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# Child leukaemia 'not linked to power lines'

By Caroline Parkinson Health editor, BBC News website



Children who live near overhead power lines do not have an increased risk of developing leukaemia, a study has said.

Data on 16,500 children who developed leukaemia in Britain between 1962 and 2008 was analysed.

The paper found no increased leukaemia risk for those living near power lines from the 1980s onwards - but a higher risk did exist in the 1960s and 70s.

The researchers said the findings were "reassuring" but work was being done to understand the historical patterns.

Leukaemia accounts for around a third of all cancers diagnosed in children.

Around 460 new cases of leukaemia are diagnosed in children under the age of 15 each year in Britain.

## Historic risk

This research, by the Childhood Cancer Research Group at the University of Oxford, used cancer information drawn from the National Registry of Childhood Tumours.

The study, funded by Children with Cancer UK, included nearly 16,500 children born in Britain who were diagnosed with leukaemia between 1962 and 2008.

They were compared with around 20,000 children who were born in the same area who did not develop cancer.

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Kathryn Bunch Researcher

When the data for the whole period was analysed it showed no increased risk from living near power lines. However, when the analysis was broken down into decades, an historic increased risk was seen for those born in the 1960s and 70s, who lived within about one-third of a mile (600m) of a power line.

Those born from the 1980s onwards did not have an increased risk.

The researchers say this "strongly suggests" there is no direct biological effect of power lines on leukaemia risk.

Kathryn Bunch, who led the study, said: "It's very encouraging to see that in recent decades there has been no increased risk of leukaemia among children born near overhead power lines.

"More research is needed to determine precisely why previous evidence suggested a risk prior to 1980, but parents can be reassured from the findings of this study that overhead power lines don't increase their child's risk of leukaemia."

'Could be risk'

She told the BBC: "I would like to stress it's very encouraging that this study gives such reassuring information to parents.

"But I have to be honest, until we can explain what caused the increased risk in the earlier decades, we can't rule out the possibility that in some circumstances there could be a risk."

Dr Julie Sharp, Cancer Research UK's head of health information, said: "There has been a lot of concern that overhead power lines could increase the risk of cancer, particularly leukaemia, in children.

"This study is reassuring for anxious parents, as it indicates that overhead power lines don't cause leukaemia or other cancers in children."

The researchers say they do not know for certain why the historic increased risk existed.

They are carrying out further research looking at whether there has been a change in the pollutants emitted: if the spike was in some way connected to the construction of the power lines and has since diminished - or if there has been a shift in the characteristics of the people who live near power lines, as increased leukaemia risk has been linked to higher economic status.