clinicians to examine patients who may be under the care of other doctors.

There is an additional point which I would like to bring forward. The loss of the medical officer of health was a great one. There is no doubt that he could be very helpful to general practitioners, and that general practitioners with an epidemiological background could often alert him to what was going on in their area and allow controlled measures to be applied.

I would like to support the study of epidemiology in clinical practice as a very useful activity.

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Measles again

SIR,—Dr Hillas Smith (15 March, p 766) believes that the current level of measles vaccination in the UK will result in an increasing incidence of measles in older age groups and this is certainly possible. He quotes as one reason for this the American experience of "loss of vaccine-induced immunity in the group aged over 15," but there is no evidence that this is happening here. The Medical Research Council trial of further attenuated (Schwartz strain) live measles vaccine given to children aged 10 months to 2 years¹ has now completed 15 years of follow-up and the attack rate in the vaccinated group shows no signs of a loss of immunity (see accompanying figure). This was confirmed by estimations of

Medical Research Council investigation of measles vaccines: annual attack rate in children 1964-79.

measles antibody (by haemagglutination inhibition) 10 and 15 years after vaccination. It seems unlikely on this evidence that there will be a sudden loss of vaccine-induced immunity after 15 years. Measles is more likely to occur in adults who have neither been vaccinated nor contracted measles, and in the small proportion in whom vaccine has failed (4-8%).^{1,2}

The UK policy of measles vaccination since May 1968 (set out in CMO 1/68) has been to give one injection of live attenuated measles vaccine in the second year of life. Killed vaccine followed by live vaccine was used in the UK only for comparatively small numbers in trials up to June 1968, and multiple doses of killed vaccine have never been used. The American experience of measles following these vaccine combinations is therefore unlikely to be duplicated here.

Measles vaccine was introduced because of the risk of severe complications of measles.³ These have not changed⁴ and encephalitis, the

most serious, can follow an unremarkable attack of measles at any age. If the policy of selective immunisation were to be adopted, both the incidence of measles—and inevitably the complications—would increase again. Immunisation of "groups at risk" is notoriously difficult both for the decision as to who is at risk and because of the problem of how to reach them.

A more realistic approach to this problem would be to improve on the vaccination acceptance of 50% in the second year of life by offering vaccine at school entry to those who have had neither measles nor vaccine by that age. In the United States this policy has effectively reduced the incidence of measles in school-aged children in the States where it is enforced.⁵

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SIR,—I see that Professor George Dick (10 May, p 1186) has been blandly asserting that measles is becoming a trivial disease in civilised communities.

We have had two cases of febrile convulsions in children under the age of 3 in the prodromal phase of measles infection in the last month. Both children were admitted to hospital, thereby infecting the entire ward, before the Koplik's spots appeared. Both developed severe otitis media.

From the standpoint of the GP, I believe that measles vaccination should be wholeheartedly encouraged in small children. I see no evidence of a decline in the virulence of this virus.

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Prophylaxis of surgical wound sepsis

SIR,—In your recent leading article on prophylaxis of surgical wound infection (19 April, p 1063) you correctly imply that antibiotic prophylaxis should be in addition to and not an alternative to meticulous surgical technique, and that the choice of the antibiotic used should be determined by the organisms likely to be encountered at operation and also on the prevailing hospital bacteriological sensitivity.

However, your comment that "we still do not know how many doses of antibiotic should be given" is rather misleading. As long ago as 1961 Burke¹ demonstrated in animal studies that antibiotics were only effective in dealing with bacterial contamination for three hours following an operation—in other words, over the immediate postoperative period. That this work is relevant to the clinical situation has clearly been demonstrated in several clinical trials. Short courses of preoperative prophylactic antibiotics given either systemically or intracutaneously have been shown to reduce wound sepsis after general²⁻⁵ and orthopaedic⁶ operations and given systemically to reduce chest infection following cardiac operations.⁷

Furthermore, whenever a short course has been compared to a long course of antibiotics no advantage has been shown for the latter.^{8,9}

The use of prophylactic antibiotics for longer than the preoperative period in either one or two doses given systemically, or given intracutaneously at the end of the operation, is therefore unnecessary in terms of efficacy and expense and will lead to a greater incidence of antibiotic toxicity problems and of emergence of resistant organisms. Finally, it should be emphasised that this type of short course is not appropriate when antibiotics are used therapeutically to treat an established infection.

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Outbreak of infection in a urological ward

SIR,—We were very interested to read the article about an outbreak of *Acinetobacter* infection in a urological ward (8 March, p 722). We are also isolating this organism.

Acinetobacter calcoaceticus was first isolated from both male and female patients in the urological ward. Since then, with the transfer of these patients to different wards, we have isolated it from patients in the intensive therapy unit and a general surgical and a general medical ward. In only two of these patients has the organism been isolated from blood. Our environmental screening has been unhelpful and the *Acinetobacter calcoaceticus* returned to the intensive therapy unit despite closing, cleaning, and redecorating the unit. It was not isolated from the environment prior to closing or before reopening the unit. None of the new patients was colonised on admission.

This organism rarely causes clinical infection, but the pattern of multiple antibiotic resistance can make treatment very difficult. How can we best prevent its spread throughout the hospital?

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Preventing infection in clinical laboratories

SIR,—The contribution by Sir James Howie and Mr C H Collins about the Howie code of practice for preventing infection in clinical laboratories (19 April, p 1071) is both timely and welcome.

If clinical laboratories in the United Kingdom had been constructed to a standard design, no doubt the task of the working party would have been more straightforward; the fact is they have not. In general, clinical

laboratories consist of antiquated buildings, the inadequacies of which have been subject to continuous improvisations over many years in an attempt to accommodate ever-increasing work loads.

It is not surprising therefore that in these obsolete, overcrowded conditions laboratory-acquired infections occur, and any guidance to prevent infection in these prevailing conditions is surely welcome.

The problem that has arisen is the inconsistent interpretation of the Howie Code¹ by the Health and Safety Inspectorate owing probably to its lack of knowledge of the clinical laboratories they suddenly find themselves responsible for.

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¹ Department of Health and Social Security. *Code of practice for the prevention of infection in clinical laboratories and postmortem rooms*. London: HMSO, 1978.

SIR,—Sir James Howie and Mr C H Collins in answering critics of the Howie Code for preventing infection in clinical laboratories are in my view amiss in dismissing the criticism that the composition of the working party was not sufficiently representative (19 April, p 1071). It was, in fact, notable for the absence of a community physician with responsibility and experience in the control of infection in the community. The setting up both of the Public Health Laboratory and of the National Health Service historically isolated the medical officer of health from exercising in practice his legitimate responsibilities of surveillance of infectious diseases in these institutions, which the 1974 reorganisation of health services has done little to ameliorate.

It is thus not surprising to note that little has been quantified about infection risk to staff in laboratories, and records of information about infections of a laboratory origin are found to be patchy and uncoordinated in their availability for study. Attempts to fill in the gap with occupational health services have been hampered by financial considerations and lack of experienced staff. Further, the occupational health services do not provide the broad setting of the surveillance of workers at work and also at home. The families of the workers at risk are also in danger of being neglected.

A tradition of surveillance for infection in hospitals, including laboratories, by the medical officer of health (or community physician, the present equivalent) would have done much to focus attention on the worker at risk and lead to development of sensible work practices and safety of equipment and premises in relation to that risk. Serious outbreaks of laboratory and hospital infections, inept documents from the Health and Safety Executive, unjustifiable expense, and panic measures are only some of the consequences of the lack of the presence of the control and surveillance which the rest of the community enjoys for its protection from its medical officers for environmental health.

The code nevertheless expects the occupational health staff, where they, exist to monitor the needs of the staff. It neither mentions what should happen in their absence nor lays down any standard of service to be expected from an occupational health service. The code is thus weakest where it matters

most—namely, in monitoring the health of the worker at risk.

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Ketotifen in adult asthma

SIR,—Dr K Prowse in his letter (1 March, p 646) describes drowsiness as a troublesome side effect of ketotifen and in his series 11 patients out of 17 had their therapy terminated after one week owing to this problem. This incidence is considerably higher than that quoted in the recent report by Drs A J Dyson and A D Mackay. Dr Spiro (10 May) reported 12.6% drowsiness with ketotifen in clinical trials. We are carrying out a postmarketing surveillance with ketotifen and some preliminary results are described.

The first 7178 patients at the three-months follow-up show an incidence of 13.44% with drowsiness as an adverse event while 1.77% have reported dizziness. Two hundred and forty-five (3.41%) stopped treatment owing to the drowsiness. In a small postmarketing study in Switzerland drowsiness was observed in 95 of 352 patients (27%). The withdrawal rate for all side effects in this series was 7% and loss of balance, mentioned in Dr Prowse's letter, was never observed.

The results obtained by Dr Prowse are therefore not representative as seen in the light of wider clinical experience.

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Endocrine aspects of liver disease

SIR,—We have read the review by Dr R G Long (26 January, p 225) on endocrine aspects of liver disease with interest, but do not quite agree on a number of subjects. Two points concerning treatment of hypogonadism and feminisation in men with cirrhosis deserve comment.

Dr Long states that there is no evidence that testosterone treatment of cirrhosis is beneficial. Although we agree that the protocols of the majority of controlled studies dealing with testosterone treatment of cirrhosis have been far from optimal, three of them found a positive effect on complications (liver failure and gastrointestinal bleeding), clinical condition, sexual impotence, and survival¹⁻³; and one paper concluded that there was no effect—positive or negative.⁴ However, one cannot exclude that the duration of treatment (one month) had been too short.⁴ In fact, uncontrolled observations stress that the duration of treatment has to be longer in order to obtain any effect.⁵

Dr Long further points to the numerous dangers, especially cholestasis and primary liver-cell carcinoma, of testosterone administration. It is quite correct that testosterone when substituted in the 17- α -position has been connected with hepatocellular carcinoma, peliosis hepatis, and hepatic angiosarcoma.⁶ However, we know of no reports proving that such associations may exist between genuine testosterone and liver side effects in man. We have shown that peroral testosterone treatment in men with no testicular function appears to be safe even after long-term administration.⁷

The situation in patients with cirrhosis may be different. Because of an increased conversion of androgens to oestrogens in hepatic cirrhosis an increased oestrogenic effect may be feared.⁸ However, we found no signs of increased hyperoestrogenisation in 24 male patients with alcoholic liver cirrhosis during testosterone administration for 28 days. We conclude that well-conducted, controlled studies of genuine testosterone treatment of men with alcoholic cirrhosis seem to be indicated in order to establish possible effects and side effects.

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Laryngoscopy

SIR,—The article on laryngoscopy (1 March, p 629) omitted two important advances in the procedure. For the last two years I have been using a fiberoptic indirect laryngoscope (LarynxVue, manufactured by Cavitron), the ideal laryngoscope for the amateur. It looks like a straight urethroscope, with a tiny oblique mirror at the end. The electric bulb, of the same type as that used in an otoscope, abuts on the mirror and provides just enough heat to prevent it from fogging over. A special holder is put over the thumb and the patient's tongue is grasped between the thumb and forefinger. The scope is then pushed through a hole in the holder and advanced over the back of the tongue to the pharynx, affording an excellent view of the larynx. Comparatively little training is needed to use the instrument efficiently and there is no problem of arranging a light source and focusing a head mirror. Also there is no difficulty about warming the laryngeal mirror to the correct temperature, whereas previously the mirror always seemed too hot or too cold.

In cases where indirect laryngoscopy is impossible, there is now available a flexible fiberoptic laryngoscope, which can be introduced through the nose, eliminating the necessity for the general anaesthesia that was previously needed when direct laryngoscopy was performed.

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Second malignancies in Hodgkin's disease

SIR,—Mr P Valagussa and others reported (26 January, p 216) that they found no second malignant neoplasms in Hodgkin's disease patients receiving irradiation and the hard drug regimen, adriamycin, bleomycin, vinblastine, and decarbazine (ABVD). Second