efforts" should be made to secure the attendance of the parents or carers, but if they cannot be notified the application can still be dealt with. Wardship proceedings can also be used. Judges are available on a 24 hour basis to deal with such emergency applications. Hospitals and surgeries should ensure that they have the up to date emergency telephone numbers. If necessary the police can prevent the child being removed from the hospital. If a child must be traced urgently, social services and the police should be contacted; wardship proceedings give access to additional search facilities.

If there is no time to apply to court the procedure laid down by the Home Office should be followed.<sup>4</sup>

Medical staff should fully familiarise themselves with the legal rules if tragedies like the death of Nakhira are to be avoided.

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## Long term management after splenectomy

EDITOR,-The long term management of patients after splenectomy has generated much corres-pondence.<sup>1</sup> Peter J Flegg calls for the development of national guidelines on preventing sepsis after splenectomy.1 The British Committee for Standards in Haematology is developing such guidelines through a working party of its clinical haematology task force. The members of the working party comprise haematologists from district general and teaching hospitals, a microbiologist, an immunologist, a paediatrician, a paediatric haematologist, a surgeon, a general practitioner, and a medical representative from the Department of Health. The guidelines will soon be reviewed by the British Committee for Standards in Haematology before being submitted for publication. They aim to provide definitive guidance from a balanced group of interested specialists with the Department of Health's backing. One of the working party's main objectives is to unify the many local initiatives in progress, especially by producing a standard fact sheet and card for patients.

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#### Alcohol intake and mortality

EDITOR,—Having read the Danish paper on alcohol intake and mortality,<sup>1</sup> I am grateful for the sound advice from Ian Robertson that the message that women should drink a maximum of 14 units a week and men a maximum of 21 units a week is clear and unambiguous and should not be lightly given up.<sup>2</sup> Morten Grønbaek and colleagues conclude that "simple messages about the benefits of total abstinence may not be appropriate," yet their total abstinence group is made up of "hardly ever/never" drinkers, with no information provided on the proportions of lifelong teetotallers, former drinkers (recent and long term), and occasional drinkers. No information is provided on the health status or lifestyle behaviour of any of the groups.

We have established that among middle aged British men those who do not drink include a high proportion who have given up drinking as they have grown older and accumulated illnesses and drug treatments not necessarily related to alcohol intake.3 Without providing this information, the Danish workers have no justification for assuming that the excess deaths are attributable to alcohol intake (or the lack of it) or that the other covariates influencing mortality are equal in the different alcohol groups. Such information should have been displayed rather than assumptions being made. To then calculate the number of deaths due to abstention and the reduction consequent on the entire population drinking is unjustified if not disingenuous.

Men who drink lightly and regularly (1-2 units a day) have the most favourable risk factor status in terms of social class, smoking, body weight, blood pressure, and blood lipid concentrations.<sup>4</sup> It is therefore not surprising that they have the lowest mortality. The Danish study contains no information on social class, physical activity in leisure time, blood pressure, or blood lipid concentrations.

To focus on mortality from all causes and to use cirrhosis of the liver, a relatively rare disease, as the benchmark for damage due to alcohol is to take a restricted approach to discussing the benefits or disadvantages of alcohol. Robertson is correct in identifying the assault that is taking place on the guidelines of 14 and 21 units, and the medical profession and the media should look more critically at the studies that directly or indirectly advocate their extension.

A G SHAPER

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# Immunity to diphtheria in adults in England

EDITOR,-The recent resurgence of diphtheria in Russia has led to anxieties about the susceptibility of British adults to the disease, and about the organism's potential for reintroduction and circulation in the population. Serological surveys in Scandinavian countries have shown low levels of antibodies to diphtheria toxin in adults, particularly among women over 40,1 and small outbreaks of diphtheria have subsequently been reported in Sweden and Denmark.<sup>2</sup> To assess immunity to diphtheria in adults in England we tested 2862 serum samples from adults stratified by age and sex. The samples had been collected during 1991 by the six public health laboratories that receive samples for diagnostic and screening purposes from eight regions in England. Samples were tested by enzyme linked immunosorbent assay (ELISA); concentrations of toxin antibody were measured in international units (IU) by comparison with human diphtheria antibody reference serum 91/534 (National Institute of Biological Standards and Control, South Mimms, Hertfordshire). To allow for the measurement by ELISA of some non-neutralising antibody, samples with

Numbers (percentages) of serum samples with concentrations of diphtheria antibody  $\ge 0.1$  IU/ml by age and sex

Age (years)	Men		Women		Both sexes	
	No tested	≥ 0·1 IU/ml	No tested	≥ 0·1 IU/ml	No tested	≥ 0·1 IU/ml
15-34	487	383 (79)	491	345 (70)	978	728 (74)
35-54	482	326 (68)	486	329 (68)	968	655 (68)
≥ 55	499	303 (61)	417	220 (53)	916	523 (57)
Total	1468	1012(69)	1394	894 (64)	2862	1906(67)

concentrations < 0.1 IU/ml were considered to show non-immunity; this cut off point is 10 times higher than that of an in vivo toxin neutralisation assay.<sup>3</sup>

Overall, 1906 serum samples had antibody concentrations  $\ge 0.1$  IU/ml, the proportion declining with age in both men and women (table). Immunisation was introduced on a national scale in the United Kingdom only in the early 1940s, so immunity in people aged 55 and over will largely be naturally acquired. The significantly lower level of immunity in women aged 15-34 compared with men of the same age (P = 0.003) is surprising and cannot be accounted for by booster immunisation of men entering military service because conscription ended in 1960 in the United Kingdom. A lower level of immunity to diphtheria has also been reported in young Israeli women,4 suggesting a possible sex difference in response to immunisation.

Our results give no immediate cause for concern: given that our cut off point for immunity was conservative and that the current uptake of immunisation in infants is 93%, the proportion of the total population with protective levels of antibody should be above the 70-75% considered necessary to confer herd immunity to diphtheria.<sup>5</sup> With the gradual replacement of natural immunity by less durable vaccine induced immunity in older people, however, this proportion may decrease. We understand that the use of low dose diphtheria vaccine combined with tetanus toxoid is now being considered for booster immunisation of school leavers.

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### **Continuing medical education**

EDITOR,—Rajendra Kale's news article on continuing medical education for consultant obstetricians and gynaecologists may have misled readers.<sup>1</sup> Kale puts misplaced emphasis on certain aspects of the Royal College of Obstetricians and Gynaecologists' programme of continuing medical education and is far too definite about some developments that are in their infancy. As chair-