

Request for advice

In a letter dated March 19, 2014, ref IENM/BSK-2014/62976, the State Secretary of Infrastructure and the Environment requested the Health Council to advise on the relationship between exposure to extremely low frequency (ELF) magnetic fields and possible long-term health effects. In English, this request reads as follows (translation by the Health Council of the Netherlands):

The precautionary policy regarding overhead high-voltage power lines is mainly based on your advisory report published in 2000. Recently, a few studies have been published which showed no association between living near high-voltage power lines and an increased risk of childhood leukaemia. Therefore, the results of these studies are not consistent with the results of the studies included in your 2000 report. Partly based on your recommendation to follow the developments in this field of science, I would like to ask you to update your 2000 report. An update gives me the opportunity to decide whether or not to reconsider the current precautionary policy.

In my opinion, the update of your advice should focus on the long-term health effects related to exposure to ELF magnetic fields generated by the electricity grid and living near high-voltage power lines for a sustained period of time.

I would like you to answer the following questions:

1. Is there an association between living within a certain distance of overhead power lines and the incidence of health risks such as childhood leukaemia, other types of cancer in children and adults and Alzheimer's disease, and does the voltage of the lines play a role in this?
2. Is there an association between exposure to ELF magnetic fields and increased health risks?
3. If there is an association between living near overhead power lines for a sustained period of time and increased health risks, are there indications for factors other than the magnetic field associated with the presence of overhead power lines that may explain this risk?