

Oral Presentation

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## Prevalence of neural tube defects in Ireland 2001–2002, was the folate media campaign effective?

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### Background

The aim of this study was to review the prevalence of Neural Tube Defects in the island of Ireland over a two period from 2001–2002. This period followed a high profile campaign on folic acid supplementation by the Departments of Health in both the Republic and Northern Ireland.

### Design setting

The Irish Paediatric Surveillance unit (I.P.S.U) agreed to include N.T.D's as one of their reporting conditions for the two year period. Paediatrician's reporting a case were asked to complete a questionnaire including obtaining information on mother's folic acid intake. Cases were also identified and verified through other sources including maternity hospital reports, HIPE and the Health Information Unit. The Dublin Eurocat registry had monitored NTD previously in the Eastern Health Board region and also in the Galway region and more recently Cork and Kerry. However there had been no nationwide reporting.

### Results

Ireland has a population of 5.532 million (3.847 republic of Ireland 1.685 northern Ireland). Over the two year period 87 NTD cases were identified, a prevalence rate of 5.379 per 10,000 live births (6.335 in the Republic and 3.768 in Northern Ireland). More detailed information was available on 70, 37% had anencephaly, 57% myelomeningocele. 26 of 40 infants with myelomeningocele survived the first three months of life. Similar to previous studies there were more females born and more born to younger and older mothers. Of the 42 with definite information on folic acid intake, 7 had intake prior to conception for between 2 weeks and 6 months, 14 after conception between 6 weeks and 9 months, taking a dose of 400 mg daily. Of the three families with a history of

neural tube defect two mothers had taken pre-conceptual folate, 1 post conceptual. The prevalence will be shown geographically but most clinical cases are within the main centres of population in Dublin, Cork, Galway and Belfast.

### Discussion

A low uptake of folate supplements was recorded in mothers who subsequently had infants with N.T.D's. 6 mothers including 2 with infants with anencephaly had taken adequate pre and post conceptual folic acid. The fall in prevalence of Neural Tube Defects has been well reported internationally. It has been well documented in the Dublin registry of Eurocat falling from 46.48 per 10,000 live births in 1980 to 15.47 in 1990 and 9.54 in 2001. The large cohort of children detected during the earlier years are now adolescents and young adults and over age for our multidisciplinary clinics, while numbers in the paediatric age group are diminishing. In Belfast Dr. J. McCann and colleagues have set up an excellent clinic for adults with spina bifida. We need to review the specific requirements of this population within the Republic of Ireland and plan appropriate services.