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[Am J Epidemiol.](#) 2009 Jan 15;169(2):167-75. Epub 2008 Nov 5.

Residence near power lines and mortality from neurodegenerative diseases: longitudinal study of the Swiss population.

[Huss A](#), [Spoerri A](#), [Egger M](#), [Röösli M](#); [Swiss National Cohort Study](#).

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Abstract

The relation between residential magnetic field exposure from power lines and mortality from neurodegenerative conditions was analyzed among 4.7 million persons of the Swiss National Cohort (linking mortality and census data), covering the period 2000-2005. Cox proportional hazard models were used to analyze the relation of living in the proximity of 220-380 kV power lines and the risk of death from neurodegenerative diseases, with adjustment for a range of potential confounders. Overall, the adjusted hazard ratio for Alzheimer's disease in persons living within 50 m of a 220-380 kV power line was 1.24 (95% confidence interval (CI): 0.80, 1.92) compared with persons who lived at a distance of 600 m or more. There was a dose-response relation with respect to years of residence in the immediate vicinity of power lines and Alzheimer's disease: Persons living at least 5 years within 50 m had an adjusted hazard ratio of 1.51 (95% CI: 0.91, 2.51), increasing to 1.78 (95% CI: 1.07, 2.96) with at least 10 years and to 2.00 (95% CI: 1.21, 3.33) with at least 15 years. The pattern was similar for senile dementia. There was little evidence for an increased risk of amyotrophic lateral sclerosis, Parkinson's disease, or multiple sclerosis.

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Magnetic field exposure and neurodegenerative disease mortality among electric utility workers. *Savitz DA, Checkoway H, Loomis DP. Epidemiology. 1998 Jul; 9(4):398-404.*

[Mortality from neurodegenerative disease and exposure to extremely low-frequency magnetic fields: 31 years of observations on Swiss railway employees.](#) [Neuroepidemiology. 2007]

[Occupational exposure to magnetic fields in case-referent studies of neurodegenerative diseases.](#) [Scand J Work Environ Health. 2002]

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[Biological effects of nonionizing radiation: low frequency electromagnetic fields]. *Busljeta I, Gomzi M, Trosić I. Arh Hig Rada Toksikol. 2000 Mar; 51(1):35-51.*

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