

Committee on Medical Aspects of Radiation in the Environment (Comare) 11th report.

The distribution of childhood leukaemia and other childhood cancers in Great Britain 1969–1993.

The report concludes that clustering of childhood leukaemia cases occurs on a 5km geographical scale. That some of these clusters coincide with the location of nuclear industry sites is a matter of chance.

Comment

The report highlights the importance of establishing the normal variation of case density. Any conclusion that high incidence clustering is in some way causally linked with a feature of that location must be first tested against the chance of non-uniform distribution in areas without that feature.

Epidemiologists usually require an aetiological hypothesis that clustering could occur before finding the resources to check for it. Without such a hypothesis they will, quite reasonably, assume a uniform probability distribution. The existence of positive and negative clustering should give rise to the observation of both increased and decreased risk associations with the causal hypothesis occurring by chance. Reports of negative associations are less likely to be published.

