

Vaccine uptake, August 1993 (Source COVER returns to CDSC/PHLS)

	Jarman score	D3	P3	MMR
Liverpool	23	91	87	89
East Birmingham	25	97	95	93
Tower Hamlets	55	90	88	89
National	0	95	93	93

pertussis (P3) uptake, and by 70 for measles, mumps, and rubella (MMR) at 2 years.³

While family and social circumstances are clearly very important factors in influencing immunisation performance, the BMRB report identified the importance of the local management of the immunisation services in overcoming these impediments. In the table, the most recently available Liverpool immunisation uptake data is compared with that of a district with the closest match Jarman score, the English district with the highest Jarman score (most deprived) and the national average.

Even accepting the fallibility of the Jarman score and the lack of comparability of East Birmingham with Liverpool, there can be little doubt that Tower Hamlets is an appropriate district for comparative purposes. Immunisation uptake is as high there for pertussis and MMR, clearly indicating that local management of the immunisation programme can overcome socioeconomic barriers to immunisation.

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- 1 Pearson M, Makowiecka K, Gregg J, Woollard J, Rogers M, West C. Primary immunisations in Liverpool. I: Who withholds consent? *Arch Dis Child* 1993; **69**: 110-4.
- 2 Pearson M, Makowiecka K, Gregg J, Woollard J, Rogers M, West C. Primary immunisations in Liverpool. II: Is there a gap between consent and completion? *Arch Dis Child* 1993; **69**: 115-9.
- 3 White JM, Leon S, Begg NT. 'COVER' (cover vaccine evaluated rapidly) 27. *Communicable Disease Report* 1993; **3**: R158.

Professor Pearson and coauthors comment:

We thank Drs Salisbury and Begg for their interest in our paper looking at immunisation of children resident in Liverpool two years ago and not five as stated in their letter. They have drawn our attention to the BMRB report of 1989, *The Uptake of Pre-School Immunisation in England*. As it has been so widely disseminated, it is surprising that it was not referred to in any of the recent publications on immunisation.

We would agree that it was an omission not to mention the accelerated programme of vaccination. However, we could not see how that could overcome the practical or attitudinal barriers to immunisation, nor address the issue of consent.

Good local management of immunisation services is crucial, but is becoming increasingly difficult. In Liverpool, health visitors are in one trust, clinical medical officers and the immunisation coordinator in another trust, and approximately two thirds of vaccinations are done in general practice. Despite these difficulties, COVER statistics show that pertussis uptake has increased by 6%. As diphtheria has only increased by 1%, we

would suggest that good management resulting in increased confidence in pertussis accounts for the improved figures, rather than the accelerated programme.

A recently published report based on the 1991 census places Knowsley and Manchester as the most deprived districts in England, with Liverpool a very close third.¹ Tower Hamlets was ranked fifth. Perhaps Knowsley (an adjoining district to Liverpool) would be more appropriate for comparative purposes. The COVER statistics for Knowsley and St Helens Health District are diphtheria 89%, pertussis 85%.

1 *People and places - a 1991 census atlas of England*. University of Bristol, SAUS Publications.

EDITOR.—The recent articles by Pearson *et al*, about obtaining consent of parents for immunisations,^{1,2} seem to assume the moral or political necessity of the process as a precondition for immunisation. This raises the question as to the basis of this assumption. Children are not autonomous agents and require surrogate decision makers. There is a reasonable assumption that parents, under most circumstances, are most likely to be able to represent the interests of their child. This is not a universal right or law, however, and there is ample precedent for having other surrogates if the parents are neglectful, incompetent, or abusive, etc.

If the society, through its elected representatives and after intensive, objective scientific debate, determines that immunisations are beneficial and necessary for the public health and for the child, and that the individual risks associated with immunisation are small in respect to the benefits, then no reasonable caring parent should object and no unreasonable or uncaring parent should be allowed to object. The children of the minority of parents who refuse immunisation will benefit from the herd immunity resulting from all those children who face the small risk of the procedure. This is clearly inequitable and unjust. If all stand to benefit, all should share the risk.

As these articles and other studies demonstrate, considerable effort and resources that might otherwise be more beneficially employed are required to obtain and document immunisation consent. Perhaps consideration should be given to devoting those resources to improving the public's confidence in the process of reviewing the safety and effectiveness of vaccines, and to justification of a policy of mandatory immunisation without formal consent.

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- 1 Pearson M, Makowiecka K, Gregg J, Woollard J, Rogers M, West C. Primary immunisations in Liverpool I: Who withholds consent? *Arch Dis Child* 1993; **69**: 110-4.
- 2 Pearson M, Makowiecka K, Gregg J, Woollard J, Rogers M, West C. Primary immunisations in Liverpool II: Is there a gap between consent and completion? *Arch Dis Child* 1993; **69**: 115-9.

Resolution of hepatic abscess after interferon gamma in chronic granulomatous disease

EDITOR.—We read with interest the report by Hague *et al* of possible benefit from interferon gamma in an acute infection in a patient with

chronic granulomatous disease.¹ Our recent experience would not support this suggestion²: a 3 year old boy with known chronic granulomatous disease presented with a left sided chest wall mass and the diagnosis of extensive intrathoracic and extrathoracic aspergillosis was confirmed by a percutaneous biopsy guided by computed tomography. He was treated initially with intravenous liposomal amphotericin and subcutaneous interferon gamma 50 µg subcutaneously three times weekly, but his clinical condition deteriorated significantly during seven weeks of treatment. Amphotericin was therefore discontinued and he was commenced on oral itraconazole suspension which resulted in progressive clinical improvement after three months on this regimen, and marked radiological clearing after eight months of treatment. The patient remains well on maintenance itraconazole suspension and subcutaneous interferon gamma three times weekly.

This suggests to us that interferon gamma did not have a major influence on the resolution of the severe fungal lung infection in this patient. A controlled trial on the use of prophylactic antimicrobial treatment is required which should include antifungal prophylaxis with itraconazole suspension. However, given the apparent success of continuous prophylactic treatment with interferon gamma,³ the suggestion that such a study should include intermittent interferon gamma treatment would be difficult to justify on ethical grounds.

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- 1 Hague RA, Eastham EJ, Lee REJ, Cant AJ. Resolution of hepatic abscess after interferon gamma in chronic granulomatous disease. *Arch Dis Child* 1993; **69**: 443-5.
- 2 Spencer DA, John P, Ferryman SR, Weller PH, Darbyshire P. Successful treatment of invasive pulmonary aspergillosis in chronic granulomatous disease with orally administered itraconazole suspension. *Am Rev Respir Dis* 1994; **149**: 139-41.
- 3 The International Chronic Granulomatous Cooperative Study Group. A controlled trial of interferon gamma to prevent infection in chronic granulomatous disease. *N Engl J Med* 1991; **324**: 509-16.

Bovine colostrum immunoglobulin concentrate for cryptosporidiosis in AIDS

EDITOR.—Shield *et al* report the case of a child with AIDS complicated by cryptosporidiosis who showed a favourable response to hyperimmune colostrum.¹ The report documents the availability of a commercially available preparation but casts no new light on the management of cryptosporidiosis affecting the immune compromised.

It has been known for many years that cryptosporidiosis may cause severe illness complicating a variety of humoral and cell mediated immune deficiency states.² There have also been a number of case reports documenting varying degrees of clinical and microbiological benefits by the administration of various forms of enteral immunotherapy to patients with diverse immune deficiency states, including AIDS, complicated by cryptosporidiosis.³⁻⁵ These include hyperimmune bovine colostrum, pooled bovine colostrum, whey protein concentrate, and human serum immunoglobulin.