

COMARE statement on the SAHSU publication 'Childhood cancer incidence around nuclear installations in Great Britain, 1995-2016'.

The Committee on Medical Aspects of Radiation in the Environment (COMARE) has been considering cancer incidence in the vicinity of nuclear installations since its establishment in 1985, with a particular emphasis on Sellafield and Dounreay. The Small Area Health Statistics Unit (SAHSU) was set up in 1987, with functions including the study of potential clustering of diseases including childhood cancers. COMARE welcomes the publication by SAHSU of a detailed analysis of childhood cancer incidence around nuclear installations in England, Wales and Scotland ([Davies et al 2025](#)), responding to a recommendation of the COMARE 17th Report in 2016.

The [17th COMARE report](#) considered the areas around Sellafield (Cumbria) and Dounreay (Caithness). The studies confirmed the previously reported increase in the incidence of leukaemia and non-Hodgkin lymphoma (NHL) among children (0 – 14 years) and young adults (15 – 24 years) resident in Seascale, the village adjacent to Sellafield, and around Dounreay between 1963 and 1990. However, no increases in cancer risk were found for more recent years (1991 – 2006). A likely cause of the earlier increases in cancer risk is population mixing and exposure to unidentified infectious agents, as has been observed elsewhere, with radiation doses being too low to make a material contribution.

A recommendation of the 17th Report, as well as previous reports, was that cancer incidence around Sellafield and Dounreay, and more generally around other nuclear installations, should be kept under surveillance.

The [10th COMARE report](#) in 2005 examined the incidence of cancer in children under 15 years of age in the vicinity of 28 nuclear installations in Great Britain, including Sellafield and Dounreay, 13 nuclear power plants (NPPs) and six other major installations. The report confirmed previous observations of excess childhood leukaemia and NHL around Sellafield and Dounreay, but showed no evidence of excess numbers of childhood cancer cases among those living within 25 km of NPPs or the six other major installations for the time period 1969-1993, noting that radiation exposures around these sites are extremely low. Following this, the [11th COMARE Report](#) in 2006 considered the overall distribution of childhood leukaemia and other childhood cancers in Great Britain in the same time-period and showed that there is a general tendency towards spatio-temporal clustering of cases, particularly for leukaemia. The [14th COMARE report](#) in 2011 considered the incidence of leukaemia and NHL in children under 5 years of age living in the vicinity of 13 NPPs in Great Britain over the period 1969 to 2004, again showing no evidence of increased risk associated with proximity to NPPs.

The newly published SAHSU study by Davies et al evaluated cancer rates for children 0 – 14 years of age living in the vicinity of 28 nuclear installations in England, Scotland and Wales between 1995 and 2016, showing no statistically significant increases for childhood leukaemia and NHL, central nervous system tumours and other solid tumours. In welcoming the findings of this detailed study, COMARE agrees with the authors that continued surveillance of childhood cancer rates is warranted.