This week in

**BMJ**

### Brain damage is rare after fits in childhood

Studies of selected groups of children admitted to hospital with status epilepticus or prolonged febrile convulsions have suggested that there is a high risk of brain damage or death as a direct result of the seizure. These studies, however, are biased, and there has been little population based information. By using data from the child health and education study Verity et al (p 225) have provided a more optimistic view of outcome. The evidence suggests that no death was directly due to the lengthy febrile convulsions or episodes of status epilepticus. The outcome after these prolonged episodes seemed to be determined by the underlying cause rather than the seizures themselves.

### Prisoners are willing to be tested anonymously for HIV

Inmates of prisons are perceived to be at particularly high risk of infection with HIV. A paper by Bird et al (p 228) describes the results of a voluntary anonymous survey of HIV infection that they conducted at Polmont, Scotland's largest young offenders institution. They found no prisoners to be infected with HIV, but the high prevalence of risk behaviours among the prisoners indicated the need for future vigilance. The authors conclude that the excellent compliance with their voluntary anonymous HIV testing suggests that Scottish prisons are well placed to introduce initiatives such as easier access to testing for HIV and rehabilitation programmes for drug misusers.

### Risk of stroke reduced by history of vigorous exercise

Lack of physical activity has, to date, not been widely accepted as a cause of cerebrovascular disease, although a link with hypertension and diabetes is emerging. Shinton and Sagar (p 231) present data from a community case-control study, which adds weight to the case that exercise protects against stroke. Vigorous exercise in early adulthood produced an independent reduction in the risk of stroke in later years. Moreover, as the years of participation in vigorous exercise increased, there was a corresponding further decrease in risk. Recent walking and more recent vigorous exercise were also beneficial. The results did not seem to be due to either confounding variables or biased recall of activities. The authors suggest that exercise at all stages of life can contribute to reducing the risk of stroke.

### Psychological distress increases risk of preterm delivery

Advances in neonatal intensive care have improved the chances of survival of preterm infants, but the rate of preterm delivery remains unchanged. On p 235 Hegedoor et al investigated, by questionnaires, whether psychological distress during pregnancy is associated with increased risk of preterm delivery, and found that distress in the 30th week of pregnancy did increase the risk but distress in the 16th week did not. Women with high distress and with moderate distress had relative risks of 1.22 and 1.73, respectively, in comparison to those with low distress. Future interventional studies, suggest the authors, should focus on ways of lowering psychological distress in late pregnancy.

### Cold chain for vaccines not observed in general practice

The potency of vaccines may be compromised by improper management of vaccine, which is likely to be an important reason for primary vaccine failure. In a study of the management of the cold chain for vaccines in general practice carried out during summer 1991 in two districts of the Oxford Region (p 242) Haworth et al found both poor compliance with the local code of practice for vaccine storage and breaks in the cold chain. Audit of management of the cold chain has subsequently shown improved compliance with vaccine storage guidelines. The authors suggest that management of the cold chain for vaccines in general practice could be improved by making the demonstration of regular audit of management of the cold chain a prerequisite for immunisation target payments.

### Licensing of diabetic lorry drivers needs standardising

People who have jobs driving motor vehicles must generally meet minimum licensing standards. These standards often incorporate some assessment of competence in operating the vehicle, physical or medical suitability, and history of accidents and traffic violations. But recent arguments suggest that employment opportunities for people with medical impairments may be unnecessarily limited. A report from the DialMond Project Group examines the licensing of lorry drivers with diabetes who are taking insulin in different countries (p 250). Licensing regulations were found to differ greatly. The authors argue that the lack of appropriate data on how often diabetes or hypoglycaemia is an initiating factor in crashes may be the leading influence behind this disparity. Proper assessment of this risk is necessary to balance fairly employment rights with concerns about public safety.

### Aerosol delivery of drugs should be measured in children

Drugs for respiratory disease are increasingly given as an aerosol since the adverse systemic effects are reduced as the drug is delivered straight to the site of action. However, the amount of drug received may be affected by the method of inhalation and type of inhaler especially in young children. On p 245 Thomas et al discuss methods of assessing the amount of drug received by inhalation in children. They conclude that the best method is to use radioactive markers and argue that the potential risk of radiation exposure is more than outweighed by the dangers of using inappropriate doses of drugs or equipment if the dose received is not measured.