failures) than would be expected by its 70% share of the market.

In the UK, vaccination against Hib disease was begun in October, 1992, and had achieved 90% coverage in children aged 12 months by November, 1993.[1] Children receive three doses of PRP-T vaccine at 2, 3, and 4 months as part of the standard vaccination programme. One dose of HbOC was used for catch-up immunisation in children who were less than 4 years but more than 12 months at the start of the programme. We have compared the incidence of Hib meningitis in England and Wales for the 12 months before the vaccination programme began (Aug 1, 1991, to July 31, 1992) with the 12 months after vaccination (Aug 1, 1993, to July 31, 1994) to see whether the effect of vaccination more closely resembles the experience in the Netherlands or that in Germany. In addition, we have stratified the incidence by age to determine if the incidence of disease in younger children (<2 months) who have not yet been vaccinated has been affected by vaccination of older children.

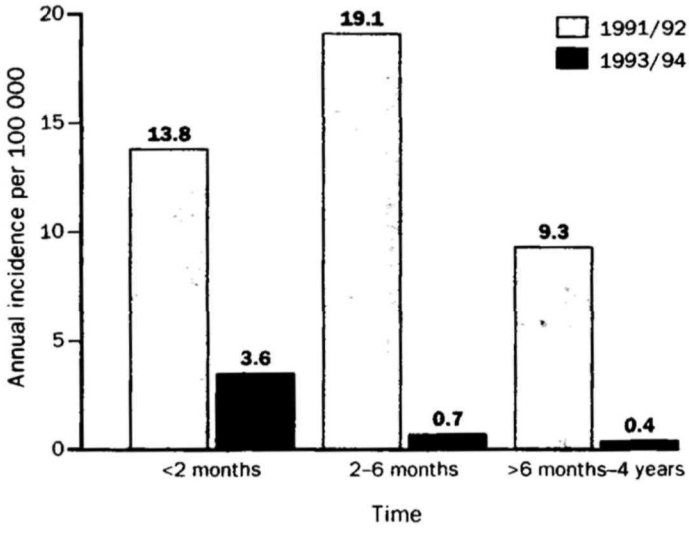

Figure: **Hib meningitis in England and Wales by age**
Source: Laboratory reports to Public Health Laboratory Service. Communicable Disease Surveillance Service.

The annual incidence of Hib meningitis fell in children under 5 years from 10·4 per 100 000 before vaccination to 0·6 per 100 000 after vaccination (358 and 19 cases, respectively). The drop more closely resembles the fall seen in the Netherlands (from 22 to 0·6 per 100 000) than that recorded in Germany (from 23 to 1·9 per 100 000). In addition, we noted a large fall in the incidence in children under 2 months who had not yet received the vaccine (figure).

These findings show that the PRP-T and HbOC vaccines have achieved a 95% reduction in disease among vaccinated children and a 75% reduction in children under 2 months of age who have not received the vaccine. The latter observation presumably related to decreased carriage among vaccinated children.

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1 White JM, Leon S, Begg NT. 'COVER' (Cover of vaccination evaluated rapidly): 28. *CDR Rev* 1994; **4:** R18–19.

Acute epiglottitis after Hib vaccination

SIR—Booy and colleagues (Aug 6, p 362) report 100% efficacy of *Haemophilus influenzae* type b (Hib) conjugate vaccine PRP-T in the prevention of Hib infection. We report a case of acute epiglottitis after Hib in a fully vaccinated child.

The child was aged 22 months and presented to her local hospital with a 6 h history of pyrexia and respiratory distress. She was pale, deeply cyanosed, and tachycardic. Gas induction anaesthesia was undertaken and she was orally intubated. She was referred to our paediatric intensive care unit with a provisional diagnosis of acute laryngotracheobronchitis. Laryngoscopy, for nasal intubation, revealed a swollen oedematous epiglottis, characteristic of acute epiglottitis. A swab of the epiglottis was taken and blood culture was done. High-dose intravenous cefotaxime was started. The mother was confident that all the child's vaccinations, including Hib, had been completed. Over the following 18 h the child's temperature fell from 39·5° to 37·3°. She was then successfully extubated with only slight intermittent stridor. Hib was identified from both the blood culture and the epiglottic swab. At this point we confirmed that the child had been vaccinated at the recommended ages of 2, 3, and 4 months with the same vaccine (ActHIB, Merieux) on each occasion. There was no evidence of immune deficiency, with normal white cell numbers and immunoglobulins.

Previously meningitis due to Hib has been reported when vaccination has been incomplete.[1,2] This case shows that life-threatening infection from Hib may still arise after vaccination according to the British accelerated immunisation schedule. Hence invasive Hib infections should still be considered in all vaccinated children.

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1 van Alphen L, Takala AK, Geelen-van den Broek L, et al. Changes in distribution of *Haemophilus influenzae* type b clones associated with widespread vaccination in Finland. *J Infect Dis* 1992; **166:** 1340–45.
2 Desgrandchamps D, Schmid R, Zimmerman HP, et al. Effect of conjugated PRP vaccines on the incidence of invasive diseases caused by *Haemophilus influenzae* type b in childhood. *Schweiz Med Wochenschr* 1994; **124:** 575–82.

Syncope and near-death experience

SIR—The existence of near-death experiences is no longer debatable. Their origin, however, is still a matter of controversy: physiological, psychological, and transcendental explanations have been offered.[1] Whilst studying motor phenomena of syncope[2] we were impressed by similarities between syncopal hallucinations and near-death experiences.

Syncope lasting up to 22 s was induced in 42 healthy young adults by hyperventilation and Valsalva manoeuvre. Subjects reported visual hallucinations—perception of colours and lights which could intensify to a glaring brightness, or landscapes and familiar people, in some cases with no discernible faces; out-of-body experiences—scenes in which they were involved yet they observed them from above; and auditory hallucinations that ranged from roaring noises to screaming or unintelligible human voices.

Most subjects described the emotional experience of syncope as pleasant, detached, and peaceful, making them unwilling to return. Some compared it to drug or meditation experiences. 2 were reminded of an earlier post-traumatic near-death experience. One participant disclosed: "I thought