

## Childhood Cancer in Seascale

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The village of Seascale in West Cumbria, near the Sellafield nuclear plant has been a focus of attention since 1983, when a cluster of childhood leukaemia was identified there. Much of the early work to try to establish the cause of the cluster was conducted by the late Professor Martin Gardner who studied two cohorts of children born and attending schools in the village and performed a case-control study of leukaemia in West Cumbria. The results of the latter gave rise to the hypothesis that the father's occupational pre-conceptual exposure to radiation might increase the child's subsequent risk of leukaemia. Gardner's work in this area will be reviewed. Recently the Department of Health's Committee on the Medical Aspects of Radiation in the Environment published its latest findings on the leukaemias near Sellafield. The committee was unable to find an adequate explanation for the excess though it concluded that part of it might be explained by the unusual patterns of population mixing in the village introducing infections which in turn caused the leukaemias. The Gardner hypothesis was not thought to explain the excess and it has received little support elsewhere, though the results of some large scale studies are awaited. Nonetheless, there is still concern about trans-generational effects in the village as it has been alleged that there is an excess of retinoblastomas in the offspring of mothers who themselves spent at least part of their childhood in the Seascale. An assessment of this allegation is underway in the form of a study of the offspring of those in Gardner's birth and schools cohorts. Details of this study will be outlined.