1: JAMA. 1991 Mar 20;265(11):1403-8.

Links

Comment in:
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Cancer in populations living near nuclear facilities. A survey of mortality nationwide and incidence in two states.

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Reports from the United Kingdom have described increases in leukemia and lymphoma among young persons living near certain nuclear installations. Because of concerns raised by these reports, a mortality survey was conducted in populations living near nuclear facilities in the United States. All facilities began service before 1982. Over 900,000 cancer deaths occurred from 1950 through 1984 in 107 counties with or near nuclear installations. Each study county was matched for comparison to three "control counties" in the same region. There were 1.8 million cancer deaths in the 292 control counties during the 35 years studied. Deaths due to leukemia or other cancers were not more frequent in the study counties than in the control counties. For childhood leukemia mortality, the relative risk comparing the study counties with their controls before plant start-up was 1.08, while after start-up it was 1.03. For leukemia mortality at all ages, the relative risks were 1.02 before start-up and 0.98 after. For counties in two states, cancer incidence data were also available. For one facility, the standardized registration ratio for childhood leukemia was increased significantly after start-up. However, the increase also antedated the operation of this facility. The study is limited by the correlational approach and the large size of the geographic areas (counties) used. It does not prove the absence of any effect. If, however, any excess cancer risk was present in US counties with nuclear facilities, it was too small to be detected with the methods employed.

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