6 weeks, 6 months, and 1 year, and not just on the occasion when the baby has nappy rash. Complete checks for a developmental assessment should never be

carried out on a child with intercurrent illness as an ill child will not show interest, drive, or response.

E M DAVIS

Community Health Service,
Surrey Area Health Authority
(Mid-Surrey District),
Epsom KT19 8PB

SIR,—I read with interest Dr Stuart Carne's article (21 July, p 190), "The care of children in general practice," in which he argued cogently that it was in general practice that experience and expertise lay. In his hands I am sure that it does. Nevertheless, his admission that very few handicapping conditions occur in each practice is surely one that cannot be glossed over lightly. It is precisely in this field that the community doctor, whom he scarcely mentions, can offer much help and expertise, not only to the child but also to his family.

We in community medicine see considerable numbers of handicapped children and build up experience and knowledge of their problems. We add this to our roles in preventive medicine and child development. It is not enough to note in passing how a child is progressing. It needs a careful monitoring programme not to miss the potentially damaging degrees of developmental delay, visual and hearing loss, and educational anomalies.

It is often now the senior community staff who can and often do offer training in development and handicapping conditions to the general practitioners in their patch. Where this happens and where other doctors, in both general and hospital practice, are aware of community expertise there is no talk of dismissing the service as irrelevant. Maybe clinical medical officers would do well to learn this lesson and concentrate on perfecting and sharing their skills with their colleagues rather than to complain that they do not enjoy a well-defined place in the NHS structure.

PAT ALLINGTON-SMITH

Great Yarmouth, Norfolk

Neonatal superintensive care

SIR,—The article by Dr Malcolm Chiswick and others (28 July, p 247) gives me the opportunity of expanding the figures for mortality in babies of very low birth weight reported elsewhere.¹

Figures from Hammersmith Hospital² showed that there had been no improvement in survival rates in those infants weighing 1500 g or less born and treated in that hospital from 1961 to 1975. Now Dr Chiswick and his colleagues give their figures for babies imported to St Mary's Hospital, Manchester, in the years 1976-8. From their table I it can be seen that, of the 73 infants in this weight group, 32 survived—a mortality rate of 56.2%. My table shows this figure along with that for Hammersmith Hospital in 1971-5 and compares both with the national results in the

Percentage of neonatal (0-28 d) deaths in babies born weighing 1.5 kg or less

Completed years	Born and treated in Hammersmith Hospital	Imported into St Mary's Hospital	England and Wales
1971-5	51.9		53.9
1976-7		56.2	48.7*

*England only.

same years. It can be seen that the national figures are at least as good as those of the two superintensive care units.

R R GORDON

Northern General Hospital,
Sheffield S5 7AO

¹ Gordon, R R, *Lancet*, 1979, **2**, 36.

² Jones, R A K, Cummins, M, and Davies, P A, *Lancet*, 1979, **1**, 1332.

Travel and health risks

SIR,—The rising numbers of cases of imported malaria in Britain, reported in several recent issues of the *BMJ*, reflect an enormous increase in movement from one country to another by air, now measured in hundreds of millions of people annually. It is probably also a response to malaria becoming a notifiable disease. However, I believe the most important factor is that the profession has become much more alive to the problems of imported disease.¹⁻³

Unfortunately, the growing awareness of the profession is not matched by the general public, who remain almost totally ignorant of the medical risks of travel abroad—mostly trivial but sometimes serious, even fatal. I blame this ignorance largely on the travel agents and to a lesser extent on flight operators and others associated with travel. Apart from seeing that the recommendations of the international health regulations are carried out most agents do very little, although detailed information for particular countries is easily obtainable from regularly produced publications by the World Health Organisation and other bodies or by consultation with embassies and high commissions.^{4,5}

Travel agents are supposed to be issued officially by the Department of Health and Social Security with the pamphlet *Health Protection: Notice to Travellers*, which covers the main medical problems of travel and includes a warning about malaria. (I say "supposed" because on one occasion we telephoned most of the Liverpool agents and only one knew of the pamphlet and had it. It would be interesting to discover whether your readers have better luck with their agents). The absurdity is that, although the agent is issued with the pamphlet, he has no legal responsibility to disclose its contents or give a copy to the intending traveller. This should be mandatory. I agree with Dr A P Hall that legislation is needed, even an Act of Parliament.⁶ I wish him luck. Such matters have been raised several times in the House, with the usual equivocal parliamentary responses.

The airline operators are doing much better. Of these, I have always found British Airways and its predecessors the most understanding and helpful.⁷ Today, for instance, warnings about malaria are announced by the hostess in the cabin, both when approaching and when returning from a malarious endemic area; and passengers are advised to see a doctor if they become ill after return and tell him their recent geographical history. Lavatories in the intercontinental terminal in Heathrow now display signs offering similar advice. Equivalent notices should be placed in every major airport in the world, not only in lavatories but wherever the public and the authorities are likely to meet—for example, in the customs and passport areas.

DHSS has printed a small single sheet (Form Part 35) warning against malaria. This fits the folders provided by banks for traveller's

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.

BRIAN MAEGRAITH

Liverpool

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.

P K P HARVEY

Royal Northern Hospital,
London N7

R GOULDING
D J BERRY*

Poisons Unit,
New Cross Hospital,
London SE14 5ER

*For correspondence.

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.

P E BROWN

Department of Community Medicine,
University of Sheffield Medical School,
Sheffield S10 2RX

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.

JOHN STUDD

King's College Hospital,
London SE5 9RS

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%.

A S HARRIS

West Sussex Area Health Authority,
Worthing BN12 4NQ

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