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No increased risk of certain cancers from electromagnetic fields among energy workers

Risk for leukaemia and brain and breast cancer among Danish utility workers -- a second follow up

Electromagnetic fields do not pose a health hazard to workers in the electrical energy supply industry, suggests a large study of 28,000 people, published ahead of print in Occupational and Environmental Medicine.

Exposure to low frequency electromagnetic fields of 50 to 60 Hz has been implicated in an increased risk of leukaemia, brain and breast cancers.

The researchers used the health and employment records of more than 22,000 utility workers at 99 different electrical energy supply companies in Denmark.

All the employees had been employed at the companies for a minimum of three months since 1968, and they were tracked for an average of nearly 23 years or until death..

When the data were linked to the Danish Cancer Registry where all new cases of cancer in the country have been recorded since 1942, the researchers found "no compelling evidence" for an increased risk of leukaemia, breast or brain cancers.

There were no excess cases of leukaemia among men or of breast cancer among female employees who had been exposed to medium to high frequency magnetic fields.

Women exposed to medium frequency electromagnetic fields were more likely to develop brain cancer than women with background frequency levels.

But this was not true of men who had been exposed to high frequency magnetic fields. They were less likely to develop the disease.

The researchers conclude that their findings agree with those of the International Agency for Research on Cancer in 2002