



THE INPATIENT STATISTICS COLLECTION AND HIB MENINGITIS

The NSW Health Department Inpatient Statistics Collection (ISC) has been used as a 'gold standard' to measure case ascertainment of bacterial meningitis^{1,2}. Other researchers have used more intensive methods to ascertain cases of *Haemophilus influenzae* type b (Hib) meningitis^{3,4}.

Peter McIntyre, Staff Paediatrician in Infectious Diseases at Westmead Hospital, has been undertaking Hib surveillance in children in the Sydney Statistical Division since 1985. The methods of case ascertainment used for 1985-87 have been detailed elsewhere³. Since 1989 active laboratory surveillance (ALS) has continued, but review of hospital records has not been maintained.

To assess the accuracy of the ISC for case ascertainment of Hib meningitis in children less than five years old, it was compared to ALS. The study period was January 1 to June 30, 1991. The Chandra Sekar and Deming method⁵ (CSD) was then used to estimate the number of cases not identified by either of these independent surveillance methods.

The results are displayed in Table 1. Of the five cases identified by ALS but not by the ISC, two were identified by the ISC as unspecified meningitis (ICD9-322.9) rather than Hib.

These results indicate that neither surveillance method is perfect. This analysis suggests that the ISC ascertained 84 per cent of cases of Hib meningitis in children under five years of age, while ALS ascertained 89 per cent. The ISC is a reasonable method for ascertaining cases of a condition that results in hospital admission, especially given the ease of access to the data.

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3. McIntyre P, Leeder S, Irwig L. Invasive *Haemophilus influenzae* type b disease in Sydney children 1985-1987: a population study. *Med J Aust* 1991; 154:832-7.
4. Hanna J, Wild B. Bacterial meningitis in children under five years of age in Western Australia. *Med J Aust* 1991; 155:160-4.
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TABLE 1

CASES OF HIB MENINGITIS IN CHILDREN <5 YEARS OLD IN THE SYDNEY STATISTICAL DIVISION BY SURVEILLANCE METHOD, JANUARY 1-JUNE 30, 1991

		Cases detected by the ISC		
		Yes	No	
Cases detected by ALS	Yes	29	5	34
	No	3	1*	4
		32	6	38

* estimated by CSD method

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